# **Panasonic**<sup>®</sup>

# **PC Programming Manual**

**Pure IP-PBX** 



Model No. KX-NS1000

Thank you for purchasing this Panasonic product.

Please read this manual carefully before using this product and save this manual for future use. In particular, be sure to read "1.1.1 For Your Safety, page 20" before using this product.

KX-NS1000: PCMPR Software File Version 007.00000 or later

Manuals and supporting information are provided on the Panasonic Web site at: https://panasonic.net/cns/pcc/support/pbx/

## Introduction

## **About this Programming Manual**

The PC Programming Manual is designed to serve as a system programming reference for the Panasonic Pure IP-PBX. It explains how to programme this PBX using Web Maintenance Console.

The PC Programming Manual is divided into the following sections:

#### Section 1, Overview

Provides an overview of programming the PBX.

#### Section 2, Introduction of Web Maintenance Console

Explains the layout and menus of Web Maintenance Console.

#### Sections 3 - 28, Web Maintenance Console Operating Instructions

Serves as reference operating instructions when using Web Maintenance Console to programme the PBX.

#### Section 29, Appendix

Provides a list of changes from previous software versions of the PBX.

#### **Feature Programming References**

Provides a list of all related programming items for each feature.

#### References Found in the PC Programming Manual

#### **PC Programming Manual References**

Related sections of the PC Programming Manual are listed for your reference.

#### **Feature Manual References**

The Feature Manual explains what the PBX can do, as well as how to obtain the most of its many features and facilities. Sections from the Feature Manual are listed throughout this manual for your reference.

#### **Installation Manual References**

The Installation Manual provides instructions detailing the installation and maintenance of the PBX. Sections from the Installation Manual are listed throughout this manual for your reference.

## **Links to Other Pages and Manuals**

If you are viewing this manual with a PC, certain items are linked to different sections of this and other PBX manuals. Click on a link to jump to that section.

Linked items include:

- · Installation Manual References
- · PC Programming Manual References
- · Feature Manual References

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#### **Notice**

- During a long programming session, it is highly recommended that you periodically save the system data
  to the Storage Memory Card. If the PBX undergoes a sudden power failure or if the system is reset for
  some reason, all the system data in RAM will be lost. However, if system data has been saved to the
  Storage Memory Card, it can be easily reloaded.
- To save the system data to the Storage Memory Card, (1) click the 

  button on the Home screen of Web Maintenance Console before resetting the PBX or turning off the power, or (2) logout from Web Maintenance Console so that the PBX automatically saves the system data.

#### **NOTES**

- The contents of this manual apply to PBXs with a certain software version, as indicated on the cover of
  this manual. To confirm the software version of your PBX, see How do I confirm the software version
  of the PBX or installed cards? in Maintenance Console Software in 2.3 Frequently Asked
  Questions (FAQ).
- Some optional hardware, software, and features are not available in some countries/areas, or for some PBX models. Please consult the seller where you purchased this PBX for more information.
- The description of the manual may be different from the actual Web-MC screen.
- Product specifications, including text displayed by the software, are subject to change without notice.
- In this manual, the suffix of each model number (e.g., KX-NS1000NE) is omitted unless necessary.
- Operation of the KX-NTV series depends on the PBX software file version and the firmware version of the KX-NTV series. You can confirm the compatibility on the Panasonic Web site at: https://panasonic.net/cns/pcc/support/pbx/

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# Section 1 Overview

This section provides an overview of programming the PBX.

## 1.1 Introduction

## 1.1.1 For Your Safety

To prevent personal injury and/or damage to property, be sure to observe the following safety precautions. The following symbols classify and describe the level of hazard and injury caused when this unit is operated or handled improperly.

 $\Lambda$ 

## **WARNING**

This notice means that misuse could result in death or serious injury.



## **CAUTION**

This notice means that misuse could result in injury or damage to property.

The following types of symbols are used to classify and describe the type of instructions to be observed.



This symbol is used to alert users to a specific operating procedure that must not be performed.



This symbol is used to alert users to a specific operating procedure that must be followed in order to operate the unit safely.



## **WARNING**



• Unplug the PBX from the AC outlet if it emits smoke, an abnormal smell or makes unusual noise. These conditions can cause fire or electric shock. Confirm that smoke has stopped and contact an authorised Panasonic Factory Service Centre.



## **CAUTION**



• Do not remove the Storage Memory Card while power is supplied to the PBX. Doing so may cause the PBX to fail to start when you try to restart the system.



· To the Administrator or Installer regarding account passwords

- 1. Please provide all system passwords to the customer.
- **2.** To avoid unauthorised access and possible abuse of the PBX, keep the passwords secret, and inform the customer of the importance of the passwords, and the possible dangers if they become known to others.
- **3.** The PBX has no passwords set initially. For security, select an installer password as soon as the PBX system is installed at the site.
- 4. Change the passwords periodically.
- **5.** It is strongly recommended that passwords of 10 numbers or characters be used for maximum protection against unauthorised access.
- There is a risk that fraudulent telephone calls will be made if a third party discovers a personal identification number (PIN) (verification code PIN or extension PIN) of the PBX.
   The cost of such calls will be billed to the owner/renter of the PBX.

To protect the PBX from this kind of fraudulent use, we strongly recommend:

- a. Keeping PINs secret.
- **b.** Selecting complex, random PINs that cannot be easily guessed.
- c. Changing PINs frequently.

### 1.1.2 Introduction

These programming instructions are designed to serve as an overall system programming reference for the PBX. Each feature in the PBX has default settings that can be changed to customise the PBX to your requirements. These settings control the functions of the PBX, and changing them is referred to as "system programming".

Programming can be performed by system installers, on-site managers, and individual users. However, managers and individual users may only change a limited number of settings. For details, see **2.1.1 Web Maintenance Console Accounts**.

All features and settings of the PBX can be programmed through system programming with Web Maintenance Console. Starting Web Maintenance Console is described in **1.2 PC Programming**. Individual system programming items are described from **3 Web Maintenance Console Home Screen**.

#### **Programming Modes**

There are two different modes available for programming using Web Maintenance Console:

#### On-line Mode

On-line mode allows you to use Web Maintenance Console on a PC that is connected to the PBX to modify the system data and settings used by the PBX. Settings can be modified and results are displayed in real time. Modifications to settings change the information in the PBX's temporary memory (DRAM). To finalise the changes, you must either save the changes to the PBX's Storage Memory Card by clicking or log out of Web Maintenance Console by clicking For details, see Web Maintenance Console Features in 2.1.5 Software Interface.

#### · Off-line Mode

Off-line mode allows you to connect to a version of Web Maintenance Console running on your PC. Using Off-line mode, you can create new system data files and make modifications to system data files stored on your PC, without being connected to the PBX. After you finish configuring settings, they can be saved and uploaded to the PBX, which will update the PBX's settings. For details, see **Uploading Programmed Settings to the PBX** in **1.2.2 PC Programming Using Off-line Mode**.

## 1.1.3 Entering Characters

The characters on a white background below can be used when storing a name, message, password or other text entry data using a PC. The available characters vary according to the model of PBX.

## Table 1 (Standard)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
20	SP	!	11	#	\$	%	&	1	(	)	*	+	,	-		/
30	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
40	@	A	В	С	D	Е	F	G	Н	I	J	K	L	M	N	О
50	P	Q	R	S	Т	U	V	W	X	Y	Z	[	/	]	^	
60	,	a	b	С	d	e	f	හු	h	i	j	k	1	m	n	o
70	p	q	r	s	t	u	V	W	X	у	Z	{		}	~	DEL
80	€		,	$\int f$	,,	•••	†	‡	<b>`</b>	‰	Š	VI	Œ		Ž	
90		6	,	"	,,	•	1		~	TM	š	٨١	œ		ž	Ÿ
A0	NBSP	i	¢	£	¤	¥	1	§		©	a	«	Г	SHY	®	-
В0	0	±	2	3	,	μ	¶	·	5	1	o	<b>»</b>	1/4	1/2	3/4	ં
C0	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ϊ
D0	Đ	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
E0	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
F0	ð	ñ	ò	ó	ô	õ	ö	÷	Ø	ù	ú	û	ü	ý	þ	ÿ

## Table 2 (For CE model)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
20	SP	!	"	#	\$	%	&	•	(	)	*	+	,	-		/
30	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
40	@	A	В	С	D	Е	F	G	Н	Ι	J	K	L	M	N	О
50	P	Q	R	S	T	U	V	W	X	Y	Z	[	/	]	^	_
60	\	a	b	С	d	e	f	හා	h	i	j	k	1	m	n	o
70	p	q	r	s	t	u	v	w	X	у	z	{		}	~	DEL
80	€		,		,,		†	<b>*</b> +		‰	Š	<b>«</b>	Ś	Ť	Ž	Ź
90		4	,	"	,,	•	-			TM	š	<b>&gt;</b>	ś	ť	ž	ź
A0	NBSP	~	•	Ł	¤	Ą	-	§	•	©	Ş	**	Г	SHY	R	Ż
В0	0	±	L	ł	,	μ	¶		,	ą	ş	<b>»</b>	Ľ	"	ľ	Ż
C0	Ŕ	Á	Â	Ă	Ä	Ĺ	Ć	Ç	Č	É	Ę	Ë	Ě	Í	Î	Ď
D0	Đ	Ń	Ň	Ó	Ô	Ő	Ö	×	Ř	Ů	Ú	Ű	Ü	Ý	Ţ	ß
E0	ŕ	á	â	ă	ä	ĺ	ć	ç	č	é	ę	ë	ě	í	î	ď
F0	đ	ń	ň	ó	ô	ő	ö	÷	ř	ů	ú	ű	ü	ý	ţ	•

## Table 3 (For RU model)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
20	SP	!	"	#	\$	%	&	1	(	)	*	+	,	-		/
30	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
40	@	A	В	С	D	Е	F	G	Н	I	J	K	L	M	N	О
50	P	Q	R	S	Т	U	V	W	X	Y	Z	[	/	]	^	-
60	1	a	b	c	d	e	f	g	h	i	j	k	1	m	n	o
70	p	q	r	S	t	u	V	W	X	y	Z	{		}	~	DEL
80	ъ	ή	,	ŕ	,,		†	‡	€	‰	Љ	<b>(</b>	Њ	K	ħ	Ţ
90	ħ	4	,	"	,,	•	-	Н	TM	љ	>	њ	Ŕ	ħ	Ĥ	
A0	NBSP	ў	ў	J	¤	ľ	1	§	Ë	©	€	«	-	SHY	R	Ϊ
В0	0	±	Ι	i	ľ	μ	¶		ë	№	$\epsilon$	<b>&gt;&gt;</b>	j	S	S	ï
C0	A	Б	В	Γ	Д	Е	Ж	3	И	Й	К	Л	M	Н	О	П
D0	P	С	Т	У	Ф	X	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	R
E0	a	б	В	Γ	Д	e	ж	3	И	й	К	Л	M	Н	o	П
F0	p	С	Т	у	ф	X	ц	Ч	ш	Щ	ъ	Ы	Ь	Э	ю	Я

## Table 4 (For GR model)

	00	01	02	03	04	05	06	07	08	09	0A	0В	0C	0D	0E	0F
20	SP	!	"	#	\$	%	&	1	(	)	*	+	,	-	٠	/
30	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
40	@	A	В	С	D	Е	F	G	Н	I	J	K	L	M	N	О
50	P	Q	R	S	T	U	V	W	X	Y	Z	[	/	]	^	
60	•	a	b	c	d	e	f	g	h	i	j	k	1	m	n	o
70	p	q	r	s	t	u	v	W	X	у	z	{		}	~	DEL
80	€		,	f	,,	•••	†	‡		‰		<b>«</b>				
90		۲	,	"	,,	•	-	_		TM		>				
A0	NBSP	./.	A	£	¤	¥		§	:	©		«	Г	SHY	R	_
В0	0	±	2	3	,	μ	•	•	Έ	Ή	r	<b>»</b>	O	1/2	Y	Ω
C0	ΐ	A	В	Γ	Δ	Е	Z	Н	Θ	I	K	Λ	M	N	Ξ	О
D0	П	P		Σ	T	Y	Φ	X	Ψ	Ω	Ï	Ÿ	ά	έ	ή	í
E0	ΰ	α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ	ν	ξ	o
F0	π	ρ	ς	σ	τ	υ	φ	χ	Ψ	ω	ï	ΰ	ó	ύ	ώ	

## 1.2 PC Programming

## 1.2.1 Starting Web Maintenance Console

System programming, diagnosis and administration can be performed with a PC using Web Maintenance Console. Web Maintenance Console is accessed through a Web browser running on a networked PC. This section describes how to set up and access Web Maintenance Console.

#### **System Requirements**

#### **Required Operating System**

Microsoft® Windows® 7, Windows 8.1, Windows 8.1 Professional, or Windows 10 operating system

#### Note

In Windows 8.1 / 8.1 Professional, Web Maintenance Console runs only in desktop mode. It is not available from the Windows 8.1 Start screen.

#### **Recommended Display Settings**

- Screen resolution: XGA (1024 × 768)
- DPI setting: Normal size (96 DPI)

#### **Supported Browsers for use with Web Maintenance Console**

- Windows Internet Explorer 11
- Mozilla® Firefox® version 57 or ESR52

Always apply the latest updates to your Web browser software. For details, refer to your Web browser's documentation. Only the browsers and browser versions listed above are supported for use with Web Maintenance Console.

#### Note

When using Windows Internet Explorer, there may be a delay when displaying some screens of Web Maintenance Console. A message may be displayed that reads "Stop running this script?". This message is automatically displayed when a script takes a long time to complete. If this message is displayed, click **No** to continue using Web Maintenance Console. If you click **Yes**, you will have to close the browser window for Web Maintenance Console and log in again. For information about disabling this prompt, refer to your Web browser's on-line support resources.

#### **Browser Setting Requirements**

The following functions must be enabled in the Web browser's settings to use Web Maintenance Console:

- Cookies
- JavaScript
- · The ability to download files
- · The display of animations
- · The display of images

For details regarding the above settings, refer to your Web browser's documentation.

#### PC Specifications (for programming)

The following are recommended specifications for PCs used for programming. For details about programming in Off-line mode, see **1.2.2 PC Programming Using Off-line Mode**.

	Recommended Specification
CPU	3.2 GHz Intel® Core™ 2 Duo processor or comparable CPU
RAM	2048 MB
Hard Disk	10 GB available space

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#### **PC Connection (On-line Mode)**

To connect to Web Maintenance Console in On-line mode, both the PC and the PBX must be connected. The connection can be made through a local area network (LAN), a virtual private network (VPN), or over the Internet. A PC can also be connected directly to the maintenance port of the PBX.

#### **Connecting to Web Maintenance Console (On-line Mode)**

Below is the procedure for connecting to Web Maintenance Console to programme in On-line mode:

- 1. Connect the PC to the PBX:
  - Connect the PBX to a PC with the MNT port and access the PBX directly from the PC.
  - Connect the PBX to a network with the LAN port and access the PBX from a PC in your LAN or VPN.
  - Connect the PBX to a network with the LAN port and access the PBX from a PC using an Internet connection.

#### **Notice**

- When connecting the PC to the MNT port, if the PC is set to obtain the IP address automatically, the IP address of the PC will be set to an appropriate IP address to establish a connection to the PBX. For more information about the connection procedure, refer to "5.2 PC Connection" in the Installation Manual.
- 2. Access Web Maintenance Console:

#### MNT Port connection:

Launch your Web browser and in the address bar, enter one of the following addresses exactly as shown:

- 223.0.0.1
  - or
- http://kx-ns1000.

#### Note

- If entering "http://kx-ns1000.", be sure to include the period at the end as shown.
- If connecting using 223.0.0.1 takes a long time, configure a static IP address for the PC.

#### LAN or VPN connection:

Launch your Web browser and input the IP address of the PBX followed by the Web Maintenance Console port number into the address bar. The input method will differ according to the PC's connection to the PBX.

The default IP address for the LAN port of the PBX is 192.168.0.101, and the default Web Maintenance Console port number is 80. Accordingly, the address to enter to connect to the PBX for the first time will be as follows (enter the address exactly as shown):

http://192.168.0.101

#### Internet connection:

You can connect to the PBX in On-line mode using the Off-line Web Maintenance Console Programme Launcher. For details, see Connecting in On-line Mode using the Programme Launcher in 1.2.2 PC Programming Using Off-line Mode.

- 3. The Web Maintenance Console login screen is displayed. For details about logging in, see 2.1.3 Logging in to Web Maintenance Console.
  - If this is the first time the PBX is accessed (i.e., it is in its initialised, factory default state), you must log in using the Installer level account. Once you log in, the Easy Setup Wizard will launch. For details, see **2.1.4 Easy Setup Wizard**.
  - If the PBX has been set up using the Easy Setup Wizard, PBX system programming can be
    performed. To perform programming, enter the login name and password according to your status
    and authorisation level. For details about the differences between levels of authorisation, see
    2.1.1 Web Maintenance Console Accounts.
- **4.** After you successfully log in to Web Maintenance Console, the Home screen will be displayed and programming can be performed. For details about accessing the different features of Web Maintenance Console, see **2.1.5 Software Interface**.

#### **Connecting to Web Maintenance Console (Off-line Mode)**

To connect to Web Maintenance Console in Off-line mode, use the **New -Offline Mode** or **Open -Offline Mode** operations in the Off-line Web Maintenance Console programme launcher. For details, refer to **1.2.2 PC Programming Using Off-line Mode**.

## 1.2.2 PC Programming Using Off-line Mode

PC Programming is performed by connecting to the PBX using Web Maintenance Console, which is also known as On-line mode. However, as certain programming requires installed cards to be set to out of service (OUS), or requires system settings to be changed, some programming cannot be performed while the PBX is in use. Off-line mode programming is performed using the Off-line version of Web Maintenance Console, which you install on your PC.

Off-line mode allows you to create new system data files and make modifications to system data files stored on your PC, without being connected to the PBX. The programming changes can be saved and then later uploaded to the PBX.

The following procedures outline how to install and use the Off-line Web Maintenance Console for Off-line mode programming.

#### Installation

#### Note

Be sure to install and use the latest version of "Off-line WEB-Maintenance Console".

- Before beginning the installation of Off-line Web Maintenance Console, the following software must be installed on the PC:
  - Microsoft .NET Framework 2.0
  - Microsoft .NET Framework 4

This software can be downloaded from Microsoft's online Download Center.

- To install or uninstall the software on a PC running Windows 7, Windows 8.1, Windows 8.1 Professional, or Windows 10, you must be logged in as a user in the "Administrators" group.
- 1. Copy the "Off-line WEB-Maintenance Console" setup file to your PC.
- 2. Double-click the setup file to run the installer.
- 3. Follow the on-screen instructions provided by the installation wizard.

#### **The Programme Launcher**

After Off-line Web Maintenance Console has been installed, you can run the Programme Launcher from the Windows Start menu.

#### Off-line Web Maintenance Console Programme Launcher



#### **Note**

Off-line Web Maintenance Console cannot be used when the PBX Web Manager for Unified PC Maintenance Console (for KX-TDA/KX-TDE/KX-NCP PBXs) is running on the PC.

#### To disable the PBX Web Manager:

- 1. In the Unified PC Maintenance Console launcher, click Option→PBX Web Manager.
- 2. Deselect the Enable Web Server check box.
- 3. Click OK.

#### Starting a New System Data File

You can start a new session of PBX programming in Off-line mode. You can then programme PBX settings in Off-line Web Maintenance Console and then save them to a file you can later upload to the PBX.

#### Note

Since selecting this option creates a blank system data file, uploading this file to the PBX will overwrite all previous settings. Use this function only when necessary.

#### To create a new system data file

- 1. In the Programme Launcher, click **New -Offline Mode**. The Off-line Web Maintenance Console login screen will be displayed in your PC's Web browser. For details about the login screen, see **2.1.3 Logging in to Web Maintenance Console**.
- **2.** Log in to Off-line Web Maintenance Console using the Installer level account and password to start the Easy Setup Wizard. For details, see **2.1.4 Easy Setup Wizard**.

#### To convert a KX-TDE/KX-NCP/KX-TDA100D's system data file to KX-NS1000

KX-TDE/KX-NCP/KX-TDA100D system data can be converted for use with the KX-NS1000 by using the Database Converter.

1. In the Programme Launcher, click **Database Converter**. The Database Converter screen will be displayed in your PC.

For details, refer to "Converting KX-TDE, KX-NCP or KX-TDA100D System Data for Use with the KX-NS1000" in "5.3 Starting Web Maintenance Console" in the Installation Manual.

#### **Opening an Existing System Data File**

This operation will load a PBX settings system data file from your PC for programming in Off-line mode. The system data file can be a file created earlier using Off-line Web Maintenance Console, or a system data file downloaded from a PBX. You can then programme PBX settings using Off-line Web Maintenance Console and then save the settings to a file you can later upload to the PBX.

When you use the following procedure to open a system file created using a previous version of the KX-NS1000 software, a confirmation screen will be displayed asking whether you want to convert the system data to the latest software version. Click **Yes** to convert the data and proceed with Off-line programming.

#### **Notice**

Only system data created using software version 001.10000 or later can be converted this way. System data created using software version 001.00000 cannot be converted.

#### To open a system data file

- 1. In the Programme Launcher, click **Open -Offline Mode**. The Open dialogue box will be displayed.
- 2. Navigate to the folder containing the system data file you want to open.
- 3. Select the file.
- 4. Click Open, and then click OK.

The file will be loaded and the Off-line Web Maintenance Console login screen will be displayed in your PC's Web browser. For details about the login screen, see **2.1.3 Logging in to Web Maintenance Console**.

5. Log in using an account name and password associated with the system data file that was loaded.

#### Note

User (User) level accounts cannot be used to log in to Off-line Web Maintenance Console. For details about account types, refer to **2.1.1 Web Maintenance Console Accounts**.

#### Connecting in On-line Mode using the Programme Launcher

You can also use the Programme Launcher to log in to Web Maintenance Console in On-line mode. You can save the IP address and port information for each PBX in a profile. This feature is useful when there are multiple PBXs in your network. For details about connecting to the PBX in On-line mode, see **Connecting to Web Maintenance Console** (On-line Mode) in 1.2.1 Starting Web Maintenance Console.

#### To connect in On-line mode using the Programme Launcher

- In the Programme Launcher, click Connect -Online Mode.
   The Connection dialogue box will be displayed.
- 2. Select a profile from the drop-down list, or enter the IP address and Port manually.
- 3. Click Connect.

The Web Maintenance Console login screen for connecting directly to the PBX in On-line mode will be displayed in your PC's Web browser. For details about the login screen, see **2.1.3 Logging in to Web Maintenance Console**.

#### **Editing and Printing Terminal Labels**

You can create and print key label sheets that match the Flexible Button settings and then use the labels on extensions. In the Programme Launcher, click **Terminal Label Print**. The screen for editing and printing key labels will be displayed. For details, see **1.2.2.1 Editing and Printing Terminal Labels in Off-line Mode**.

#### **Options**

You can specify the display language of the Programme Launcher, as well as set the web server port number for Off-line Web Maintenance Console. In the Programme Launcher, click **Options** and change the settings as necessary.

#### Adding Additional Languages

Additional display language files may be made available. To add a display language not listed in the language selection menu, select **Additional language**, and then click **Browse** to specify the language file. After specifying a language file, click **OK** to change to the selected language.

#### **VoIP Test Tool**

Click the **VoIP Test Tool** button to launch the VoIP Test Tool. This tool is identical to the VoIP Test Tool included with the Unified PC Maintenance Console for KX-TDA/KX-TDE/KX-NCP PBXs.

#### IP Terminal Utility

Click the **IP Terminal** button to launch the IP Terminal setup utility. This utility is identical to the IP Terminal utility included with the Unified PC Maintenance Console for KX-TDA/KX-TDE/KX-NCP PBXs.

#### **IP Trace File Converter**

Click the **IP Trace File Converter** button to launch the IP Trace File Converter utility. This utility will convert locally-saved IP trace file data collected by the system utilities listed below into a format that can be analysed by general packet analysis software tools.

- 7.4.2 Utility—Monitor/Trace—V-IPGW16 Protocol Trace
- 7.4.3 Utility—Monitor/Trace—V-SIPGW16 Protocol Trace

#### **Others**

Click this button to open the folder containing external applications. For example, the Import CSV Edit Tool can be used as an external application.

#### **Programming in Off-line Mode**

Once you have logged in to Off-line Web Maintenance Console, programming is very similar to On-line mode. The title bar will be coloured differently from when in On-line mode:

#### When programming in On-line mode:



#### When programming in Off-line mode:



Some items are not programmable when in Off-line mode, and those items will be greyed out. Some tools and utilities are also not available in Off-line mode. For details, refer to **2.1.2 Access Levels**.

#### **Notice**

- In Off-line mode, changes made in **6.8 Tool—Screen Customise** will not be reflected in On-line mode. This is because these settings are not stored in the system data file (DCSYS).
- When you load the system data file to the PBX, you must install any required activation keys in Online mode. Activation keys are required for mailboxes. Settings such as mailbox passwords will be cleared if the number of activation keys for mailboxes is insufficient.

#### **Uploading Programmed Settings to the PBX**

When programming in Off-line mode, clicking the icon will open a save dialogue box. Specify a location and file name for the system data file. This file can then be uploaded to the PBX in On-line mode using the "File Transfer PC to PBX" utility. For details, refer to 7.2.1 Utility—File—File Transfer PC to PBX.

#### **Notice**

- If the PC running the Off-line Web Maintenance Console is shut down, the Web browser is closed, or the user logs out, any changes that have not been saved will be lost. Be sure to regularly save data while programming.
- When you upload a system setting file to the PBX, all existing settings on the PBX will be overwritten
  with the settings in the file, including settings you may not want to change. To change only specific
  settings in Off-line mode, follow the procedure below:
  - 1. Use the "File Transfer PBX to PC" utility in On-line mode to save a file with the PBX's current settings. For details, refer to **7.2.2 Utility—File—File Transfer PBX to PC**.
  - **2.** Use the **Open -Offline Mode** command in the Programme Launcher to load the PBX system file in Off-line mode.
    - For details, refer to Opening an Existing System Data File above.
  - **3.** Perform the desired programming in Off-line mode, and then click the **□** icon to save the modified system settings to your PC.
  - **4.** Log in to Web Maintenance Console in On-line mode, and then use the "File Transfer PC to PBX" utility to upload the modified data to the PBX.

## 1.2.2.1 Editing and Printing Terminal Labels in Off-line Mode

Follow the procedure below to print key label sheets for use with your system's extensions and DSS consoles.

- 1. In On-line mode, export PBX system data to your PC, and then open the exported data in Off-line mode.
  - **a.** In On-line mode, use the File Transfer PBX to PC utility to save your system's data and settings to your PC. For details, see **7.2.2 Utility—File—File Transfer PBX to PC**.
  - **b.** Use the Programme Launcher to open the system data in Off-line mode. For details, see **Opening** an Existing System Data File in 1.2.2 PC Programming Using Off-line Mode.

- 2. In Off-line mode, export the key settings to a CSV file.
  - **a.** After logging in to Off-line Web Maintenance Console, access the screen from which key settings will be exported:
    - For extensions: Setup → PBX Configuration → Extension → Wired Extension → Flexible Button
    - For DSS consoles: Setup  $\rightarrow$  PBX Configuration  $\rightarrow$  Extension  $\rightarrow$  DSS Console
  - b. Click Export, specify a location to save the flexible key settings data, and then click OK.

#### Note

The **Export** button is available only when in Off-line mode.

- **3.** Open the exported CSV data in the Terminal Label Print utility, and then edit the label settings as necessary.
  - a. In the Programme Launcher, click Terminal Label Print.
  - b. Select Open. Specify the exported CSV file in the dialogue that is displayed, and then click OK.
  - **c.** Edit the following settings as necessary:

Label	Specifies the label that will be printed next to the corresponding button. (Max. 20 characters)
Colour of Font	Specifies the colour used for the label text for the corresponding button. Click <b>Choose</b> to select a colour.
Colour of Background	Specifies the colour used for the label background for the corresponding button. Click <b>Choose</b> to select a colour.
Font Size	Specifies the size of the font on the label for the corresponding button. (Size value range: 4–15)
Telephone Type	Specifies the model number of the telephone to determine the size and shape of the label template.

**4.** Once the settings have been configured, click **Key Label Print** on the settings screen. Follow the Key Label Print Wizard to print the key labels or to output the data as a PDF file.

## 1.2.3 PBX Configuration Types

#### **One-look Network Configuration**

Multiple KX-NS series PBXs can be connected together in a configuration called a One-look network. One KX-NS1000 PBX serves as the Master unit, and other KX-NS series PBXs connect to the Master unit as Slave units. Slave unit PBXs receive settings and operation instructions from the Master unit PBX. With this configuration, it is easy to make network-wide changes by performing programming at only one PBX.

#### **One-look Network Data Types**

The data that is set when programming a One-look network using Web Maintenance Console is divided into three categories: global data, local data, and connection data. The kind of data being programmed affects how the programming is performed.

Data Type	Description
Global Data	Global data is related to the function of the PBX network as a whole. These settings are unified network-wide, including extension and calling configurations.
Local Data	Local data is related to the settings and functions of each Slave unit PBX. Local data includes UM configuration settings and network settings.

Data Type	Description
Connection Data	Connection data includes setting information for connecting the Master unit to Slave units in the One-look network.

Details for Master units and Slave units are as follows:

Configuration Type	Description
Master Unit	This is the central PBX of a One-look network of KX-NS1000 PBXs. All PBXs in a One-look network can be programmed by logging in to the Master unit via Web Maintenance Console. Both the global settings (settings that apply to all PBXs) and local settings (settings that apply only to a single Slave unit PBX) of the One-look network can be programmed in one session. Slave units can also be registered to the Master unit and then configured from the Master unit. If the Master unit is set to out of service (OUS) for maintenance or due to a problem, the One-look network cannot be used until the Master unit is returned to in service (INS) status.
	Note  When a single KX-NS1000 is used in a stand-alone configuration or other networking configuration, for programming purposes it still must be set as the Master unit.
Slave Unit	Slave units receive programming information from the Master unit for all system-wide functions, such as extension information and call handling. Each Slave unit also contains local data programming settings, but these local settings are still specified using the Master unit. When you log in to a Slave unit, you may view all global data settings, but only that Slave unit's local data and connection data may be viewed. The only setting data that can be specified using a Slave unit is connection data. If a Slave unit is set to OUS, its resources cannot be used but otherwise the One-look network will still function. The resources of the OUS Slave unit may be used again when it is returned to INS status.

#### Stand-alone and Other Networking Configurations

A KX-NS1000 PBX can be used as a single stand-alone unit, without connecting to other KX-NS1000 PBXs in a One-look network. Programming is still performed by logging in to the PBX using Web Maintenance Console. A KX-NS1000 PBX (including the Master unit of a One-look network) can also connect to other PBXs using standards such as H.323. For details about other networking configurations, refer to "4.2.2 Network Type Comparison" in the Feature Manual.

## 1.2.3.1 One-look Networking Survivability

A One-look network can be configured so that even if a site's main PBX fails or is otherwise disconnected from the network, operation of the One-look Network as a whole continues. One-look Networking Survivability provides the following features:

#### Backup Master mode

A Slave unit can be designated as a Backup Master unit. When the Master unit goes offline, the Slave units will detect the change in status. The designated Slave unit will switch to Backup Master mode, and the other Slave units will use the Backup Master unit as the Master unit.

#### Isolated mode

If no PBX is designated as the Backup Master unit, or if the Backup Master unit also goes offline, Slave units will operate in Isolated mode if they are set to do so. In Isolated mode, each PBX will provide service to the extensions registered to it and for the trunk lines connected to it.

#### Automatic Rerouting to Secondary PBX

If the unit to which an IP extension (e.g., IP-PT or SIP extension) is connected fails, the extension can automatically switch its connection to a secondary PBX.

#### UM Group Failover

When a PBX goes offline, incoming calls routed to the UM group of the PBX can be automatically redirected to another PBX's UM group.

For more information about One-look Networking Survivability and programming required for each aspect of network survivability, refer to "4.2.3 One-look Networking Survivability" in the Feature Manual.

# Section 2

# Introduction of Web Maintenance Console

This section serves as reference operating instructions when using Web Maintenance Console to programme the PBX.

# 2.1 Introduction

### 2.1.1 Web Maintenance Console Accounts

### User account levels

Access to Web Maintenance Console requires a login name and password, which are assigned to accounts in the PBX. Also, access to Web Maintenance Console is controlled by different levels of authorisation. The Installer level is the highest authorisation level. There are also two levels for end users, Administrators and Users. The usage for each level and number of accounts available for each level are as follows:

Level	Description	Number of Accounts/Network
Installer	For dealers and system installers	1
User (Administrator)	For on-site managers	32
User (User)	For end users	Up to 1512 <sup>-1</sup>

The total number of administrator and user accounts combined cannot exceed 1512.

### Differences between user levels

#### Installer

The installer level account is the highest authorisation account of the three levels. This account level is to be used by dealers or system installers. All system programming settings are available, and this account is used for overall system installation and maintenance. The installer level can be used to programme which menus in Web Maintenance Console are accessible by Administrator accounts.

### User (Administrator)

Administrator accounts are for general maintenance of users and user settings. This account level is used by on-site managers and network administrators. Administrator level accounts can use Web Maintenance Console to add users or programme user settings.

User (Administrator) accounts are intended for maintenance functions only. To manage their own PBX user settings, on-site managers and network administrators should create their own User (User) accounts for programming.

### User (User)

User accounts are for individual users of the PBX system. Users can use Web Maintenance Console to change their extension settings, speed dial settings, or other personal settings by accessing a limited number of pre-defined menus.

#### Note

• User (User) accounts cannot be used when programming in Off-line mode. For details, refer to **1.2.2 PC Programming Using Off-line Mode**.

### **Account Login Names and Passwords**

Each account has a login name and password and are specified as follows. All account passwords are set in Web Maintenance Console (see **8.2.1 Users—Add User—Single User**).

Level	Login Name	Password
Installer	INSTALLER	4-16 character password, using a-z, A-Z, and 0-9 (case sensitive). For an initialised PBX that has not yet been set up, the default Installer level password is "1234". You will be prompted to choose a new password for the Installer level account when the Easy Setup Wizard is run (see 2.1.4 Easy Setup Wizard).
Administrator	1-16 character login name, using a-	4-16 character password, using a-z, A-Z,
User	z, A-Z, and 0-9 (case sensitive). Set during account creation. (see 8.2.1 Users—Add User— Single User)	and 0-9 (case sensitive). Set during account creation. (see 8.2.1 Users—Add User—Single User)

For more information about creating and managing end user accounts, see 8 Users .

### **CAUTION**

### To the Administrator or Installer regarding account passwords

- 1. Please provide all system passwords to the customer.
- **2.** To avoid unauthorised access and possible abuse of the PBX, keep the passwords secret, and inform the customer of the importance of the passwords, and the possible dangers if they become known to others.
- **3.** The PBX has no passwords set initially. For security, select an installer password as soon as the PBX system is installed at the site.
- 4. Change the passwords periodically.
- **5.** It is strongly recommended that passwords of 10 numbers or characters be used for maximum protection against unauthorised access.

### 2.1.2 Access Levels

Access to menu options within Web Maintenance Console is restricted depending on the level of the account and the current programming mode (see **Programming Modes** in **1.1.2 Introduction**). When a menu option is limited to certain access levels, this is noted in this manual in the initial description of that menu option, for example:

"This option is only available at Installer level."

The options available for each programming mode and access level are shown below.

The access levels are abbreviated as follows:

U: User (User); A: User (Administrator); I: Installer

#### Note

User (User) accounts cannot be used when programming in Off-line mode. A check mark indicates that the menu option is available for that access level.

### **Home Screen**

Menu Option		line	(	On-line	•
	Α	I	U	Α	I
Site Selection	✓	✓	✓	✓	✓

Menu Option		Off-line		On-line		
	Α	I	U	Α	I	
Add Site		✓			✓	
System Information		✓	✓	✓	✓	
Logout		✓	✓	✓	✓	

### Tool

Menu Option	Off-	line	On-line		
	Α	ı	U	Α	I
System Data Backup—Backup to USB				<b>√</b>	✓
System Data Backup—Backup to NAS				✓	✓
BRI Automatic Configuration					✓
NDSS Link Data Clear					✓
Call Pickup for My Group		✓			✓
Extension List View	✓	✓	✓	<b>✓</b>	✓
Import→Feature - Speed Dial and Caller ID	✓	✓		<b>✓</b>	✓
Import→Incoming Call - DDI/DID Table		✓			✓
Import→ARS - Leading Digit		✓			✓
Import→ARS - Except Code		✓			✓
Import→ARS - Routing Plan		✓			✓
Import→Wired Extension		✓			✓
Import→PS Extension		✓			✓
Import→Quick Dial		✓			✓
Import→SIP Extension		✓			✓
Import→V-IPGW16 GW Settings		✓			✓
Import→V-IPGW16 DN2IP		✓			✓
Import→V-SIPGW16 Settings		✓			✓
Import→V-SIPGW16 Provider		✓			✓
Export→Feature - Speed Dial and Caller ID	✓	✓		<b>✓</b>	✓
Export→Incoming Call - DDI/DID Table		✓			✓
Export→ARS - Leading Digit		✓			✓
Export→ARS - Except Code		✓			✓
Export→ARS - Routing Plan		✓			✓
Export→Wired Extension		✓			✓
Export→PS Extension		✓			✓
Export→Quick Dial		✓			✓
Export→SIP Extension		✓			✓

Menu Option	Off-	line	On-line		
	Α	I	U	Α	I
Export→V-IPGW16 GW Settings		✓			✓
Export→V-IPGW16 DN2IP		✓			✓
Export→V-SIPGW16 Settings		✓			✓
Export→V-SIPGW16 Provider		✓			✓
Screen Customise		✓			✓
UM Data Backup					✓
UM Data Restore					<b>✓</b>
UM Backup History					✓
DXDP All OUS					✓
Contact information	✓	✓		<b>✓</b>	✓
UT Option Setting		✓			✓
URL Information		✓			✓

# Utility

Menu Option	Off-line		On-line		
	Α	I	U	Α	I
Diagnosis→Card Diagnosis				<b>✓</b>	✓
Diagnosis→Ping					✓
File Transfer PC to PBX					✓
File Transfer PBX to PC					✓
File View					✓
File Delete					✓
Message File Transfer PC to PBX					✓
Message File Transfer PBX to PC					✓
Error Log				✓	✓
Syslog					✓
Web-MC Event Log				<b>✓</b>	✓
UM System Log					✓
ISDN/QSIG Protocol Trace					✓
V-IPGW16 Protocol Trace					✓
V-SIPGW16 Protocol Trace					✓
CS Status Monitor→Air Sync Group					✓
CS Status Monitor→LAN Sync Group					✓
Fax - Protocol Trace					✓
Fax - Task sequence Trace					✓

Menu Option	Off-	-line	On-line		
	Α	ı	U	Α	I
UM System Trace (Internal)					✓
T1/E1 Signalling Bit Monitor					✓
T1/E1 Line Trace					✓
Digital Trunk Error Report					✓
IP Extension Statistical Information					✓
UM View Reports				✓	✓
E-mail Report				✓	✓
IP-CS Information → IP-CS Statistical Information					✓
IP-CS Information → LAN Sync Information					✓
Activation Key Installation					✓
Email Notification—Alert		✓			✓
Email Notification—System Analysis					✓
Email Notification—Test Email					✓
UM Command					✓
Router Command					✓
UM – System Prompts Customisation				✓	✓
Automatic Two-way Recording	✓	✓		✓	✓
UM - System Maintenance		✓			✓
CS-Web Connection		✓			✓

# 2.1.3 Logging in to Web Maintenance Console

After establishing a connection to Web Maintenance Console (see 1.2.1 Starting Web Maintenance Console), the login window is displayed, and a login name and password must be entered. If this is the first time to log in to Web Maintenance Console, and the PBX is in its initialised, factory default state, you must log in using the Installer level account to begin the Easy Setup Wizard (see 2.1.4 Easy Setup Wizard). For information about account names and passwords, see 2.1.1 Web Maintenance Console Accounts.

### Login Screen



### **Login Restrictions**

- Up to 32 User (User) and User (Administrator) level accounts may log in at one time to Web Maintenance Console in On-line mode.
- Only 1 user may log in using the Installer level account at a time. If someone using the Installer level
  account is logged in to Web Maintenance Console and is making changes, and another user logs in using
  the Installer level account, the user logging in may override the other logged-in user so that programming
  can be performed (a warning screen will be displayed for the user that is about to override the currently
  logged-in user).
- Users can view only menus and setting items they may access according to their account level. For User (Administrator) level accounts, the items that can be viewed can be set by the Installer level account. For details, see 6.8 Tool—Screen Customise.
- If two logged-in users change the same setting, the change made last will be the effective setting.
- If a user attempts to log in, but enters an incorrect password three times, the failure is recorded in the error log of the PBX and the user may not attempt to log in again for a 5-minute period.

## 2.1.4 Easy Setup Wizard

In the Easy Setup Wizard, you will configure the mandatory settings required for the PBX. When you log in to Web Maintenance Console for a PBX that is in its initialised, factory default state, the Easy Setup Wizard for that PBX will launch automatically.

You must log in using the Installer level account name and password.

- The Installer level account name is "INSTALLER".
- The default Installer level account password is "1234".

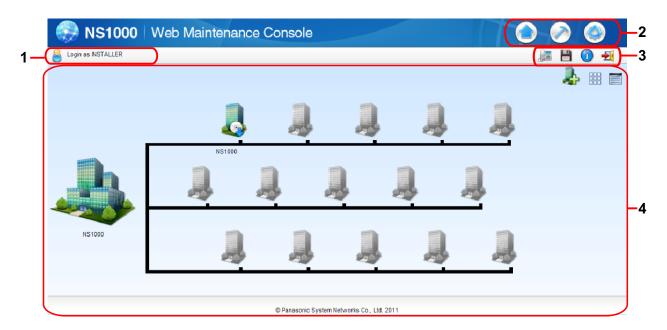
After logging in, the Easy Setup Wizard welcome screen is displayed. Refer to "5.4.1 Easy Setup Wizard" in the Installation Manual for detailed and important information about configuring the PBX using the Easy Setup Wizard.

### 2.1.5 Software Interface

This section explains the functions of the various elements of the software interface.

### **Main Window**

When you log in to Web Maintenance Console, the main window is displayed. For information about connecting to Web Maintenance Console and logging in, see **1.2.1 Starting Web Maintenance Console**. The main window of Web Maintenance Console is divided into several areas, as shown below:



### 1. Logged in Account Level

The logged in account level is displayed.

### 2. Menu Buttons

Provides access to the three main components of Web Maintenance Console:

Button	Description
	Clicking this button will load the Home Screen. From the Home Screen, you can:
1 P	View the status of connected PBXs in the One-look network
	Add PBXs to your One-look network
Home Screen	Select a PBX to perform programming For more information, see 3.1 Home Screen.
	Clicking this button will display the Maintenance Screen tree view items. From the Maintenance Screen, you can:
	Check the status and equipment of the selected PBX
	Backup or update PBX system files
Maintenance Screen	Use tools and reports to monitor and analyse system usage For more information, see Maintenance Screen Tree View Items below.
	Clicking this button will display the Setup Screen tree view items. From the Setup Screen, you can:
	Configure PBX hardware and virtual cards
	Programme settings for extensions and call handling
Setup Screen	Configure network settings and auxiliary PBX functions
	Configure the Unified Messaging (UM) system For more information, see <b>Setup Screen Tree View Items</b> below.

### 3. Web Maintenance Console Features

Clicking these buttons provides features for Web Maintenance Console, as follows:

Button	Description
Save Data	Clicking this button will save any changes made to settings to the Storage Memory Card. Programming changes that are not saved will be lost if the PBX is reset or is turned off. Changes may also be lost if Web Maintenance Console is suddenly terminated or the PC running Web Maintenance Console loses power unexpectedly. Be sure to save the data periodically while programming, especially during long programming sessions.
1	Clicking this button displays the Web Maintenance Console software version, copyright notices, and licences.
System	Note
Information	Licence information is not displayed when programming in Off-line mode.
<b>—</b>	Clicking this button will save any programming changes to the PBX's Storage Memory Card and log you out of Web Maintenance Console. For more information, see <b>2.2 Logout</b> .
Logout	
	Clicking this button will display the Extension List View in a separate window. For details, see <b>6.5 Tool—Extension List View</b> .
Extension List View	

### 4. Home Screen/Tree View

The Home Screen (shown above) displays the PBX icon view or PBX list view. The information and status of PBXs in the One-look network can be managed and confirmed. For more information, see **3.1 Home Screen**.

When the Maintenance Screen or Setup Screen is selected, the tree view is displayed. The tree view is used to display PBX setting items. Setting items are listed in categories, and by clicking items in the tree, setting items are displayed to the right in the settings programming area. Some tree items have sub-categories with additional options and settings. Clicking a sub-category will open an additional layer of settings. Below is a summary of the tree view menu items for the Setup Screen and the Maintenance Screen.

### **Maintenance Screen Tree View Items**

Item	Primary Functions
Status	Check the status of the PBX's system hardware
	Check the status of PBX equipment (PSs, CSs, UPS, etc.)
	<ul> <li>Check the status of extensions used by the Unified Messaging system For details, see 4 Status.</li> </ul>
System Control	Download and update PBX software files
	Manage music on hold (MOH) data
	Reset or shutdown the system For details, see 5 System Control.

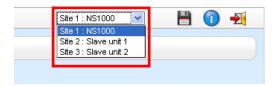
Item	Primary Functions
Tool	Backup system data to a USB memory device
	View a list of PBX extensions
	Import and export PBX settings and user information
	Backup or restore Unified Messaging data For details, see <b>6 Tool</b> .
Utility	Perform tests for PBX cards and network connections
	Transfer files between the PBX and a connected PC
	View reports, error logs, event logs, and programme update logs
	Monitor and trace PBX communications and protocols
	Manage activation keys For details, see 7 Utility.

### **Setup Screen Tree View Items**

Item	Primary Functions	
Users	Manage, view, and add PBX user profiles and account information For details, see 8 Users .	
PBX Configuration	Configure PBX hardware settings for cards, equipment, and networking	
	Configure network-wide programming such as BGM and Class of Service	
	Configure dialling features, call routing, and incoming call settings	
	<ul> <li>Configure call logging (SMDR) and other PBX maintenance items</li> <li>For details, see 9 PBX Configuration—[1] Configuration to 19 PBX</li> <li>Configuration—[11] Maintenance.</li> </ul>	
UM Configuration	Configure Unified Messaging mailboxes and voice mail subscriber settings	
	Configure service settings and system parameters	
	<ul> <li>Configure hardware options</li> <li>For details, see 20 UM Configuration—[1] Mailbox Settings to 26 UM</li> <li>Configuration—[7] System Security.</li> </ul>	
Router	Confirm the status of the built-in router and its settings	
Configuration	Configure built-in router settings and connections	
	Configure WAN/LAN settings for the built-in router	
	Configure security for the built-in router, such as a firewall For details, see 27 Router Configuration .	
Network Service	Configure server and client features for the PBX	
	<ul> <li>Configure connections settings and network security</li> <li>For details, see 28 Network Service.</li> </ul>	

### **Site Selection Menu**

When you are logged in to the Master unit of a One-look network and you are viewing programming screens in the tree view, a site selection drop-down menu is displayed with each PBX site's name and ID number. You can select a PBX site in the One-look network from the drop-down menu to programme items for that site.



### **Note**

On some screens, the site selection menu will be inactive. This means that the currently displayed programming items are set for the Master unit PBX only, and cannot be set for each Slave unit.

### **Standard Buttons**

There are standard buttons that are displayed on many screens within the Maintenance Console. The standard buttons are as follows:

Button	Function	
ОК	Temporarily implements changes to the system's memory (DRAM) and closes the current screen.	
Cancel	Abandons changes and closes the current screen.	
Apply	Temporarily implements changes to the system's memory (DRAM) and remains on the same screen.	

### **Copying and Pasting Data**

Many setting items in Web Maintenance Console can be copied and pasted to other items on the same screen. When the icon is displayed, clicking it will open a menu where you can specify the copy source and the paste destinations.

1. On a programming screen, click [=]. The copy window will be displayed.

### **Note**

The icon may not be displayed for some programming screens.

- 2. Select the copy source from the Copy From drop-down menu.
- **3.** In **Copy To**, select one or more paste destinations. Hold down the "Ctrl" key and click to select destinations one at a time, or hold down the "Shift" key and click to select a range of destinations.
- **4.** In **Items**, select one or more items to copy from the source selected in **Copy From**. Hold down the "Ctrl" key and click to select items one at a time, or hold down the "Shift" key and click to select a range of items.
- **5.** Click **Copy**. The programming item(s) selected in **Items** for the copy source specified in **Copy From** will be copied to the destination(s) specified in **Copy To**.

Individual items can also be copied and pasted in a manner similar to other software programmes. Press "Ctrl"+"c" to copy a highlighted (orange-coloured) programming item entry, select a target cell by pressing the keyboard arrow keys, and then press "Ctrl"+"v" to paste the copied information to the selected cell.

### 2.1.6 Card Status

Certain tools, utilities and settings require that the target card be set to out-of-service (OUS) or in-service (INS) status before the operation is carried out. Where required, this is noted in the description of each item. Card status changes can be performed only in On-line mode (see **Programming Modes** in **1.1.2 Introduction**).

• "In service" means that the card is installed correctly in the PBX, and is capable of being used normally.

- "Out of service" means that the card is installed correctly in the PBX, but has been temporarily removed from use. This allows settings to be modified or software to be upgraded.
- "Fault" means that the card is not installed in the PBX correctly, or is not functioning correctly. For more information, see the Installation Manual.

For details about how to change the status of a card, see **To change the status (INS/OUS) of a card (Online mode only)** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

## 2.1.7 Extension Number Setting

Many screens within the Maintenance Console software allow you to select extensions as part of programming various features (for example, as members of a group). These screens use a standard window to make selecting multiple extensions easy, accessed by clicking a button. This section explains how to use this Extension Number Setting window.

To select multiple extension numbers, select the type of extension to display, highlight the extensions you wish to add, then click the **Add** button. When finished, click **OK**. Data for the selected extensions will be added to the first free spaces on the original screen.

Name	Description	Value Range	Links
Extension Type	Selects the types of extension numbers to display in <b>Extension Numbers &amp; Names List</b> . Multiple items can be selected. Items that are not available are shown with a grey checkbox.	Wired Extension, Portable Station, ICD Group, PS Ring Group, OGM (DISA), External Pager, Fax Unit, UM / VM Extension, UM Group, VM(DPT) Group, VM(DTMF) Group	
Extension Numbers & Names List	Displays all available extensions of the types selected in <b>Extension Type</b> , and names. Click entries to select them, and click the <b>Add</b> button when finished, to add the selected extensions. To deselect an entry, click it again.	Matching extensions	
Available Column	Specifies which fields in the original form to add extension data to. For example, if both extension numbers and names can be entered in the original form, it is possible to specify that extension name data not be transferred, by deselecting that field here.  To select or deselect a field, click its name.	Available fields	
Selected Extension List	Displays the extensions that have been selected to be added to member data. To remove an extension from this list, click it to select it and click <b>Delete</b> .	Selected extensions	

# 2.2 Logout

### To logout

- 2. Click Yes.

### **Note**

- If the PC running the Web browser that is connected to Web Maintenance Console is shut down, or the Web browser is closed, any changes that have not been saved to the Storage Memory Card will be lost. To save settings while programming, click the ≝ button on the Home screen. Always end your programming session by clicking the 對 button.
- If you are logged in but do not perform any operations in Web Maintenance Console for 60 minutes (default value), you will be automatically logged out.

# 2.3 Frequently Asked Questions (FAQ)

This section provides answers to some common questions about using the Maintenance Console software to programme the PBX. The information is divided into the following topics:

. •	• .
Title	Description
Connection	Connecting to the PBX using Maintenance Console.
Maintenance Console Software	Using the Maintenance Console software.
Card Status	Changing the status (INS/OUS) of cards.
Portable Stations	Setting up portable stations, including registration and deregistration.
Numbering	Changing the numbering plan for the PBX, or numbers of individual extensions or features.
Saving Modified Data	Safely saving PBX data edited with Maintenance Console.
Setting Features	Setting up individual features.

### Connection

- Q The Maintenance Console cannot connect to the PBX via a LAN connection.
- A Is the PC connected to the LAN?
  - Have the IP address and port number of the PBX been set correctly? For more details, see 28.1 Network Service—[1] IP Address/Ports.
  - · Is the login name and password correct?
- Q Can I perform initial setup of the PBX without being connected to the PBX?
- Yes. This is possible in Off-line mode.
   Create a new system data file in Off-line mode (see 1.2.2 PC Programming Using Off-line Mode), modify settings as necessary, and then upload this file to the PBX later (see 7.2.1 Utility—File—File Transfer PC to PBX).

### **Maintenance Console Software**

- Q How do I confirm the software version of the PBX or installed cards?
- From the Home Screen, access the List View (see 3.1 Home Screen). The software version of the PBX is displayed on this screen.
  - From **9.1 PBX Configuration—[1-1] Configuration—Slot**, click **Summary**. Summary information is displayed for all cards installed in the PBX.
- Q Not all of the characters of a setting can be displayed because the column is too narrow.
- Move the mouse to the line between the names of 2 setting items, at the top of the table.
   The pointer will change to a double arrow. Click and drag the line to the right until all characters are displayed.

### **Card Status**

Q The status of a new card will not change to "INS".

- With the new card installed, does the total number of extensions or trunks exceed the maximum supported by the PBX?
  - Is the type of card installed in the slot different from the card type set as "Pre-Install" for that slot? Confirm that the correct card is installed in the slot.
  - Is the card firmly and fully installed in the slot? Confirm that the card is installed correctly in the slot.
  - · Confirm that the card is not damaged.

### Q I cannot change an LCO port to INS status.

- A Is the card installed in the appropriate slot?
  - Is the card installed in the correct slot, but not functioning correctly? Check the condition of the card.
  - Is the card itself in INS status?
     Set it to INS status.
  - Is a trunk line connected to the appropriate port?
  - Is the port in FAULT status, even though a trunk is connected? Run diagnosis on the relevant slot.
- Q How do I prevent newly installed cards automatically being changed to "INS"?
- Change New Card Installation—Card Status for any Card in 9.32 PBX
   Configuration—[1-3] Configuration—Option from "In Service (INS)" to "Out of Service (OUS)".

### **Portable Stations**

- Q I cannot register Portable Stations using the method described in 9.31 PBX Configuration—[1-2] Configuration—Portable Station.
- Do the PINs (Personal Identification Numbers) of the PBX and the Portable Station match? Confirm that they are the same.
  - Is the Portable Station within transmission range of the CS?
  - Has the Portable Station previously been registered at another location?
     It is not possible to register a Portable Station at 2 locations, so use the Forced Deregistration option to delete the previous registration.
- Q I cannot delete the extension number of a Portable Station.
- A First, de-register the Portable Station itself, and then delete the extension number.
- Q I cannot de-register a Portable Station.
- Is the Portable Station turned on? If not, turn it on.
  - Is the Portable Station within transmission range of the CS? If not, move it closer to the CS and try the de-registration operation again.
- Q The Portable Station I want to de-register is broken, and will not turn on, or is not available, or the registration information was deleted first from the Portable Station, so it cannot be de-registered.

- The Portable Station can be forcibly de-registered by following the procedure shown in Forced De-registration of 9.31 PBX Configuration—[1-2] Configuration— Portable Station.
- Q I changed the extension number of a Portable Station, but the display of the Portable Station still shows the old extension number.
- Turn the Portable Station off and back on again, to force it to re-register its location.
- Q I changed the FCO of a Portable Station, but the display of the Portable Station still shows the old FCO.
- Turn the Portable Station off and back on again, to force it to re-register its location.
- Q If I delete the extension number of a Portable Station, and then turn the Portable Station off and back on again, it does not function correctly.
- Do not delete the extension number of the Portable Station, as this information is necessary for it to operate.

### **Numbering**

- Q How do I change the extension number of a wired extension?
- Change the extension number of the target port to the new number, and click Apply.
   Next, set the port to OUS status, and then back to INS status.
- Q I changed the extension number of a wired extension while the extension was engaged in a call, but the display still shows the previous extension number.
- The extension number will not change while the extension is in use. When the conversation is finished, set the port to OUS status, and then back to INS status.
- Q How do I change the extension numbering plan from 3-digit numbers to 4-digit numbers?
- Perform the following steps:
  - Open the 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan— Main screen.
  - Enter a 2-digit number in Leading Number, or change No. of Additional
     Digits from "x" to "xx".

     For more details, see What is the procedure to modify the Numbering Plan? in Numbering.
- Q How do I set a 3-digit numbering plan?

- Select 3-digits for Select the default value of Numbering Plan in the Easy Setup Wizard. If you want to change to a 3-digit extension numbering plan after the PBX system is already running using a 4-digit extension numbering plan, follow the procedure below. There are 2 methods of creating a 3-digit numbering plan, using 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main:
  - 1. Set the leading number to be 2 digits, with one additional digit. This method allows a maximum of 10 extensions.
    - Example: **Leading Number** = 10; **No. of Additional Digits** = x In this example, extension numbers 100 to 109 can be used.
  - 2. Set the leading number to be one digit, with 2 additional digits. This method allows a maximum of 100 extensions.
    - Example: **Leading Number = 1**; **No. of Additional Digits =** xx In this example, extension numbers 100 to 199 can be used.

For more details, see **What is the procedure to modify the Numbering Plan?** in **Numbering**.

- Q What is the procedure to modify the Numbering Plan?
- Perform the following steps:
  - 1. Confirm that the Numbering Plan you will change is not currently being used by any extensions (see 6.5 Tool—Extension List View). If it is being used by extensions, temporarily change the extension numbers of those extensions to that of another numbering plan, or delete the extension number (see 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings and 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings).
  - 2. Clear the Leading Number cell.
  - 3. Click Apply.
  - 4. Modify the No. of Additional Digits cell as required.
  - 5. Click Apply.
  - 6. Enter the desired value in the Leading Number cell.
  - 7. Click Apply.
  - 8. Set all extension ports to OUS status.
  - **9.** On the relevant screens, set the extension numbers of extensions to the desired values.
  - **10.** Set all extension ports back to INS status.
- Q When modifying the Numbering Plan, I cannot change the Leading Number.

 It is not possible to use the same Leading Number for 2 extension blocks, or to use a number that could possibly overlap with another Leading Number.

So, for example, if "2" is already set as a Leading Number it is not possible to set "21" as another Leading Number because of the possible overlap of extension numbers

The number you are trying to store cannot be used if it is already being used by:

- A feature number
- Another extension block
- A Dial setting (see 17.1 PBX Configuration—[9-1] Private Network—TIE Table)
- Quick Dialling (see 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial)

In any of these cases, choose another number.

### Q When modifying the Numbering Plan, how do I set a 1-digit extension number?

- Perform the following steps:
  - 1. Clear the **Leading Number** cell.
  - 2. Click Apply.
  - 3. Set No. of Additional Digits to "None".
  - 4. Click Apply.
  - 5. Enter the desired value in the Leading Number cell.
  - 6. Click Apply.
  - 7. Set all extension ports to OUS status.
  - 8. On the relevant screens, set the extension numbers of extensions to the desired values.
  - 9. Set all extension ports back to INS status.

### Q How do I change a feature number?

- A Perform the following steps:
  - 1. Open the 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main screen and navigate to the Features tab.
  - 2. Change the value in the **Dial** cell of the desired feature.
  - 3. Click Apply.

### Q I cannot change a feature number.

It is not possible to use the same number for 2 items.

The number you are trying to store cannot be used if it is already being used by:

- A feature number
- An extension
- A Dial setting (see 17.1 PBX Configuration—[9-1] Private Network—TIE Table)
- Quick Dialling (see 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial)

In any of these cases, choose another number.

- Q How do I change the code used to access another PBX?
- Perform the following steps:
  - Open the 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan— Main screen.
  - 2. Select the Other PBX Extension tab.
  - **3.** Change the value in the **Dial** cell of the desired feature.
  - 4. Click Apply.
- Q I cannot change an Other PBX Extension code.
- It is not possible to use the same number for 2 items.
   The number you are trying to store cannot be used if it is already being used by:
  - A feature number
  - An extension
  - A Dial setting (see 17.1 PBX Configuration—[9-1] Private Network—TIE Table)
  - Quick Dialling (see 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial)

In any of these cases, choose another number.

- Q I cannot change a feature number on the B/NA DND Call Feature screen.
- A The number you are trying to store is already being used by another call feature. Please choose a different number.
- Q How do I prevent extension numbers being automatically assigned to a newly installed card?
- Change New Card Installation—Automatic Extension Number Set for Extension
   Card in the 9.32 PBX Configuration—[1-3] Configuration—Option screen from
   "Enable" to "Disable".

### **Saving Modified Data**

- Q Modified settings have not been updated in the PBX.
- Click Apply or OK in the main screen.
- Q If I reset the PBX directly after modifying settings, the modified settings are not updated in the PBX.
- When you click Apply, the settings are updated in the PBX, but are not yet saved to the Storage Memory Card. If system data is not saved to the Storage Memory Card, the PBX will restore the data that was last saved to the card in the event that the PBX is reset, or power is turned off and back on again.
  Therefore, before resetting the PBX, click the button on the Home screen to save the system data to the Storage Memory Cord. Also, when you finish a representation.
  - Therefore, before resetting the PBX, click the button on the Home screen to save the system data to the Storage Memory Card. Also, when you finish a programming session, be sure to click the button to logout and save the system data to the Storage Memory Card.

### Note

Do not remove the Storage Memory Card while power is supplied to the PBX. Doing so may cause the PBX to fail to start when you try to restart the system.

- Q After reinitialising the PBX, I restored system data from a previous backup. However, some of the settings have not been restored to their previous values.
- The following setting data is not saved to the Storage Memory Card, so will be deleted when the PBX is initialised. This data is stored in the PBX's battery backup memory.
  - Advice of Charge (AOC)
  - Hospitality guest billing data
  - Timed Reminder
  - ICD Group login status
     (All extensions are set to Login by default.)
  - Remote Extension Dial Lock

### **Setting Features**

- Q How do I change the dialling mode of an analogue trunk?
- From the 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port screen, change the Dialling Mode setting of the target port to "DTMF" or
  "Pulse", as required.
- Q How do I set disconnect detection (CPC Detection) for an analogue trunk?
- From the 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port screen, modify the CPC Signal Detection Time—Outgoing, Incoming
   setting of the target port.
   The required value varies by carrier. Transmission and reception can be set
   separately.
- Q What settings do I change to enable use of an extension ISDN telephone?
- From the 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port screen, set the Port Type of the port you want to use to "EXT".
- Q How do I connect to another PBX using QSIG?
- From the 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port or 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port screen, set the Port Type of the port you want to use to either "QSIGSlave" or "QSIG-Master".
- Q How do I edit a Class of Service, or create a new Class of Service?
- Class of Service feature restrictions can be set from the 10.7.1 PBX Configuration—
   [2-7-1] System—Class of Service—COS Settings screen.
- Q How do I restrict calls between 2 extensions?
- Calls between extensions can be restricted from the 10.7.3 PBX Configuration—
   [2-7-3] System—Class of Service—Internal Call Block screen. Click in the relevant cells to select the COS levels whose extensions are blocked from calling each other.
- Q How do I restrict trunk calls made by extensions?

- Trunk calls made by extensions can be restricted from the 10.7.2 PBX
   Configuration—[2-7-2] System—Class of Service—External Call Block screen.
   Click in the relevant cells to select the trunk groups that cannot be used by extensions associated with a particular COS in each time mode.
   To prevent extensions associated with a COS from making trunk calls, set all trunk groups for that COS to "Block" (blue).
- Q How do I modify the hold operation for SLTs?
- It is possible to choose how to hold a line and transfer a call with an SLT using the SLT-SLT Hold Mode option on the 10.9 PBX Configuration—[2-9] System—System Options screen.
  - For more details, see "2.13.1 Call Hold" of the Feature Manual.
- Q How do I set up an Incoming Call Distribution (ICD) group to receive trunk calls directly?
- A Perform the following steps:
  - On the 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call
     Distribution Group—Group Settings screen, enter the floating extension
     number you chose for the ICD group in the Floating Extension Number cell.
  - 2. Click Apply.
  - 3. On the 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Member List screen, select the ICD group you created from the ICD Group No. drop-down list.
  - **4.** Enter the extension numbers of member extensions in the **Extension Number** column.
  - 5. Click Apply.
  - 6. On the DIL tab of the 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings screen, enter the floating extension number of the ICD group as the DIL Destination—Day, Lunch, Break, Night of each time mode.
  - 7. Modify other settings as required from the **Group—Incoming Call Distribution Group** submenu.
- Q How do I set the queuing operation for an Incoming Call Distribution group?
- A Perform the following steps:
  - On the 11.5.2 PBX Configuration—[3-5-2] Group—Incoming Call
     Distribution Group—Queuing Time Table screen, set the actions as required for each queuing table.
  - On the 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call
     Distribution Group—Group Settings screen, from the Queuing Time Table tab, select the number of the Queuing Time Table to use in each time mode.
- Q How do I add an extension as a member of an Incoming Call Distribution (ICD) group?

### A • Perform the following steps:

- On the 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call
   Distribution Group—Group Settings—Member List screen, from the ICD
   Group No. drop-down list, select the group you want to modify.
   The ICD group must have an extension number set.
- **2.** Enter the extension number of the extension you want to add in a blank cell of the **Extension Number** column.
- 3. Set Delayed Ring as necessary.
- 4. Click Apply.

Note that it is necessary to set the extension number of the ICD group in advance.

# Q I have set FWD through system programming, but calls are still not being forwarded.

### Perform the following steps:

- Check that the Forward / DND settings of the target extension on the 12.1.2
   PBX Configuration—[4-1-2] Extension—Wired Extension—FWD/DND or 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station—FWD/DND screen are set to one of the forwarding settings.
- 2. Create a FWD button on the target extension if one does not already exist.
- 3. Press the FWD button so that it changes to FWD status.

# Section 3

# Web Maintenance Console Home Screen

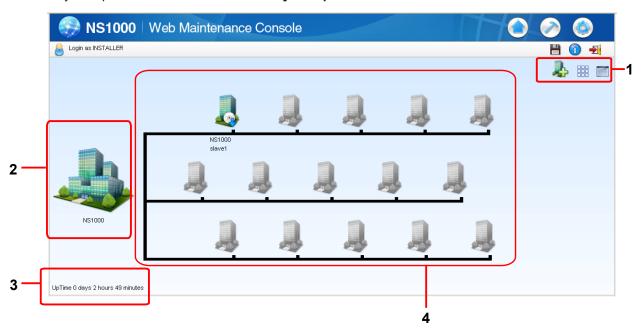
This section explains how to setup the main PBX and other connected PBXs from the Home Screen of Web Maintenance Console.

# 3.1 Home Screen

The Home Screen of Web Maintenance Console provides an overall view of your One-look network, and allows you select a PBX to perform programming, or add a PBX to your One-look network. The Home Screen is displayed when you login to Web Maintenance Console. The screen can also be accessed by clicking the Home Screen icon at the top of the Web Maintenance Console screen.

### **Note**

• The first time you login to a PBX using Web Maintenance Console, instead of the Home screen the Easy Setup Wizard is run. See **2.1.4 Easy Setup Wizard**.



### 1. PBX management buttons

These items provide site management functions as follows:

Icon	Description	
4	Add Slave Click this button to run the Add Site Wizard to add a PBX as a Slave unit to the One-look network.	
	Note	
	This is displayed only when logged in to the Master unit.	
	Icon View Click this button to display the PBXs as icons (as in the above illustration).	

### **Description Icon List View** Click this button to view the following information in a list format: System Capacity Selection This field indicates the type that is selected for **System Capacity Selection** in Easy Setup Wizard. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual. · Site status indicator • Site ID (1–16) · Site Name Location (MIB) Specified at MIB info—SysLocation in 28.3.3 Network Service—[3-3] Client Feature—SNMP Agent. • Status (INS or OUS) PBX Mode PBX Model IP Address MAC Address PBX Version (software version) · PBX Region · Data Version SRAM Version You can also perform PBX site management from this screen: Click Registration to register Slave units that have been added using the Add Site Wizard. For details, see 3.1.1 Home Screen—Add Site Wizard. You can also click **De-Registration** or **Forced De-Registration** to remove Slave units from the One-look network. - When logged in to a Slave unit, only information for that Slave unit and the Master unit is displayed. You can register or de-register Slave units only in On-line mode. • In the Backup Master drop-down list, select a site to designate it as the Backup Master site, and then click **OK**. For details, see **1.2.3.1 One-look Networking Survivability.** Note If you have already designated a Backup Master site and want to select a different site, first select Unassigned and click OK. Then, select the new Backup Master site.

### 2. Master unit PBX icon

This is the icon and unit name representing the Master unit PBX. Click this icon to open the Setup Screen for this PBX. You can also right-click the icon and select to open either the Setup Screen or the Maintenance Screen.

Right-click the icon and select **Normal Mode** in the following cases:

- The Master unit is offline and not operating, and you want to restore the Master unit to normal operation.
- There has been a connection error with one or more Slave units, and you want to restore their connection to the Master unit in the One-look network.

### 3. PBX information

- The time of when Web Maintenance Console last received information from the PBX is displayed.
- The uptime of the PBX is displayed (the total time since the PBX was last reset).

### 4. Slave unit PBX icons

These 15 icons represent Slave unit PBXs under the control of the Master unit PBX. Units that have been registered display a unit name and are coloured in. Remaining available unit positions are shown as greyed out. You can right-click a registered PBX and select **Maintenance**, **Setup**, or **Direct Login** for that PBX. Selecting **Direct Login** will display the Login screen for that PBX. For details about the login procedure, see **2.1.3 Logging in to Web Maintenance Console**.

If the PBX is operating as the Master Backup unit or is in Isolated mode, but the Master unit has been restored to normal operation, you can right-click the PBX's icon and select **Normal Mode** to restore the PBX to normal operation. (It will reconnect to the Master unit PBX as a Slave unit.)

The desired method for recovering from Isolated mode to Normal mode can be specified. For details, refer to **8.4.2 One-look Networking Survivability** in the Installation Manual.

### **Note**

- For the following items related to the Unified Messaging (UM) programming of a Slave unit, you
  must select **Direct Login** to log in to the PBX that the UM Group in which programming will be
  performed belongs to:
  - 4.1.4 Status—Equipment Status—UM Port status
  - 4.1.5 Status—Equipment Status—USB
  - 5.3 System Control—FAX Card
  - 6.1.1 Tool—System Data Backup—Backup to USB
  - 6.9 Tool—UM Data Backup
  - 6.10 Tool—UM Data Restore
  - 6.11 Tool-UM Backup History
  - 7.3.4 Utility—Log—UM System Log
  - 7.4.8 Utility—Monitor/Trace—UM System Trace (Internal)
  - 7.4.6 Utility—Monitor/Trace—Fax Protocol Trace
  - 7.4.7 Utility—Monitor/Trace—Fax Task sequence Trace
  - 7.5.3 Utility—Report—UM View Reports
  - 7.8 Utility—Command
  - 7.9 Utility—UM System Prompts Customisation
  - UM Configuration settings
     (For details for UM Configuration settings, see "20 UM Configuration—[1] Mailbox Settings" to "26 UM Configuration—[7] System Security".)

### **PBX Status Icons**

If the PBX is in service (INS) and operating normally, the unit will be displayed as shown above. Icons are displayed on PBX units when they are not in service and operating normally. The following icons are displayed on PBX units according to their status:

Icon	Description
8	Connection Error (Status Unknown)  The site where you are logged in cannot communicate with the sites displaying this icon and cannot determine their status.
5	Maintenance Mode This PBX is installed but it is out of service (OUS) and maintenance is being performed on it. PBXs with this icon are visible on the home screen, but they are currently not connected to other PBXs in the One-look network.
<b></b>	Pre-install Mode This PBX is installed but it is out of service (OUS) and has not yet been put in service (INS). The free trial period for activation key trials has not yet begun.
A	Offline Master Unit The Master unit is currently not connected to other PBXs in the One-look network and is not operating as the Master unit.

### 3.1.1 Home Screen—Add Site Wizard

The Add Site Wizard, which is run from the Home Screen, will add KX-NS series PBXs (KX-NS300/KX-NS500/KX-NS700/KX-NS1000) to your One-look network as Slave units.

### Note

- The PBX to be added must have been configured as a Slave unit using the Easy Setup Wizard. See **2.1.4 Easy Setup Wizard**.
- To designate a Backup Master PBX, first add the PBX as a Slave unit to the One-look network using the Add Site Wizard, and then select it as the Backup Master unit from the List View.
- KX-NS300/KX-NS500/KX-NS700 PBXs cannot be designated as a Master or Backup Master PBX.
- 1. To start the Add Site Wizard, click the Add Slave button () on the Home screen. For details about the Home Screen, see 3.1 Home Screen.
- Follow the prompts of the Add Site Wizard to complete the following settings:
  - PBX Setting
  - LAN Setting
  - Registration Setting
  - SNTP / Daylight Saving
  - Maintenance Setting

### Note

- The parameters which appear in the settings above are described in 2.1.4 Easy Setup Wizard.
- If 2 or more sites will be added to the One-look network, repeat steps 1 and 2 for each site.
- 3. After the Add Site Wizard is completed, click **Registration** on the List View of the Home screen.
- 4. A list of PBXs set up as Slave units will be displayed under Available Site. Select PBXs by their assigned site names and click the right arrow to move them to Selected Site for Registration. Click Next to start the registration process.
- 5. On the Registration Executing screen, the status of PBXs being registered is displayed.
- **6.** On the **Registration Completed** screen, the result of the registration process is shown. Click **Close** to continue.

Registered Slave PBXs can now be viewed and selected on the Home Screen for programming.

### Removing registered Slave units from the One-look network

To remove a Slave unit from the One-look network, there are two methods: De-registration and Forced De-registration.

Method	Description	
De-registration	Registration information and settings for the Slave unit are deleted from the Master unit.	
	The De-registered Slave unit is reset to its initialised state (factory default state).	
Forced De-Registration	Registration information and settings for the Slave unit are deleted from the Master unit.	
	The De-registered Slave unit is not reset to its initialised state. Information and settings registered on the Slave unit remain.	

- 1. Set the Slave unit to be removed to out of service (OUS) status.
- 2. From the List View of the Home Screen (see 3.1 Home Screen) click **De-registration** or **Forced De-registration**.
- **3.** Select the PBX(s) by site name, click the arrow to move them to the selection box, and click **Next**. A confirmation screen will be displayed.
- 4. Click **OK** to continue.
  - A removal status screen will be displayed. Each selected PBX will be removed one at a time. After each successful removal, a confirmation message will appear. Click **Continue** to proceed to the next PBX to remove
- 5. When all removal is complete, a message will be displayed. Click Close to finish.

# Section 4 Status

This section serves as reference operating instructions for the Status menu of the Maintenance screen of Web Maintenance Console.

# 4.1 Status—Equipment Status

## 4.1.1 Status—Equipment Status—UPS

Information is provided about the status of the UPS device and the connection to the PBX

### UPS Connection Status

Displays if the UPS system is connected or not connected. If a UPS system is connected, the information below will be displayed for the UPS system.

### Battery Voltage (V)

The voltage of the UPS battery is displayed (0-240 V).

### Battery Charge Percentage (%)

The remaining charge of the UPS battery is displayed (percentage value).

### Power Supply

Displays the usage status of the UPS (if the UPS is engaged in supplying power to the PBX).

### · UPS Shutdown Conditions - Battery level

From the drop-down list, select the amount of remaining battery level for when to initiate PBX shutdown procedures.

For more information about setting up a UPS system, refer to "4.13 Starting the KX-NS1000—Connecting an Uninterruptible Power Supply (UPS)" in the Installation Manual.

### 4.1.2 Status—Equipment Status—CS Information

Displays information stored by the PBX regarding each Cell Station (CS).

This option is only available for the Installer level account in On-line mode and requires that the target V-IPCS4 card be set to INS status.

The displayed items are as follows:

Item	Description	
Site	Number of the site	
Shelf	Number of the shelf	
Slot	Number of the slot	
Port	Number of the port	
CS Name	Name of the attached CS	
Status	Service status of the attached CS: INS, OUS, or FAULT. If the status is FAULT, subsequent data items for that port will be left blank.	
Version	Version number of the programme file stored in the CS	
Revision	Revision number of the programme file stored in the CS	
CSID	12-digit ID number of the CS	
Path	Number of the wireless extension currently using each path. In the case of a group, several extensions may be using the same floating extension number.  When an extension number is not registered, the display shows "OFF". The number of paths that can be used varies for each CS model. For more details, see the documentation for your CS.	

Item	Description
Group Call	Number of PSs registered to the attached CS that are members of a PS Ring Group.

### To view CS information

- 1. From the Target CS I/F Shelf-Slot No. drop-down list, select the target shelf and slot.
  - To display information on a single card, select the shelf number, slot number and name of that card.
  - · To display information on all matching cards, select "All".
- 2. From the Interval Timer drop-down list, select the number of seconds between each automatic screen refresh.
- 3. If you want to save the CS information, click Capture.
  - a. Create a file for saving the data.
  - b. Click Start.
  - c. Click Close.
- Click Start to begin monitoring.
   Monitoring will be performed and the screen will refresh according to the interval specified.
- **5.** Click **Stop** to end monitoring.
- **6.** If you started to save the CS information in step **3**, click **Capture**, then click **Stop** to record the information to the specified file.
- 7. Click Close to return to the main screen.

## 4.1.3 Status—Equipment Status—PS Information

Displays Portable Station (PS) registration information, including the associated Cell Station (CS). This option is only available for the Installer level account in On-line mode.

The displayed items are as follows:

Item	Description
PS No.	PS location number. Only registered PSs will be displayed.
Extension Number	Extension number of the PS.
Site	Number of the site.
LocationSlot	Slot number of the CS that the PS is registered with.
LocationPort	Port number of the CS that the PS is registered with.
Model Name <sup>*1</sup>	Model name of the PS.
Version <sup>⁴¹</sup>	Software version of the PS.

<sup>11</sup> This information is displayed for certain PSs only. For more information, refer to the documentation for your PS.

# 4.1.4 Status—Equipment Status—UM Port status

The UM Port status screen displays each port's status and number for the Unified Messaging system. The screen will be updated every 30 seconds. Each port's status will be displayed in one of the following ways:

- · Online (Ready): The port is ready to be used.
- Incoming Call: The port is handling an incoming call.
- Outgoing Call: An outgoing service is being processed.
- Error Occurred: An error has been detected.
- Off Line: The port is offline.

This screen can be accessed only in On-line mode.

## 4.1.5 Status—Equipment Status—USB

USB Mount Status indicates if a USB memory device is connected to the PBX. There is also an **Unmount** button.

 Mounted: A USB memory device is connected to the PBX. Before removing the USB memory device from the PBX, click Unmount.

### **Note**

If a mounted memory device is removed from the PBX without first clicking **Unmount**, the data on the USB memory device may be damaged.

· None: No USB memory device is detected by the PBX.

This screen can be accessed only in On-line mode.

# Section 5 System Control

This section serves as reference operating instructions for the System Control menu of the Maintenance screen when programming using Web Maintenance Console.

# 5.1 System Control—Program Update

The programme files for the following hardware components can be updated with the Program Update feature.

Each file must be named as indicated in the table to be recognised by the KX-NS1000.

### Hardware that can be updated using Program Update

Programme Type	Target of Update	File Name
MPR Programme	KX-NS1000 Mother Board	PCMPR
LPR Programmes	CSIF	PCSINF
	DHLC/DLC	PDHLC
	SLC	PSLC
	DID	PDID
	T1	PT1
	E1	PE1
	E&M	PEM
	BRI	PBRI
	PRI23	PPRI23
	PRI30	PPRI30
	OPB3	POPB3
	ESLC16/EMSLC16	PESLC
	ECSLC24/EMSLC24/MCSLC16/MCSLC24	PEESLC
	ELCOT	PELCOT
	EECHO	PEECHO
	CSLC16	PCSLC
	STACK-S	PSTKS
PT Programmes	KX-NT265	PNT265A
	KX-NT343, KX-NT346, KX-NT343	PNT300
	KX-NT321	PNT321
	KX-UT133, KX-UT136	PUT13X
	KX-UT113, KX-UT123	PUT1XX
	KX-NT543, KX-NT546	PNT540
	KX-NT551, KX-NT553, KX-NT556	PNT550
	KX-NT560	PNT560
	KX-UT248	PUT248
	KX-UT670	PUT670
	KX-NT630	PNT630
	KX-NT680	PNT680

Programme Type	Target of Update	File Name
	LCD picture file (for KX-NT680)	PNTPICT
	The maximum file size is 1MB.	
	The aspect ratio of the image is preferably 16:9.	
	<ul><li>Supported file formats are as follows:</li><li>JPEG / PNG / BMP / GIF</li></ul>	
	This file is updated from the local PC only.	
Firmware for	PFPGA	PFPGA
KX-NS1000	PAPMIRNR	PAPMIRNR
	PARMVDNR	PARMVDNR
	PARMIREP	PARMIREP
	PARMVDEP	PARMVDEP
	PC300NR	PC300NR
	PC300EP	PC300EP
	PC300DAG	PC300DAG
Unified Messaging (UM) Programme	PFAX	PFAX
CS Programmes (PS Programmes)	CS using a CSIF card for DECT Portable Station	PCSDECT
	CS using a CSIF card for 2.4 GHz Portable Station	PCS24G
	CS using a DHLC/DLC card for DECT Portable Station	PDCSDECT
	CS using a DHLC/DLC card for 2.4 GHz Portable Station	PDCS24G
	High-density CS for DECT Portable Station	PHCSDECT
	IP-CS for DECT Portable Station	PICSDCT
	TCAx85 + IP-CS (KX-NS0154)*1	PNS0154

Software updates for PSs (e.g., KX-TCA185) are bundled with software updates for an IP-CS (KX-NS0154 only).

# 5.1.1 System Control—Program Update—Download Program File

Software updates for PBX hardware components can be downloaded to the PBXs in the One-look network. Manual and automatic methods are available.

Programme downloading can be performed only in On-line mode.

### Note

• If these operations are performed when logged in to a Slave unit, only the manual method can be used, and files may only be acquired from a local PC or a USB memory device.

 When using an FTP server with this feature, the programme files to be downloaded to the KX-NS1000 PBX must be named on the FTP server in a specific way that includes the version number.

Example: "PNT300\_xxx\_xxx\_xxx" ("xxx xxx xxx" is the version number.)

#### Manual

Using manual operations, the location of updated PBX software is specified and downloaded to the Master unit, and then transferred to any Slave units.

### To download programme files manually

1. In Location of program files, specify the location of the updated files from the Look in drop-down list. The choices are as follows:

#### Local PC

Click **Browse** and specify the location of the updated programme files stored on the PC logged in to Web Maintenance Console.

### USB Memory

If a USB memory device is inserted into the PBX, the contents of the following directory on the device will be checked for updated files: /private/meigroup/psn/ippbx/update

### FTP Server

The PBX connects to the specified FTP server and checks for updated files. Specify an FTP server from the **FTP connection name** drop-down list, and specify the number of attempts to connect to the FTP server in **No. of retries**.

To specify a new FTP site, see 28.3.1 Network Service—[3-1] Client Feature—FTP.

#### Master Unit

The most recent versions of files previously downloaded to the Master unit are displayed.

#### NAS

Specify the location of the updated programme files stored on a directory of the NAS to Web Maintenance Console.

2. Specify which PBX programme files will be automatically downloaded by checking the boxes next to each hardware item.

### 3. For FTP Server only

Click **Check** to confirm the connection to the FTP server. If a connection is established, the **Execute** button will become active.

**4.** Click **Execute**, and then click **OK** on the confirmation message that appears. When the transfer is complete, click **OK**.

### Note

- If downloading cannot be completed within 10 minutes (due to slow network speeds or other connection problems), the download operation will be cancelled.
- The Master unit's FTP server function must be enabled for Slave units to download programme files. See 28.2.2 Network Service—[2-2] Server Feature—FTP.

### **Automatic**

The Master unit is set to automatically check an FTP server for updated programme files. If an update is available, the Master unit will download the data. The downloaded software is then sent over the One-look network from the Master unit to all Slave units.

To download programme files automatically

- For Download Server, select an FTP site.
   To specify a new FTP site, see 28.3.1 Network Service—[3-1] Client Feature—FTP.
- 2. For **Download mode**, select one of the following:
  - None: No actions are taken (automatic downloading is disabled).
  - Check only: The specified download server is checked at the specified times. If an e-mail is entered in **Email notification**, an e-mail notification is sent when updated files have been discovered.

### **Note**

If **Check only** is selected, updated files will have to be downloaded manually (see the manual procedure above).

- **Download automatically**: The specified download server is checked at the specified times. If updated files are discovered, they will be downloaded automatically to the PBX. If an e-mail is entered in **Email notification**, an e-mail notification is sent when updated files have been downloaded.
- **3.** In **Check time and date**, specify when the PBX will contact the server to check for updates. The check can be performed on a daily or weekly basis.
- **4.** In **Email notification** specify up to 2 e-mail addresses that will receive an e-mail notification when updated files have been discovered or when updated files have been downloaded.

### **Note**

If **Download automatically** is not selected in step **2**, specify at least one e-mail address so that an administrator will be notified when updated files have been discovered.

- 5. To begin automatic checking for updates according to Check time and date, click Execute.
- **6.** The PBX will now periodically perform checks and downloads as specified in the settings. Click **Download Cancel** on this screen to stop automatic programme updates.

### Note

When the system is downloading data from an FTP server, if downloading cannot be completed within 10 minutes (due to slow network speeds or other connection problems), the download operation will be cancelled.

# 5.1.2 System Control—Program Update—Update Program File

Once updated programme files have been downloaded and are stored on a PBX, they can be used to update the system files of the PBX. The update process can be set to be automatically performed at a specified time, or the update process can be carried out manually.

You must be connected to the PBX in On-line mode to update programme files.

#### Note

- Before updating programme files, we strongly recommend making a backup of all system files. For details, refer to the following:
  - 6.1 Tool—System Data Backup
  - 6.9 Tool-UM Data Backup
- Do not upgrade KX-UT series SIP phones at the same time as the Main unit.
- When upgrading the system software to version 004.1xxxx from an older version, the following SRAM data is cleared.
  - Timed Reminder
  - Remote Station Lock Status

- Room Status
- Login/Logout Status
- SMDR
- Billing Information
- Hotel Check In/Check Out
- Hotel Specifications

Save SRAM data before upgrading the firmware.

When you upgrade the software, a message will be shown. Then, you can save the following SRAM data into the Storage Memory Card as "smdrdata.zip".

- SMDR
- Billing Information
- Hotel Specifications
- When upgrading the firmware for the Unified Messaging (UM) Programme (PFAX), specify the MPR card as the target hardware. The MPR card's firmware will be updated at the same time. Be aware that a system reset is necessary when doing the update. However, to update the MPR card's firmware at the same time as the PFAX firmware, Immediately (Manual update) must be selected for Program Update Type. If Timed Update (Automatic update) is selected, the PFAX firmware will not be updated at the same time.

For Program Update Type, select Immediately or Timed Update.

# Immediately (Manual update)

Specify which cards or devices to update, and perform the update immediately.

- 1. In **Email notification**, specify up to 2 e-mail addresses that will receive a notification when programme files have been updated.
- 2. Updated programme files that can be used to update cards or devices installed in the system are listed in **Available Program File(s)**. In **Select the target to update**, specify which cards or devices will be updated using the files listed by checking the boxes next to each item.

### Note

- When selecting an item, a warning message may be displayed. Confirm the contents of the warning, and then click **OK** to continue.
- If you are updating the software for a PS, select the port of an IP-CS (e.g., KX-NS0154) that supports this feature. For details about which PSs can be updated, see 5.1.3 System Control— Program Update—Plug and Update.
- 3. Click Apply.
- **4.** Click on another PBX site tab to programme another PBX in the One-look network as required, and then repeat steps **1–3**. Perform settings for each PBX in the One-look network as required.
- 5. Click Execute.

The programme files are updated to the specified PBXs.

# Note

- Updated PBXs reset when the update is complete.
- If this operation is performed when logged in to a Slave unit only the PBX mother board and hardware specifically registered to the Slave unit may be updated.

# Timed Update (Automatic update)

Specify which cards or devices to update and a time to execute the update.

- 1. In **Email notification**, specify up to 2 e-mail addresses that will receive a notification when programme files have been updated.
- 2. Updated programme files that can be used to update cards or devices installed in the system are listed in Available Program File(s). In Select the target to update, specify which cards or devices will be updated using the files listed by checking the boxes next to each item.

### Note

When selecting an item, a warning message may be displayed. Confirm the contents of the warning, and then click **OK** to continue.

- 3. In **Update Time**, specify the time of day when the update will be executed.
- 4. Click Apply.
- **5.** Click on another PBX site tab to programme another PBX in the One-look network as required, and then repeat steps **1–4**. Perform settings for each PBX in the One-look network as required.
- Click Execute.The programme files will be updated to the specified PBXs at the specified time.

#### Note

- In a One-look network, the following processing is performed after you click Confirm:
  - 1. If you are updating the PBX's software, the check boxes are checked for all sites where the update will be applied.
  - 2. A general check of the software version of all sites is performed.
- When updating the software of devices other than the PBX (i.e., terminal devices), individually select the check boxes for sites where the update will be applied.
- All PBXs in a One-look network must be using the same version of the software. When updating PBXs connected in a One-look network, note the following:
  - To confirm the software version of each site, click Confirm. Major and minor software versions are displayed as follows:

Software version: XXX.YYY

XXX = Major version

YYY = Minor version

- If all sites are the same software version, Apply is available and the settings will be applied for all sites. If all sites are not the same software version, Apply is not available.
- When updating the programme files for multiple PBXs, an immediate (manual) update is recommended. For Automatic (timed) updates, set the same **Update Time** for all PBXs in the One-look network.
- At most, the process of updating all PBXs in the network can take approximately 30 minutes to complete.
- For CS programme files, in order for CS cards to be displayed on this screen, the cards must be set to INS, and the ports of the card must be set to OUS.

# 5.1.3 System Control—Program Update—Plug and Update

The Plug and Update feature allows IP-PTs, IP-CSs, and certain PSs to be automatically updated to the latest software version when they are registered to the PBX. When Plug and Update is enabled, the version number of the system software stored on the Master unit is compared to the system software currently in the

device, after the device has been registered to the PBX. If the software on the Master unit is newer, it is downloaded to the device. In a One-look network, Plug and Update can be enabled for each type of device on a per-site basis. Manual update can also be enabled for PSs.

The Plug and Update screen lists the PBXs in the One-look network by site number and site name. By default, Plug and Update is set to **Off** for all sites and device types.

- 1. For each site and device type, select **On** for the features you want to enable.
  - Plug & Update for IP-PT/IP-CS: Enable Plug and Update for IP-PTs and IP-CSs.
  - Plug & Update for TCAx85: Enable Plug and Update for supported PSs.
  - Manual Update for TCAx85: Enable manual updates for supported PSs.
- 2. Click OK.

## Note

- Plug & Update for TCAx85 and Manual Update for TCAx85 cannot be set to enable at the same time.
- The following PSs support this feature:
  - KX-TCA185
  - KX-TCA285
  - KX-TCA385

# 5.2 System Control—MOH

# 5.2.1 System Control—MOH—Install

Sound files on the programmer's PC can be installed to each PBX for use as Music on Hold (MOH). This screen can be accessed only in On-line mode.

- 1. Click **Browse** and select a WAV file to install as an MOH file. Only one file may be installed at a time.
- 2. In the Select column, specify which PBX sites will install the sound file as an MOH file.
- 3. As uploading the file to the PBX may require some time, a time can be set in **Time Set**.
- 4. In **BGM No.**, specify which BGM number the MOH file will occupy.
- **5.** Click **Execute** to confirm the settings. An installation report for each site will be displayed when the installation is finished. If "Now" is set for **Time Set**, the installation will begin at this time.

### **Note**

- Users logged in to the Master unit can see the status of all One-look network sites. Users logged in to a Slave unit may only view the status of that PBX.
- Only WAV files can be installed, and file names must not exceed 57 characters in length (including the file extension ".wav"). If non-alphabetic characters are used, the file name must not exceed 14 characters in length.
- Some language codes for file names are not supported, and file names may not display correctly after they are installed on the PBX. To ensure proper display, use only the ASCII character set for file names.
- Files may not be larger than 80 MB in size.
- For a KX-NS300 PBX Slave unit, only 2 sound files can be installed for the site.
- User (User) level accounts cannot perform this procedure.

# 5.2.2 System Control—MOH—Delete

MOH files that are occupying BGM numbers can be deleted.

This screen can be accessed only in On-line mode.

- In BGM No., specify the BGM numbers to delete MOH files from. Specify "All" to delete the data saved in all BGM numbers.
- 2. In the Select column, specify which PBX sites will delete MOH files from the specified BGM numbers.
- 3. Click **Execute** to delete the files of the specified BGM numbers.

### **Note**

- Users logged in to the Master unit can see the status of all One-look network sites. Users logged in to a Slave unit may only view the status of that PBX.
- User (User) level accounts cannot perform this procedure.

# 5.2.3 System Control—MOH—Status / Backup

MOH files stored on a PBX can be downloaded to the user's PC.

This screen can be accessed only in On-line mode.

1. From Site No., select a PBX from which to download MOH files.

- 2. The MOH files saved to the PBX will be listed. Click **Backup** for the file you would like to back up. One file can be backed up at a time.
- 3. A save file dialogue will appear. Specify the directory on the PC to back up the file to.
- 4. Click **OK** when finished.

### Note

- Users logged in to the Master unit can see the status of all One-look network sites. Users logged in to a Slave unit may only view the status of that PBX.
- Remained Capacity Time indicates the amount of time available for new MOH files to be added. The amount of time of any MOH files scheduled to be uploaded in 5.2.1 System Control—MOH—Install is not reflected in this value.
- User (User) level accounts cannot perform this procedure.

# 5.3 System Control—FAX Card

This function is used to restart the optional FAX Card after it is installed in the PBX. For details about installing the FAX Card, refer to "4.3.4 FAX Card (KX-NS0106)" in the Installation Manual. This screen can be accessed only in On-line mode.

- 1. Click Execute.
- 2. Click OK.
- 3. The card is restarted and a confirmation message is displayed. Click **OK**.

# 5.4 System Control—System Reset

When programming changes or other changes to PBX settings require a system reset, this command allows a reset to be performed remotely from Web Maintenance Console.

When the system is reset, any settings not saved to the Storage Memory Card are lost. A backup should be performed before the reset to ensure no data is lost. However, a backup should not be performed if settings or data have recently been imported into the system, because performing a backup would overwrite the imported data with the current PBX settings.

This screen can be accessed only in On-line mode.

# [Manual System Reset]

- 1. Select the System Reset tab.
- 2. Confirm the contents of the displayed warning message.
- 3. Click Backup or Skip according to the system's status:
  - Backup: Click to backup system settings. The system will be reset after the backup has been performed.
  - Skip: The system is reset without performing a backup.

If you are logged in to the PBX that is reset using this command, it is necessary to re-log in to Web Maintenance Console to continue programming.

# [System Reset by Timed Schedule]

- 1. Select the Timed Reset tab.
- 2. Select a site at **Select Site** (select **All Sites** or a specific site number and name).
- 3. Select the Reset Mode (None, One Time, One Time (KX-NT only), Daily).
- 4. Set the **Reset Time** (00:00-23:59).
- 5. Click Apply or OK to set the system reset.

The specified site will have its system reset at the specified mode and reset time, according to the above settings.

# [Optional System Reset]

To check whether or not V-UTEXT cards currently can be installed, or to change the setting, follow the procedure below.

- 1. Select Optional Reset tab.
- 2. Enable or Disable is displayed as V-UTEXT card status. It indicates whether or not V-UTEXT cards can be installed now. If you reset the system after changing the setting:
  - **2-1.** If you change the setting to "**Enable**" and then reset the system, some features do not operate. For details, carefully read the contents displayed on the web screen.
  - **2-2.** If you change the setting to "**Disable**" and then reset the system, V-UTEXT cards cannot be installed. To change this setting, the following condition must be met. (Condition)
    - · All V-UTEXT cards are removed.
- 3. Click **Execute** to execute Optional System Reset.

# 5.5 System Control—System Shutdown

In order to turn off the power to a PBX, it must first be issued a shutdown command using Web Maintenance Console. Follow the procedure below to prepare a PBX for system shutdown.

When the system is shut down, any settings not saved to the Storage Memory Card are lost. A backup should be performed before the shutdown to ensure no data is lost. However, a backup should not be performed if settings or data have recently been imported into the system, because performing a backup would overwrite the imported data with the current PBX settings.

This screen can be accessed only in On-line mode.

- 1. Select the PBX site(s) to shut down in the **Select Site** drop-down menu.
- 2. Confirm the contents of the displayed warning message.
- 3. Click **Backup** or **Skip** according to the system's status:
  - **Backup**: Click to backup system settings. The system will prepare for shutdown after the backup has been performed.
  - Skip: The system is prepared for shutdown without performing a backup.
- 4. The STATUS LED on the front of the PBX will flash amber. When shutdown preparations are completed, the STATUS LED will stop flashing and remain a solid amber. Once the STATUS LED stops flashing, you may turn off the power switch on the back of the PBX.

# Section 6 Tool

This section serves as reference for the Tool menu of the Maintenance screen of Web Maintenance Console.

# 6.1 Tool—System Data Backup

# 6.1.1 Tool—System Data Backup—Backup to USB

A PBX's system data can be backed up to a USB memory device inserted into the PBX's USB port. At a later time, the USB memory device can be used to restore the backed up system data to a PBX. This screen can be accessed only in On-line mode.

# To back up the system data to a USB memory device

1. Insert a USB memory device into the USB port of the PBX.

# **Note**

- To check the inserted USB memory's status, see 4.1.5 Status—Equipment Status—USB.
- The USB memory device must be compatible for use with the PBX. For details, refer to "4.10 Connection of Peripherals—USB Interface for Uninterruptible Power Supply (UPS) and USB Memory Device—Using a USB memory device" in the Installation Manual.
- If an uninterruptible power supply (UPS) device is connected to the PBX with a USB cable, the
  USB cable must first be removed, then reconnected after the backup to USB has been
  completed. For details about the connection between the UPS and the PBX, refer to "4.13
  Starting the KX-NS1000—Connecting an Uninterruptible Power Supply (UPS)" in the Installation
  Manual.
- **2.** Select the system data items to backup.
  - System Data

System data includes programming information for the PBX, including extension and network configuration information.

MOH + OGM

MOH (Music on Hold) and OGM (Outgoing Message) sound files stored on the PBX are backed up.

Activation Key

Activation key files that were installed on the PBX are backed up.

Any or all of the above items may be selected. However, the system cannot be restored unless **System Data** is specified.

- 3. Click **Execute** to back up the specified files. If backup data already exists on the USB memory device, it will be deleted. A confirmation message will be displayed. Click **Continue**.
- **4.** A time estimation for the backup will be displayed. Click **Continue**.
- **5.** A progress bar is displayed to indicate the progress of the backup. A message will be displayed when the backup is finished. Click **OK**.

### Note

- Unified Messaging (UM) data must be backed up using a separate process. See 6.9 Tool—UM Data Backup.
- Use a USB memory device with a capacity of at least 512 MB. During the backup process, if an error
  message is displayed indicating there is not enough free memory space on the USB memory device,
  delete other unnecessary files on the USB memory device, or use a USB memory device with a larger
  capacity.

# Restoring backed up data from a USB memory device to a PBX

Follow the procedure below to restore the backed up data to a PBX.

### Note

The restoration process first requires an initialisation of the PBX, which returns the PBX to its factory default state. Under the following conditions, restoration may not be possible, even though the PBX has been initialised.

- The USB memory device hardware is faulty.
- · The data on the USB memory device has become corrupted.
- The USB memory device is removed from the USB port of the PBX during the restoration process. To minimise the potential of a failed backup, connect the USB memory device to a PC to confirm the USB memory device is operational and that the backup data is intact before starting this restore process.
- **1.** The PBX must be in a powered-off state.
- 2. Insert the USB memory device with the backup data into the USB port of the PBX.
- 3. Set the PBX's System Mode Switch to the "SYSTEM INITIALIZE" position.
- **4.** Turn on the PBX's power switch. The STATUS indicator will flash green. Slide the System Mode Switch back to the "NORMAL" position. The restore process will begin and the STATUS indicator will flash rapidly.
- **5.** When the restoration process is completed, the PBX will restart automatically.

# 6.1.2 Tool—System Data Backup—Backup to NAS

A PBX's system data can be backed up to a NAS (Network Attached Storage) in the PBX's LAN network. This screen can be accessed only in On-line mode.

# To back up the system data to a NAS

- 1. Connect a NAS and PBX.
  - Set the parameters necessary to connect the NAS to the PBX (IP address of the NAS, etc.), and then confirm the connection. See **28.4.2 Network Service—[4-2] Other—NAS**.
- 2. Select the system data items to backup.
  - System Data
    - System data includes programming information for the PBX, including extension and network configuration information.
  - MOH + OGM
    - MOH (Music on Hold) and OGM (Outgoing Message) sound files stored on the PBX are backed up.
- 3. Click **Execute** to back up the specified files. If backup data already exists on the NAS, it will be deleted. A confirmation message will be displayed. Click **Continue**.
- **4.** A progress bar is displayed to indicate the progress of the backup. A message will be displayed when the backup is finished. Click **OK**.

# Note

- Unified Messaging (UM) data must be backed up using a separate process. See 6.9 Tool—UM Data Backup.
- Data backed up from the PBX to a NAS cannot be restored directly from the NAS to the PBX. The backup data must be copied from the NAS to a local PC. Then the data can be restored from the local PC to the PBX.
- The following characters cannot be used in the names of the backup files: open bracket, close bracket, space, forward slash ("/"), period ("."), or 0 (zero).
- When using a NAS, make sure there is sufficient network bandwidth.

- When using a NAS, select the protocol NFS (Ver.4 only) or CIFS. For more information, refer to "28.4.2 Network Service—[4-2] Other—NAS".
- Since it is necessary to send large amounts of data to the NAS when using the data backup feature, we recommend setting up a NAS at each site.
   In particular, when backing up to a NAS over a VPN using the built-in router, the NAS will require a large amount of network bandwidth. Therefore, a NAS will be necessary at each site.

# **PC Programming Manual References**

28.4.2 Network Service—[4-2] Other—NAS

# 6.2 Tool—BRI Automatic Configuration

Automatically configures the network settings of the BRI card.

This option is only available at Installer level in On-line mode.

This tool automatically inputs values into the fields **L1 Mode**, **L2 Mode**, **Access Mode**, and **TEI Mode**, on the **Network** tab of the **9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port** screen.

### **Note**

- To use this tool, the card to be configured must be pre-set to OUS status. For more details, see **2.1.6 Card Status**.
- At any time on this screen, you can click **Cancel** to return to the previous screen without saving.

# To configure the BRI card

- 1. In Check, select the card, and then click OK.
- 2. Click Execute.

The results of the automatic configuration will be displayed.

- 3. Click the Check Box cell for the ports that have been configured.
- 4. Click Data Apply to save these results to the BRI card.

# 6.3 Tool—NDSS Link Data Clear

Clears NDSS Link Data stored in the connected PBX. While this tool clears both monitor extension and monitored extension data, it only clears it at the connected PBX. To clear this data at other PBXs in the QSIG network, it is necessary to run this tool at those PBXs.

This screen can be accessed only in On-line mode.

# To clear the NDSS Link Data

When this tree menu item is selected, a confirmation screen will be displayed.

- Click **OK** to clear the data.
- Click Cancel to keep the data, and close the screen.

# 6.4 Tool—Call Pickup for My Group

Allows you to automatically configure settings in 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial and 12.1.3 PBX Configuration—[4-1-3] Extension—Wired Extension—Speed Dial so that users can answer calls to their Call Pickup Group by pressing " $\star$ 0".

### To activate this tool

- 1. When this tree menu item is selected, a confirmation screen will be displayed.
- Click Yes

The Group Call Pickup feature number (default:  $\times 40$ ) + the extension user group number of the extension is assigned to first personal speed dial.

### Note

This tool can only be activated if all of the following conditions are met:

- The first Quick Dial setting is empty or is already set to "★0".
- "

  ±0" is not used for another feature number.
- The Group Call Pickup feature number has been assigned.
- The Personal Speed Dialling feature number has been assigned.
- The extension user group number does not exceed the highest Call Pickup Group number.

# 6.5 Tool—Extension List View

Displays a list of all programmed extension numbers and types. It is possible to sort the information according to Extension Number, Type, Extension Name, Site, Shelf, Slot, or Port. There is also a key-word searching feature.

The types that can be displayed are as follows:

Туре	Detail
Intercom	Wired Extension
Portable Station	Wireless Extension (Portable Station)
SIP / IP-PT / S-PS	SIP/IP-PT/S-PS Extension
UM / VM	Unified Messaging UM Group/VPS Voice Mail
ICD Group	Incoming Call Distribution Group
PS Ring Group	Portable Station Ring Group
UM Group	Unified Messaging UM Group
VM(DPT) Group	VM (DPT) Group
VM(DTMF) Group	VM (DTMF) Group
Pager	External Pager
OGM (DISA)	DISA
DSS	DSS Console
DPT-I/F CS	PT-interface CS

# 6.6 Tool—Import

Allows several types of system data files or tables to be imported.

Except for Speed Dial and Caller ID, this option is only available at Installer level.

The files from which data can be imported are files that were previously saved at this or another PBX using the Export tool (see **6.7 Tool—Export**), or comma-separated value (CSV) files. Unsupported file types cannot be opened.

For all tables except **ARS - Routing Plan**, it is possible to edit the CSV file directly using an appropriate editor, before importing.

The types of data that can be imported using this tool, and the matching destination fields, are as follows:

# Feature - Speed Dial and Caller ID

Data Type	Import Destination
System Speed Dialling Number	Location
Name	Name
CO Line Access Number + Telephone Number	Dial
CLI Destination	CLI Destination

Related programming: 14.1 PBX Configuration—[6-1] Feature—System Speed Dial

### Note

Imported Speed Dial and Caller ID data can be copied to a specific speed dial destination. The copy range can be specified by selecting the from/to of the index.

# Incoming Call - DDI/DID Table

Data Type	Import Destination
Location	Location
DDI/DID Number	Dial In Number
DDI/DID Name	Dial In Name
DDI/DID Destination-Day	Destination-Day
DDI/DID Destination-Lunch	Destination-Lunch
DDI/DID Destination-Break	Destination-Break
DDI/DID Destination-Night	Destination-Night
Tenant Number	Tenant Number
Service Group No.	Group number for VPS answer
CLI Ring for DDI/DID-Day	CLI Ring - Day
CLI Ring for DDI/DID-Lunch	CLI Ring - Lunch
CLI Ring for DDI/DID-Break	CLI Ring - Break
CLI Ring for DDI/DID-Night	CLI Ring - Night

Related programming: 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table

# **ARS - Leading Digit**

Data Type	Import Destination
Location	Location
Leading Number	Leading Digit
Additional Number of Digits	Additional Dial Digits
Routing Plan Number	Route Plan Number

Related programming: 16.2 PBX Configuration—[8-2] ARS—Leading Number

# **ARS - Except Code**

Data Type	Import Destination
Location	Location
Leading Number Exception	Exception Code

Related programming: 16.6 PBX Configuration—[8-6] ARS—Leading Number Exception

# **ARS - Routing Plan**

Data Type	Import Destination
(no fields to select)	(no fields to select)

Related programming: 16.3 PBX Configuration—[8-3] ARS—Routing Plan Time

### **Wired Extension**

Data Type	Import Destination
No.	Location (selected automatically)
Extension Number	Extension Number (selected automatically)
Extension Name	Extension Name (selected automatically)

Related programming: 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings

# **PS Extension**

Data Type	Import Destination
No.	Location (selected automatically)
Extension Number <sup>*1</sup>	Extension Number (selected automatically)
Extension Name	Extension Name (selected automatically)

This data can only be exported, and cannot be imported.

Related programming: 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings

# **Quick Dial\***

Data Type	Import Destination
No.	Location
Dial	Dial

Data Type	Import Destination
Phone Number	Phone Number

Related programming: 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial
\*: Refer to Notices Regarding Importing Data from KX-TDE/KX-NCP PBXs to the KX-NS1000 below.

# **SIP Extension**

Data Type	Import Destination
No.	Location
Extension Number	Extension Number
Password*	Password

Related programming: 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property

# V-IPGW16 GW Settings

Data Type	Import Destination
No.	Location
GW Name	GW Name
GW IP Address	GW IP Address
GW Group	GW Group No.
Connection for IP-GW16	Connection for IP-GW16
Protocol	Protocol
Progress Tone Send Mode	Progress Tone Send Mode
IP Codec Priority 1st	IP Codec Priority 1st
IP Codec Priority 2nd	IP Codec Priority 2nd
IP Codec Priority 3rd	IP Codec Priority 3rd
Packet Sampling Time (G.711A)	Packet Sampling Time (G.711A)
Packet Sampling Time (G.711Mu)	Packet Sampling Time (G.711Mu)
Packet Sampling Time (G.729A)	Packet Sampling Time (G.729A)
Voice Activity Detection for G.711	Voice Activity Detection for G.711
FAX Sending Method	FAX Sending Method
Maximum Bit Rate	Maximum Bit Rate
FAX Detection Ability	FAX Detection Ability
DTMF	DTMF
Payload Type	Payload Type
T38 FAX Max Datagram	T38 FAX Max Datagram
T38 FAX UDPTL Error Correction – Redundancy	T38 FAX UDPTL Error Correction – Redundancy

<sup>\*:</sup> Refer to Notices Regarding Importing Data from KX-TDE/KX-NCP PBXs to the KX-NS1000 below.

Data Type	Import Destination
T38 FAX UDPTL Redundancy count for T.30 messages	T38 FAX UDPTL Redundancy count for T.30 messages
T38 FAX UDPTL Redundancy count for data	T38 FAX UDPTL Redundancy count for data
T38 FAX Rate Management Method	T38 FAX Rate Management Method

Related programming: 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—GW Settings–Main

# V-IPGW16 DN2IP

Data Type	Import Destination
No.	Location
Leading Number	Leading Number
Remaining Number of Digits	Remaining Number of Digits
GW No./GW Group Selection	GW No./GW Group Selection
GW Group	GW Group
GW No.	GW No.

Related programming: 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—DN2IP

# V-SIPGW16 Settings

Data Type	Import Destination
(no fields to select)	(no fields to select)

Related programming: 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property

### V-SIPGW16 Provider

Data Type	Import Destination
(no fields to select)	(no fields to select)

Related programming: 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property

# **PS Registration**

Data Type	Import Destination
(no fields to select)	(no fields to select)

Related programming: 9.31 PBX Configuration—[1-2] Configuration—Portable Station

# Note

Before importing PS registration settings, be sure to de-register any PSs already registered to the KX-NS1000 PBX.

# To import system data

1. From the **Tool** tree menu, select **Import**, and then click the type of data to import.

- 2. Navigate to the folder containing the system data file you want to open.
- 3. Select the file.
- **4.** Click **OK** to open the file.

If applicable, a list of field names found in the imported file will be displayed.

- **5.** For the **Feature Speed Dial and Caller ID** table, select the Speed Dial table to which to import the data (system or tenant) from the drop-down list.
- 6. If required, select import fields.

When import fields can be selected, the selection screen is displayed automatically. Matching origin and destination fields are entered by default.

- To change the destination for an import field, select the preferred field from the drop-down list.
- To not import a field, select the blank option from the drop-down list.
- **7.** Click **OK** to perform the import operation.

Depending on the type of data imported, the relevant programming screen may be displayed.

• Click **OK** or **Apply** to complete the import operation.

If data in a field being imported does not match the required format for the import destination, an error message will be displayed when the import operation is attempted, and the operation will be cancelled. This can occur when, for example, the destination field can only accept numeric data, but the data being imported contains alphabet characters, as the correct fields were not linked together.

# Notices Regarding Importing Data from KX-TDE/KX-NCP PBXs to the KX-NS1000 Quick Dial

The KX-NS1000 only supports an 8-digit Quick Dial format. Therefore, KX-TDE/KX-NCP Quick Dial data in the 4-digit format cannot be imported to the KX-NS1000.

# SIP Extension - Password

KX-TDE/KX-NCP PBXs allow 3-digit passwords, but KX-NS1000 PBXs require password with 4 digits or more. When importing password data from KX-TDE/KX-NCP PBXs to the KX-NS1000, any 3-digit passwords will not be imported and the password entry will be left blank.

# 6.7 Tool—Export

Allows several types of system data to be exported to files. These files can be used with the Import tool (see **6.6 Tool—Import**) to update another PBX.

Except for ARS - Routing Plan, tables are exported as comma-separated value (CSV) files.

Except for Speed Dial and Caller ID, this option is only available at Installer level.

# **Note**

The separator used in CSV files created using the Export tool is decided by the unit specified in List Separator, found in the Windows Control Panel's "Regional Options".

# To export system data

- 1. From the Tool tree menu, select Export, and then click the type of data to export.
- 2. Select the check boxes next to the names of the fields to export, and then click OK.
- 3. If a message window is displayed, click **OK**.
- 4. In the file selection screen, select the Save check box, and then click OK.

# 6.8 Tool—Screen Customise

Allows you to specify which Setup and Maintenance screens can be accessed in the User (Administrator) account level.

This option is only available at Installer level.

Selected check boxes will be displayed in the tree menus of Web Maintenance Console to users with the User (Administrator) account level.

# To modify displayed screens

- 1. Click the access level to modify.
- 2. Select the items that you want to have displayed.
  - Clear the check box beside the names of items you do not want to have displayed.
  - Select the check box beside the names of items you want to have displayed.
- 3. Click OK.

# 6.9 Tool—UM Data Backup

The UM Data Backup tool can be used to backup and restore Unified Messaging (UM) data.

This screen can be accessed only in On-line mode.

The following voice data can be backed up or restored as individual files. The data can be backed up to a USB memory device connected to the PBX or a NAS.

- a. System Prompts
  - Installed Prompts
  - Custom Service Menu
  - Company Name
  - Company Greetings
  - System Mailbox Group Voice Label
  - System Caller Name
  - Prompt Selection
  - Hold Announce Menu
- **b.** Mailbox Prompts
  - Owner Name
  - Personal Greetings
  - Personal Caller ID Name
  - Interview
  - Personal Group List Name
  - EMD List Member Name
- Mailbox Messages

### **Note**

Mailbox data may not be backed up if the mailbox is in use during the backup process. Additionally, Unified Messaging system response time may be affected when backing up data. For these reasons, we recommend backing up data when the Unified Messaging system is not in use.

Use only the ASCII character set for directory/file names.

The UM Data Backup tool can be executed manually or scheduled to run automatically at regular intervals. Refer to the following:

- 6.9.1 Tool—UM Data Backup—Manual Backup
- 6.9.2 Tool—UM Data Backup—Scheduled Backup

# 6.9.1 Tool—UM Data Backup—Manual Backup

Use this procedure to manually back up Unified Messaging system data. For details on the items that can be backed up, see **6.9 Tool—UM Data Backup**.

- 1. To back up system prompts, select the check box next to **System Prompts** and select the check boxes of the items you want to back up.
- 2. To back up mailbox prompts, select the check box next to **Mailbox Prompts** and select which prompts to back up.
- **3.** To back up the prompts for specific mailboxes, click **Mailbox Prompts** to open the mailbox list. Check the top checkbox to select all mailboxes, or select the mailboxes for which you wish to back up prompts, then click **OK**.

- 4. To back up mailbox messages, check the box next to Mailbox Messages button and click Mailbox Messages to open the mailbox list. Select the top check box to select all mailboxes, or select the mailboxes you wish to back up, and then click OK.
- **5.** Select the destination for the backed up data:
  - Local PC: After the backup is started, a file download will begin in your web browser. Specify a location on your local PC to save the backup data.
  - **USB Flash Drive (Main Unit)**: Back up the data to a USB memory device connected to the Master Unit PBX. When **USB Flash Drive (Main Unit)** is selected, a folder selection menu becomes active. Specify a folder on the USB memory device for saving the backup data.

### **Note**

Before selecting this option, make sure that a USB memory device is connected to the Master Unit PBX.

- **NAS**: Back up the data to a NAS. When **NAS** is selected, a folder selection menu becomes active. Specify a folder on the NAS for saving the backup data.
- 6. Click **OK** to start the backup.

### **Note**

- The system will prepare the data to be backed up, and the backup will begin about 30 seconds later. The time needed to backup the data will vary depending on the communication speed and the amount of data that is being backed up.
- Deleted messages will not be backed up when backing up Mailbox Messages.
- To back up the Unified Messaging data of a Slave unit in a One-look network, log in to the Slave unit and perform the backup operation from the Slave unit.
- When **Local PC** is selected, individual messages that are larger than 100 MB cannot be backed up.
- Depending on your browser or your browser's settings, a prompt may appear during the backup for each file to be downloaded. Be sure to select an action for each prompt that appears.

# 6.9.2 Tool—UM Data Backup—Scheduled Backup

You can schedule backups in advance. The Unified Messaging system will automatically back up the selected data at the scheduled times to a USB memory device or NAS connected to the PBX. (Scheduled backups cannot be made to a local PC.) For details on the items that can be backed up, see **6.9 Tool—UM Data Backup**.

Follow the procedure below to schedule an automatic backup.

- 1. Click to create a new scheduled backup.
- 2. Enter a description for the backup.
- 3. Set the frequency (daily, weekly, etc.) and time of day when the backup should take place.
- 4. Check the desired item(s) to backup.
- 5. Click Edit next to Mailbox Prompts.
- 6. Check either All Mailboxes or select the mailboxes you wish to backup.
- 7. Click OK.
- 8. Click Edit next to Mailbox Messages.
- 9. Check either All Mailboxes or select the mailboxes you wish to backup. You can also specify the following backup conditions:

- Retention Days: Back up only messages that have been stored on the system for at least the number of days specified.
- Remaining mailbox Capacity (min): Only perform a backup if the remaining mailbox capacity has reached the specified amount.
- Delete After Backup: Specify to delete messages that have been backed up from the mailbox.
- Message Type: Specify to back up all messages, or only messages marked as "old".

### Note

An invalid combination of these settings may prevent a backup from occurring. For example, if a mailbox is full, but there are no messages older than the number of days specified in **Retention Days**, or no messages are marked as "old", the backup will not be performed.

- **10.** In **System Backup**, select **USB Flash Drive (Main Unit)** or **NAS**, and then specify the folder on the selected device where you want to save the system backup file.
- 11. Click OK.
- 12. In Status, select Enable and click OK.

#### Note

- Up to 20 backup events can be scheduled.
- If a backup is scheduled, but a USB memory device is not connected to the PBX at the time of the scheduled backup, the backup will not be performed.
- When using a NAS, make sure there is sufficient network bandwidth.

# Editing a scheduled backup

- 1. From the Scheduled Backup screen, select the backup you wish to edit.
- 2. Click Edit.
- **3.** Edit the settings as desired.
- 4. Click OK.

### Deleting a scheduled backup

- 1. From the Scheduled Backup screen, select the backup you wish to delete.
- 2. Click Delete.
- 3. Click Yes.
- 4. Click OK.

# 6.10 Tool—UM Data Restore

Follow the procedure below to restore data backed up using the UM Data Backup tool.

This screen can be accessed only in On-line mode.

For more information about the UM Data Backup tool, see **6.9 Tool—UM Data Backup**. You can restore data from a USB memory device connected to the PBX or from a file on your local PC.

- 1. Select the check boxes of the items to restore.
- 2. In System Restore, select Local PC or USB Flash Drive (Main Unit).
  - Local PC

Click **Browse** and select a backup file from your local PC. The file must have been saved using the UM Data Backup tool.

# USB Flash Drive (Main Unit)

When **USB Flash Drive (Main Unit)** is selected, the folder selection menu becomes active. Specify the folder on the USB memory device where the backup data is saved.

#### NAS

When **NAS** is selected, the folder selection menu becomes active. Specify the folder on the NAS where the backup data is saved.

#### Note

Before selecting **USB Flash Drive (Main Unit)**, make sure that the USB memory device with the backup data is connected to the Master unit PBX.

### To restore a single file:

Files that match the selected types of items to restore will be highlighted.

Click a file in the list to display its name in the text box. You can also click a folder name to display that folder's contents, and then click a file to select it.

# To restore multiple files at once:

Folders whose contents match the selected types of items to restore will be highlighted.

Click a folder in the list to display its name in the text box. You can also click a folder name to display that folder's contents, and then click a folder to select it.

# **Note**

When restoring data from a local PC, up to 40 files can be selected at one time. When there are a large number of files to restore, they should be restored from the folder on the USB memory device.

- 3. Click **OK** to restore the selected file or folder of files.
  - Local PC

The results of the data restore will be downloaded from the PBX as a text file called "UM\_data\_restore\_result.txt". Save the file to your local PC to view its contents.

# • USB Flash Drive (Main Unit)

The results of the data restore will be saved in a text file called "UM\_data\_restore\_result.txt" on the USB memory device. To view this file, you must connect the USB memory device to a PC and then open the text file.

### NAS

The results of the data restore will be saved in a text file called "UM\_data\_restore\_result.txt" on the NAS. To view this file, you must connect to the NAS and copy to a PC and then open the text file.

### Note

- When restoring multiple items, only files that match the items for which check boxes have been selected will be restored. Also, even if data exists in the specified folder of the USB memory device, the data will not be restored unless the check box of the matching item has been selected.
- Data in sub-folders of a selected folder will not be restored.
- If more than one file matches a selected item, the newest file will be restored.
- The following characters cannot be used in the names of the backup files: open bracket, close bracket, space, forward slash ("/"), period ("."), or 0 (zero).
- The backup file names stored on the USB memory device should not be changed. If the file names are changed, the system may not be able to detect which backup files correspond to which UM data items.
- A backed up message cannot be restored to the subscriber's mailbox if the mailbox still contains a New/Old/Deleted copy of the same message.
- Voice data recorded by users in a KX-TVM series VPS can be converted and used as voice data in the KX-NS1000's Unified Messaging system. For details, refer to "5.3 Starting Web Maintenance Console—KX-TVM System Prompt and Mailbox Data Import" in the Installation Manual.

# 6.11 Tool—UM Backup History

The following records for backup that have been performed can be checked on this screen:

- Description
- Parameters
- · Completion Status
- · Date & Time
- Total Elapsed Time (HH:MM:SS)

This screen can be accessed only in On-line mode.

# 6.12 Tool—DXDP All OUS

Sets the status of all DXDP/XDP extension ports to "OUS" simultaneously for the currently selected site.

# To set all DXDP/XDP ports to OUS for the currently selected site

- 1. Access Tool—DXDP All OUS from the Maintenance Screen tree view.
- 2. Click OK.

# 6.13 Tool—Contact information

Dealers can set contact information for the user of the PBX here. When users select this tree menu item, this information will be displayed for the user's reference.

- 1. Input the following information, and then click **OK**.
  - · Company Name
  - Telephone Number
  - Fax Number
  - Address
  - URL
  - · Email Address

# 6.14 Tool—UT Option Setting

Option settings can be specified for KX-UT series SIP phones on a system-wide level.

### **Note**

The following apply when programming in On-line mode only:

- To apply changes made to these settings for KX-UT series SIP phones connected to Slave unit PBXs in a One-look network, be sure to click the elicon after programming. Otherwise, there may be a delay of 30 minutes or more before changed settings are applied.
- To set these parameters, all installed V-UTEXT32 cards must first be set to OUS. For details, see **9.1 PBX Configuration—[1-1] Configuration—Slot**.

# **Numbering Plan for UT Series Terminal**

One or more number dialling plans can be specified for KX-UT series SIP phones. Enter the dial plan text string into the text box, and then click **OK**. A dial plan text string may also be copied and pasted into the text box from another source.

### Note

- For more information about dial plans, refer to the Administrator Guide of the relevant KX-UT series SIP phone.
- You can enter up to 500 characters in the dial plan text box.
- You can assign up to 20 dial plans, separating them with a "|" (vertical bar).
- · You can assign up to 32 digits per dial plan.
- When **OK** is clicked, the entered text string will be validated. If there is a validation error, a message will be displayed.

### **Timer for UT Series Terminal**

This timer specifies for KX-UT series SIP phones how long the system waits for another digit to be dialled before determining that dialling has finished. This value will apply for all KX-UT series SIP phones connected to the PBX. Specify a number of seconds in **Extension Inter-digit (s)**, and then click **OK**. If the value for the timer is changed, the new value will be applied to each KX-UT series SIP phone after it is restarted.

# 6.15 Tool—URL Information

The URL addresses for downloading the IMAP tool and the Fax Driver can be specified on this screen. These URL addresses will be used for the **Unified Messaging Plug in** and **Fax Driver Tool** download buttons displayed to users when they view the **Unified Message** tab of their profile in the **User** menu. For details, see **8.2.1 Users—Add User—Single User**.

Specify valid URL addresses for Unified Messaging Plug in and/or Fax Driver Tool, and then click OK.

# 6.16 Tool—P-SIP Option

You can export the root certificate to be used for SIP-TLS.

# Section 7 Utility

This section serves as reference operating instructions for the Utility menu of the Maintenance screen of Web Maintenance Console.

## 7.1 Utility—Diagnosis

## 7.1.1 Utility—Diagnosis—Card Diagnosis

Performs diagnostic tests on cards installed in the PBX, to identify the source of problems.

If any of the tests listed here returns the result "NG" ("No Good"), contact the seller where you purchased this PBX.

When testing is complete, any cards that were set to OUS status must be returned to INS status if they are to be used again.

This screen can be accessed only in On-line mode.

#### **Card Test**

Tests the relevant functions of a card to ensure that it is operating correctly. The tests carried out vary according to the type of card being tested.

The tests that are performed on each card are listed below.

#### Note

Tests marked with a "\*" are available only for cards installed on a legacy gateway. For details, see 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2. For more information about cards installed in legacy gateways, refer to the documentation of the legacy gateway PBX.

Test Type	Available Cards
Local loop back diagnosis	KX-NS1000 PBXs: SLC2, LCOT2, BRI4, PRI Legacy Gateways: DHLC, DLC, SLC8, SLC16, MSLC16, ESLC16, EMSLC16, CSLC16, MCSLC16, ECSLC24, MCSLC24, CSIF, LCOT8, LCOT16, ELCOT, T1, E1, BRI2, BRI4, BRI8, PRI, OPB, E&M, DID
Card CT Bus diagnosis*	DHLC, DLC, SLC8, SLC16, MSLC16, EMSLC16, CSLC16, ECSLC24, CSIF, LCOT, ELCOT, T1, E1, BRI, PRI, OPB, E&M, DID
DTMF Receive test port	KX-NS1000 PBXs: SLC2 Legacy Gateways: DHLC, SLC8, SLC16, MSLC16, MCSLC16, ESLC16, EMSLC16, CSLC16, ECSLC24, MCSLC24, E&M, DID
PT loop back diagnosis*	DHLC, DLC
DSP DTMF generator/receiver diagnosis*	T1, E1
DSP DTMF receiver diagnosis*	T1, E1
Framer IC alarm signal detection diagnosis*	T1, E1, PRI
Framer IC error detection diagnosis	KX-NS1000 PBXs: PRI Legacy Gateways: T1, E1, PRI

Test Type	Available Cards
CS-INF loop back diagnosis*	CSIF
Super frame synchronization diagnosis*	CSIF
Caller ID card loop back diagnosis	KX-NS1000 PBXs: LCOT2 Legacy Gateways: LCOT, ELCOT
Extension mode setting test	BRI

#### To perform a card test

- 1. Click on the Status cell of the card to be tested, and set it to "OUS".
- **2.** Click on the cell showing the card type. A new window will be displayed.
- 3. Select the **Card Test** option, and then click **Execute**.

The error report will be displayed. When all tests are completed, the words "Test End!" will be shown on the last line of the output.

- 4. Select an option:
  - Click Capture if you want to save the displayed information.
    - 1. Specify a save destination and file name.
    - 2. Click Save.
  - · Click Cancel to return to the Diagnosis screen.

#### **Note**

To run consecutive card tests on the BRI4 card, you must change the card's status to INS, then OUS again after running each test.

#### **Network Loopback Test**

Performs a remote loopback test on the PRI23 card.

#### Note

To perform this test, it is necessary to set Loopback Test started by Network in 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—CO Setting to "Enable".

#### To perform a network loopback test

- 1. Select **Point1** or **Point2** depending on the type of loopback test you want to perform. The available selections may vary depending on the hardware version of the card.
- 2. Click Apply.

Preparation for the test is complete. The test will start automatically.

- 3. After the test is complete, select Release and click Apply.
- 4. Click Cancel to return to the Test Menu screen.

#### **Pair Port Test**

Tests the combination of an extension port and trunk port to ensure that communication with the trunk port can be carried out successfully. Only cards installed in legacy gateway KX-TDE/KX-TDA PBXs can be tested.

The pair port test can be carried out using one LCOT or ELCOT card and one DHLC8, SLC8, SLC16, MSLC16, ESLC16, EMSLC16, CSLC16, or ECSLC24 card.

#### Note

- Cards installed in KX-NS1000 PBXs and legacy gateway KX-NCP PBXs cannot be tested using this
  utility.
- The cards to be used for testing must be installed in the same legacy gateway PBX.

The tests that are performed are as follows:

Line current OFF (Ext->CO)	Line current from extension to trunk turns off.
Line current ON (Ext->CO)	Line current from extension to trunk turns on.
Off hook detection (CO->Ext)	Off-hook generation/detection from trunk to extension
DTMF detection (CO->Ext)	DTMF generation/detection from trunk to extension
DP detection (CO->Ext)	DP generation/detection from trunk to extension
BELL detection (Ext->CO)	BELL generation/detection from extension to trunk
Speech path (Ext->CO)	Speech path from extension to trunk
Speech path (CO->Ext)	Speech path from trunk to extension

#### To perform a pair port test

- 1. Click on the Status cell of the extension card to be tested, and set it to "OUS".
- 2. Click Test.

A new window will be displayed.

- 3. Select the Pair Port Test option. A new window will be displayed.
- **4.** In **Extension Line**, in the **Site-Shelf-Slot No.** drop-down list, select the extension card to test. Each card will be preceded by a 3-digit number, following the pattern "XYZ":
  - X: Site number (1–16)
  - Y: Shelf number (2-3 [Corresponding to Legacy Gateway 1 or 2])
  - Z: Slot number (1–11)
- 5. From the Port No. drop-down list in Extension Line, select the port number of the extension to test.
- **6.** In **CO Line**, in the **Site-Shelf-Slot No.** drop-down list, select the trunk card to test. Each card will be preceded by a 3-digit number, following the pattern "XYZ" as described in step **4**.
- 7. From the Port No. drop-down list in CO Line, select the port number of the trunk to test.
- 8. Click Test.

The error report will be displayed.

- 9. Select an option:
  - Click Capture if you want to save the displayed information.
    - **a.** Specify the save destination and file name.
    - b. Click Save.
  - · Click Cancel to return to the Diagnosis screen.

## 7.1.2 Utility—Diagnosis—Ping

Performs a connection test on network devices. This function sends echo requests to a particular IP address across an IP network, and displays the result of responses and round-trip time. This screen can be accessed only in On-line mode.

#### To perform a Ping test

- 1. Enter a specific IP address in the IP Address box.
- **2.** Click **Test** to perform the test. The result will be displayed.
- 3. Select an option:
  - Click Capture if you want to save the displayed information.
    - 1. Enter a file name, or select a file to overwrite.
    - 2. Click Save.
  - · Click Cancel to return to the Ping screen.

## 7.2 Utility—File

## 7.2.1 Utility—File—File Transfer PC to PBX

Copies PBX system data files from the connected PC to the Storage Memory Card installed in the PBX. Pre-existing files on the Storage Memory Card are overwritten.

This option is only available at Installer level when programming in On-line mode.

To install new main system data that has been copied to the PBX, use the System Reset utility (see **5.4 System Control—System Reset**) for DCSYS files.

The PBX examines the header information of a file to determine 2 things: whether the file contains supported data, and which system component the file applies to.

Only files whose header information matches that of a system file supported by the PBX can be transferred. Attempting to transfer any other type of file results in an error message.

The names of all files that can be stored on the Storage Memory Card are as follows:

#### **System Data**

Name on Storage Memory Card	Corresponding Card
DCSYS	Mother Board
DCSYS_R	Mother Board <sup>*1</sup>

DCSYS-file-format data that is transferred to the PBX is saved as "DCSYS R".

#### To transfer files to the Storage Memory Card

- 1. The dialogue box will be displayed.
- 2. Select the file to upload, and click OK.

A window showing the upload progress will be displayed.

While transferring files to the Storage Memory Card, the PBX automatically renames them according to the header information.

A message will be displayed when the transfer is complete.

3. Click OK.

## 7.2.2 Utility—File—File Transfer PBX to PC

Copies system data files from the Storage Memory Card installed in the PBX to the connected PC. This option is only available at Installer level when programming in On-line mode.

The files that can be downloaded from the Storage Memory Card are as follows:

File Name	File Type
DCSYS	System data
\$SYSERR	Error data
\$SYSERR1-\$SYSERR9	
UT_ACS	KX-UT series SIP phone configuration data

Downloading the DCSYS system data file allows you to make a backup of the configuration of the PBX.

- The error data files are snapshots of the configuration of the PBX taken automatically when a major error
  causes a system reset. If they are generated, consult the seller where you purchased this PBX to identify
  the cause of the problem. If there is only one error data file, its name will be \$SYSERR. If there is more
  than one file, the files will be numbered in chronological order, up to a maximum of 9 files.
- KX-UT series SIP phone configuration data can be transferred to a PC, and then imported using the phone's Web user interface. For details, refer to the Administrator Guide of the relevant KX-UT series SIP phone.

#### To transfer files to the PC

- Select the file to download from the list of files on the Storage Memory Card.
   Only the files listed in the table above can be downloaded. Selecting any other file will cause an error message to be displayed.
- 2. Click Transfer.

The Save dialogue box will be displayed.

- 3. Navigate to the folder in which you want to save the file.
- 4. Enter a file name.
- 5. Click Save.
  - A window showing the download progress will be displayed.
  - A message will be displayed when the transfer is complete.
- 6. Click OK.

### 7.2.3 Utility—File—File View

Displays a list of files on the Storage Memory Card.

This screen can be accessed only in On-line mode.

The name, date and time of creation, and size of files are displayed.

This utility can also display information on activation key files stored in the Storage Memory Card. The effective date, PCMPR-ID, activation key type, number of activation keys, and expiration date of activation keys are displayed on the Detail screen.

## To view information of programme and activation key files stored in the Storage Memory Card

- 1. Click on the name of the desired programme or activation key file.
- 2. Click **Detail**. The Detail screen will be displayed. You can select different files from the **File** drop-down menu to view the details for each file.
- 3. Activation key files can be deleted on the **Detail** screen. Follow the procedure below.
  - a. Click Delete.

A confirmation screen will be displayed.

b. Click OK.

#### Note

The maximum number of files is 99. Therefore, we recommend deleting activation key files that have expired.

## 7.2.4 Utility—File—File Delete

Allows you to delete files from the Storage Memory Card.

This option is only available at Installer level in On-line mode.

The DCSYS system file cannot be deleted by this utility.

#### **Note**

Programme files cannot be deleted if the Program Update feature's timed update is set, or if an update is currently being performed. For details, see **5.1.2 System Control—Program Update—Update Program File**.

#### To delete files from the Storage Memory Card

- 1. Click on the file to be deleted.
- 2. Click Delete.

A confirmation screen will be displayed.

3. Click OK.

The display will return to the File Delete screen.

### 7.2.5 Utility—File—Message File Transfer PC to PBX

Transfers Outgoing Message (OGM) files from the PC to the Storage Memory Card.

This option is only available at Installer level when programming in On-line mode.

Uploaded files are automatically renamed as necessary. If the location specified already contains an OGM, it will be overwritten by the newly uploaded message.

#### To transfer OGMs to the Storage Memory Card

- 1. From the Utility menu, select Message File Transfer PC to PBX.
- 2. Select the destination to transfer the OGM files to from the drop-down list, and then click **Browse**. The Open dialogue box will be displayed.
- **3.** Select the message files to upload. The files must be in the WAV format. It is possible to select multiple files.

#### **Note**

- When selecting files to copy to the PBX, the file names (apart from the file extension) cannot be more than 33 characters in length.
- When selecting G.711 codec WAV files to copy to the PBX, the total file size of all selected files combined cannot exceed 32 megabytes.

#### 4. Click OK.

- The files will be uploaded. Files that do not contain message data will be ignored.
- An index number (01 to 64) will be appended automatically to the file names of message files transferred to the PBX.
- When complete, the display will return to the main screen.

## 7.2.6 Utility—File—Message File Transfer PBX to PC

Transfers Outgoing Message (OGM) files from the Storage Memory Card to the PC. This option is only available at Installer level when programming in On-line mode.

#### To transfer OGMs to the PC

- 1. From the lower drop-down list, select the messages to transfer.
  - To transfer a certain message, select the number of that message.
  - To transfer all messages at once, select "ALL".

The Save dialogue box will be displayed.

- 2. Enter a file name.
- 3. Click Save.
- 4. Click OK.
  - When you choose to transfer all messages, each message is saved as an individual file, with a number appended to the file name corresponding to that message's location on the Storage Memory Card.
  - When complete, the display will return to the main screen.

## 7.3 Utility—Log

## 7.3.1 Utility—Log—Error Log

Collects and displays system error information.

Whenever there is a system failure, the PBX stores the error code generated. The connected PC collects all of these codes, along with other information, and displays an explanatory error message.

This screen can be accessed only in On-line mode.

The functions of the buttons on this screen are as follows:

Button	Function
Cancel	Closes the Error Log screen without saving.
Save	Saves the currently displayed Error Log information as a text file.
Minor	Displays minor errors, which affect only a certain part of system operation.
Major	Displays major errors, which affect operation of the whole system, or result in system failure.
Clear	Erases the stored error log information from both the screen and the PBX.
Log Information	Displays probable causes of the errors and their solutions.

The items displayed on screen are as follows:

Item	Description
Date	The date of the error detection.
Time	The time of the error detection.
Error Code	The 3-digit error code assigned by the PBX. For details about the error code, refer to the "Log Information" item in this table.
Sub Code	SMDR: The 8-digit sub code of the relevant hardware (BBWXYYZZ). Web Maintenance Console: The 6-digit sub code of the relevant hardware (WXYYZZ). (The site number of the PBX can be confirmed in the Site column of the Error Log.) For information about the digits of the Sub Code, refer to table "Sub Code Details" below.
Error Message	A description of the error.
Log Information	Clicking this button displays a list of errors and solutions in PDF format, as shown below.

#### [Sample] List of Errors and Solutions

For each error code, the error message, probable cause, and solutions are explained.

#### List of Errors and Solutions

The tables below list the errors and their solutions.

When an error whose error code is indicated with "\*" occurs in the PBX, the ALARM indicator on the front of the shelf turns on red, and the system logs the error information.

When the error conditions indicated by the error codes "043", "053", "058", "091", "092", "230", "510", "530" and "539" are recovered, the ALARM indicator will turn off automatically, indicating successful troubleshooting. When other errors are logged, the ALARM indicator will turn off only when the log for major or minor errors is cleared from the Maintenance Console.

- In other words, the ALARM indicator will turn off under the following conditions:

  When the errors "043","053", "058", "091", "092", "230","510", "530" and "539" are logged: when the error conditions are recovered
- When other errors are logged: when the log for major or minor errors is cleared from the Maintenance Console

Optional Service Card Initial Self Diagnosis

Error Code	Error Message	PROBABLE CAUSE	SOLUTION
211	Speech path loop-back check error	Optional service card malfunction	See if the corresponding optional service card is installed properly     Pull out and re-insert the
212	Echo canceller access error		corresponding optional service card
214	DSP Boot check error		Perform a system reset of the PBX through Web Maintenance Console (If the system reset cannot be performed, turn off the power switch, and then turn it on)     Replace the corresponding optional service card
	10	<ul> <li>Optional service</li> </ul>	See if the corresponding

#### **Sub Code Details**

Sub Code	Description
ВВ	Site ID 00–15
	Corresponds to site numbers of PBXs in the One-look network (1 to 16)
W	Slot Type
	For physical slots (including physical slots of legacy gateway PBXs)  — " " (blank)
	For KX-NS1000 virtual slots
	- "*" (asterisk)
X	Shelf Number
	• - KX-NS1000 unit: 1
	<ul><li>Legacy gateway: 2–3</li></ul>
	<ul><li>Non-PBX process: 5</li></ul>
	- Convert process: 6

Sub Code	Description
YY	Slot Number
	When X is not 4 or 5
	Physical shelf  Mother board slot: 00  Regular slots: 01–05
	Legacy gateway STACK-S card: 00 Optional physical service card slots:
	- KX-TDE600/KX-TDA600: 01-10
	<ul><li>– KX-TDE620/KX-TDA620: 01–11</li></ul>
	<ul> <li>KX-NCP500/KX-NCP1000/KX-NS1020: 01–07</li> <li>(Slots 04 and 07 are disregarded for KX-NCP500 PBXs)</li> </ul>
	Virtual shelf Virtual Trunk slots: 1–16 Virtual Extension slots: 17–36 Virtual IP-CS slots: 37–52
	When X is 4 YY: Convert code
	When X is 5 YY: Process code
ZZ	Port Number
	When X is not 4 or 5  ZZ: Optional service card port number (01–XX)
	When X is 4 ZZ: Convert code
	When X is 5 ZZ: Process number (determined by each process)

#### **Note**

- When there is no parameter for slot and port number, YY and ZZ will be displayed as "00". Example: Sub code for the mother board = "01 10000"
- For more information about Shelf Numbers and Slot Numbers for KX-NS300/KX-NS500/KX-NS700 PBXs, refer to the PC Programming manual for each PBX.

## 7.3.2 Utility—Log—Syslog

Displays a log of system events. Each entry in the log includes the following information:

- Type: Describes the type of system event.
- Date: The date and time the system event occurred.
- Message: Details about the system event.

This screen can be accessed only in On-line mode.

## 7.3.3 Utility—Log—Web-MC Event Log

The Web-MC Event Log retains information about user interaction with Web Maintenance Console. This screen can be accessed only in On-line mode.

The items displayed on screen are as follows:

Item	Description
Date	The date of the event.
Time	The time of the event.
User	The account name of the user accessing Web Maintenance Console.
Description	A description of the action taken by the user. (i.e. "Login to Web-MC")
IP Address	The IP address of the PC used to access Web Maintenance Console.

#### To save the event log as a text file

- **1.** From the Web-MC Event Log screen, select **Save**. The Save dialogue box will be displayed.
- 2. Enter a file name.
- 3. Click Save.

#### To clear the event log

1. From the Web-MC Event Log screen, select Clear.

#### **Note**

Users logged in to a Master unit can see all events. Users logged in to a Slave unit can only view the events for that unit.

## 7.3.4 Utility—Log—UM System Log

You can export a log of events from the Unified Messaging system for troubleshooting purposes. This screen can be accessed only in On-line mode.

- 1. Click OK to export a UM System Log file.
- 2. Click Save to save the data to a local file.
- 3. Click OK.

## 7.3.5 Utility—Log—Call Control Log

Collects and displays Logical Partitioning Call Control Log information.

To show the setting change information for the Logical Partitioning feature, press the **Condition** button. To show the call restriction status of the Logical Partitioning feature, press the **Status** button.

#### Condition

Item	Description
Date	The date on which the setting change of the logical partitioning feature occurred.

#### 7.3.5 Utility—Log—Call Control Log

Item	Description
Time	The time at which the setting change of the logical partitioning feature occurred.
Information	"Logical Partition" is displayed.
Status	The new setting status of the following settings is displayed.  9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property  —Main—Main—Area ID for logical partition  10.9 PBX Configuration—[2-9] System—System Options—Option  2—Applying logical partitioning

#### Status

Item	Description
Date	The date on which the call restriction event from the logical partitioning feature occurred.
Time	The time at which the call restriction event from the logical partitioning feature occurred.
Function	The call restriction types are as follows:
	- CO call
	- CO-CO call
	- Conference call
Information	The restricted extension number and/or trunk number is displayed. If the restriction is between sites in a One-Look network, an asterisk "*" is shown directly before the trunk or extension number (e.g. EXTN100-*T256).
Status	"Restricted (Logical Partitioning)" is displayed.

## 7.4 Utility—Monitor/Trace

## 7.4.1 Utility—Monitor/Trace—ISDN/QSIG Protocol Trace

This utility collects protocol trace data from BRI or PRI cards, and displays it on the PC.

This option is only available at Installer level in On-line mode, and requires that the target BRI or PRI card be set to INS status.

Protocol trace data is continually accumulated on ISDN cards, and 3 types of data can be downloaded:

- Real Time Trace: Pseudo-real-time data is collected through data polling at one-second intervals. The
  displayed information is updated beginning when the Start button is clicked.
- · Accumulation Trace: Previously accumulated data is retrieved and displayed.
- Error Accumulation Trace: Previously accumulated error data is retrieved and displayed. This trace shows the data snapshot that is taken just before a card resets.

#### To view trace data

- 1. From the **Site-Shelf-Slot No.** drop-down list, select the target slot. Each card will be preceded by the pattern "X-Y-Z" as follows:
  - X: Site number (1–16)
  - Y: Shelf number (1–3)
    - 1: KX-NS1000 physical shelf
    - 2: Legacy Gateway 1
    - 3: Legacy Gateway 2
  - **Z**: Slot number (1–11)
- 2. From the Trace Data Type drop-down list, select the type of data to view.
- 3. Click Start.

Trace information will be displayed.

- 4. Select an option:
  - Click Capture to save the displayed trace information.
  - · Click Clear to clear the screen display.
- 5. Click Cancel to return to the main screen.

## 7.4.2 Utility—Monitor/Trace—V-IPGW16 Protocol Trace

This utility collects trace data of protocol activity from V-IPGW16 card.

This option is only available at Installer level in On-line mode, and requires that the target V-IPGW16 card be set to INS status.

#### To save trace data to the Storage Memory Card

From the Utility menu, select V-IPGW16 Protocol Trace.
 When the progress bar disappears, the protocol trace is complete. The trace data has been saved to the Storage Memory Card (file name: "PRTH323").

#### To transfer trace data to the PC

 Click the File Transfer PBX to PC link to access the file transfer screen. The list of files will be displayed.

#### Note

The file transfer screen can also be accessed from the tree menu (see **7.2.2 Utility—File—File Transfer PBX to PC**).

- 2. Select the desired trace data file.
- 3. Click Transfer.
- **4.** Navigate to the folder in which you want to save the file.
- 5. Enter a file name.
- Click Save.
- 7. Click OK.

## 7.4.3 Utility—Monitor/Trace—V-SIPGW16 Protocol Trace

The trace data of protocol activity can be collected from the V-SIPGW16 card and saved to a PC using the V-SIPGW16 Protocol Trace.

This option requires that the target V-SIPGW16 card be set to INS status.

This option is only available at Installer level in On-line mode.

Follow the steps below to trace and file V-SIPGW16 card protocol activity:

#### To save trace data to the Storage Memory Card

From the tree menu, select V-SIPGW16 Protocol Trace.
 When the progress bar disappears, the protocol trace is complete. The trace data has been saved to the Storage Memory Card (file name: "PRTSIPC").

#### To transfer trace data to the PC

Click the File Transfer PBX to PC link to access the file transfer screen.
The list of files will be displayed.

#### **Note**

The file transfer screen can also be accessed from the tree menu (see **7.2.2 Utility—File—File Transfer PBX to PC**).

- 2. Select the desired trace data file.
- 3. Click Transfer.
- **4.** Navigate to the folder in which you want to save the file.
- 5. Enter a file name.
- 6. Click Save.
- 7. Click OK.

## 7.4.4 Utility—Monitor/Trace—CS Status Monitor—Air Sync Group

This utility monitors the status of CSs being synchronised with air synchronisation. CSs receive data from other CSs that they are currently synchronised with. **Current Sync CS** information is displayed for IP-CSs that are in INS status.

This option is only available at Installer level in On-line mode.

The displayed items for the Current Sync CS of each CS are as follows:

Item	Description
CS Type	Type of CS that each CS is currently synchronised with.
Shelf	The shelf number (or Virtual for IP-CSs) of the CS that each CS is currently synchronised with.
Slot	Slot number of the CS that each CS is currently synchronised with.
Port	Port number of the CS that each CS is currently synchronised with.
CS / Repeater	Indicates whether the CS that each CS is currently synchronised with is a CS or Repeater.
CS Name	Name of the CS that each CS is currently synchronised with.
CS ID	12-digit ID number of the CS that each CS is currently synchronised with.
Monitored Value	Monitored value (dBm) of the CS that each CS is currently synchronised with.
Monitored Level	Monitored level (signal strength level) of the CS that each CS is currently synchronised with.
Error Rate	Error Rate (%) of the CS for each CS that it is currently synchronised with.

#### To monitor the status of CSs

- 1. From the **Air Synchronisation Group Number** drop-down list, select the desired Air Synchronisation Group number.
- 2. From the **Interval Timer** drop-down list, select the number of seconds between each automatic screen refresh.
- Click Start to monitor the status of air synchronisation.Monitoring will be performed and the screen will refresh according to the specified interval.
- 4. Click **Stop** to end monitoring.
- **5.** To refresh the screen manually at any time, click **Refresh**.
- **6.** To collect the monitored data, click **Start Capture**.
- Click Stop Capture to finish and save the monitored data. A dialogue box will be displayed.
- 8. Navigate to the folder in which you want to save the file.
- 9. Enter a file name.
- 10. Click Save.

The dialogue box will close.

## 7.4.5 Utility—Monitor/Trace—CS Status Monitor—LAN Sync Group

This utility monitors the status of CSs being synchronised with LAN synchronisation (KX-NS0154 only). CSs receive data from other CSs that they are currently synchronised with. Information is displayed for IP-CSs that are in INS status.

This option is only available at Installer level in On-line mode.

The displayed items for each CS are as follows:

Item	Description	
Index	A unique index for the CS. (This depends on the number of V-IPCS4 cards and the number of connected CSs.)	
Site	The site to which the CS is connected.	
Shelf	Always displays "Virtual".	
Slot	The slot number of the CS in the selected synchronisation group.	
Port	The port number of the CS.	
Connection	The connection status of the CS (OUS/INS/Fault).	
LAN Sync Status	The current synchronisation status of the CS, as follows:	
	1. No Sync.: Attempting to establish synchronisation	
	2. Establishing Sync.: Establishing synchronisation	
	3. Good: Currently synchronised	
	4. Keep Sync.: Maintaining synchronisation	
	5. Unstable: The CS is running unsynchronised	
	6. Sync. Lost: Synchronisation has been lost	
	7. Out of system: Cannot communicate with the PBX	
	8. Sync. Master: CS is the sync master or is a slave acting as the sync master	
LAN Sync Quality Level	Shows the quality of the synchronisation, depending on the value of <b>LAN Sync Status</b> , as follows:	
	• 1, 7, 8: "-" is displayed.	
	6: The quality of the synchronisation before synchronisation was lost is displayed.	
	Other: A number indicating the quality of the synchronisation (-16384–16384 ns).	

#### To monitor the status of CSs

- **1.** From the **LAN Synchronisation Group Number** drop-down list, select the desired LAN Synchronisation Group number.
- 2. From the **Interval Timer** drop-down list, select the number of seconds between each automatic screen refresh.
- Click Start to monitor the status of LAN synchronisation.Monitoring will be performed and the screen will refresh according to the specified interval.
- 4. Click **Stop** to end monitoring.
- 5. To refresh the screen manually at any time, click Refresh.
- **6.** To collect the monitored data, click **Start Capture**.
- Click Stop Capture to finish and save the monitored data. A dialogue box will be displayed.
- 8. Navigate to the folder in which you want to save the file.
- 9. Enter a file name.

#### 10. Click Save.

The dialogue box will close.

## 7.4.6 Utility—Monitor/Trace—Fax - Protocol Trace

This screen displays trace information for faxes sent and received by the PBX's FAX Card.

This screen can be accessed only in On-line mode.

The following information is recorded for each fax sent or received:

- · Date/Time
- Status
- Mode
- Resolution
- Speed
- Remote Capacity
- Local Capacity

To save a copy of the recorded information, click **Save Trace** and follow the prompts.

## 7.4.7 Utility—Monitor/Trace—Fax - Task sequence Trace

This screen displays a log of events related to fax activity.

This screen can be accessed only in On-line mode.

To save a copy of the log, click **Save Trace** and follow the prompts.

## 7.4.8 Utility—Monitor/Trace—UM System Trace (Internal)

Unified Messaging (UM) system processes can be monitored and logged.

This screen can be accessed only in On-line mode.

The following data can be traced and logged for each UM port, or all UM ports:

- DTMF / Dial: data regarding DTMF signals received by the Unified Messaging system.
- · Guidance: guidance data that the Unified Messaging system played.
- · Message: Unified Messaging system activity for messages such as creating, playing and deleting.
- Process Event: events occurred between Unified Messaging system processes such as Application, Call Processor and DSP.
- · Caller ID: received Caller ID information.
- DID: received DID numbers.
- PIN: PINs received by the Unified Messaging system.

Follow the steps below to monitor or log the system trace data.

- 1. Select Internal Trace, Display, or Trace Clear.
  - Setting
    - 1. Check Enable / Disable Trace Data.
    - **2.** Check the data and UM ports you wish to monitor.
    - 3. Click OK.
  - Display: Displays the trace data and/or error data.
    - 1. Check the data and UM ports you wish to monitor.
    - 2. To include error data, click the Error Trace tab and check Error Data.

- 3. Click OK.
- **4.** The selected data will be displayed in a new window. Click the **Trace Data** or **Error Trace** tabs to switch views. Click **Save Log File** to save a copy of the displayed data.
- 5. Click Cancel when finished.
- Trace Clear: Clears saved trace data.
  - 1. Select the trace data to clear.
  - 2. Click **OK** to clear the selected trace data.
  - 3. The message "System Trace Clear Successful" will be displayed. Click OK to continue.

## 7.4.9 Utility—Monitor/Trace—T1/E1 Signalling Bit Monitor

Displays reference signalling bit information for all channels of a T1 or E1 card that is installed in a legacy gateway by monitoring sent and received A, B, C and D bits. This utility is intended for use by dealers. For information about legacy gateways, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**.

This option is only available at the Installer level, and requires that the target card be set to INS status. While monitoring is being performed, any displayed bits whose value changes from 0 to 1 or vice versa will be highlighted in red until the next screen refresh is performed.

#### To view signalling bit information

- 1. From the **Site-Shelf-Slot No.** drop-down list, select the target slot. Each card will be preceded by the pattern "X-Y-Z" as follows:
  - X: Site number (1-16)
  - Y: Shelf number (2-3 [Corresponding to Legacy Gateway 1 or 2])
  - **Z**: Slot number (1–11)
- From the Interval Timer drop-down list, select the number of seconds between each automatic screen refresh.
- 3. Click Start.

Monitoring will be performed and the screen will refresh according to the interval specified.

Click Stop to end monitoring.
 To refresh the screen at any time while monitoring is stopped, click Refresh.

## 7.4.10 Utility—Monitor/Trace—T1/E1 Line Trace

Traces the sent and received signalling bits and dial numbers on the specified channel of the T1 or E1 line of a card installed in a legacy gateway. This utility is intended for use by dealers.

For information about legacy gateways, see 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2.

This option is only available at Installer level, and requires that the target card be set to INS status.

#### To view trace data

- 1. From the **Site-Shelf-Slot No.** drop-down list, select the target slot. Each card will be preceded by the pattern "X-Y-Z" as follows:
  - X: Site number (1–16)
  - Y: Shelf number (2-3 [Corresponding to Legacy Gateway 1 or 2])
  - **Z**: Slot number (1–11)
- 2. From the CH No drop-down list, select the target channel.

#### 3. Click Start.

Trace information will be displayed. The information is automatically updated whenever the data being monitored changes.

- **4.** Click **Stop** to end the trace.
- **5.** Select an option:
  - Click **Capture** to save the displayed trace information. Information will be saved to the PC as a text-format file.
  - Click Clear to erase the information.

## 7.5 Utility—Report

## 7.5.1 Utility—Report—Digital Trunk Error Report

Displays accumulated information on various types of errors occurring on digital trunks.

This option is only available at Installer level in On-line mode.

The value displayed for each error item is the number of times that each error occurred during the time period selected. Average values for these items vary depending upon many factors, such as the equipment being used, and the distance from the telephone company.

The displayed items are as follows:

Item		Description
Time		Time of error
Slot		Relevant slot and card type
Counter of Digital	Out of SYNC (#300)	Digital trunk out of sync (Loss of Signal)
Trunk Error Logs logged in "Minor Error"	RAI (#301)	Digital trunk RAI signal reception
Log	AIS (#302)	Digital trunk Alarm Indication Signal reception
	Frame Failure (#300)	Digital trunk frame failure (Loss of Frame)
Counter of minor	CRC	Cyclic Redundancy Check error
communication error	SF	Severely errored frame (or Severe Framing Error)
	FE	Frame synchronisation bit-error
	LV	Line Code Violation
	SL	Controlled slip

#### To view digital trunk information

- 1. From the Slot drop-down list, select the target slot.
  - To generate a report on a specific card, select the slot number and card name.
  - To generate a report on all matching cards simultaneously, select "ALL".
- 2. From the Display form drop-down list, select the time period to view.
- 3. Click Execute.

The error report will be displayed.

## 7.5.2 Utility—Report—IP Extension Statistical Information

Displays accumulated statistical information on IP extensions, IP-CSs (KX-NS0154 only), V-IPEXT32 cards, V-IPCS4 cards, and the DSP card.

This screen can be accessed only in On-line mode.

Item	Description
Collection Started Time	Date and time the port was last reset.
Port No.	Number of the port.
RTP Receive Packet Counter	Total number of packets received.
RTP Receive Lost Packet Counter	Total number of packets lost.
RTP Receive Abandoned Packet Counter	Total number of packets abandoned.
RTP Arrive Packet Interval (MAX.) [ms]	Maximum time taken for a packet to arrive.
RTP Arrive Packet Interval (MIN.) [ms]	Minimum time taken for a packet to arrive.

#### To view IP extension information

- 1. From the Card Selection drop-down list, select the slot number for the card.
- 2. Click Execute.

The statistical information will be displayed.

- 3. Select an option:
  - Click **Capture** if you want to save the displayed information.
    - 1. Enter a file name, or select a file to overwrite.
    - 2. Click Save.
  - Click Clear to erase the information and reset the Collection Started Time.
- 4. Click Cancel to return to the main screen.

## 7.5.3 Utility—Report—UM View Reports

Unified Messaging (UM) system reports can be generated in order to monitor voice mail operations. Reports can be displayed on a PC, printed, or exported.

This screen can be accessed only in On-line mode.

#### To view a report

- 1. In the View Report tab, select the desired report from the Report Parameters drop-down list.
- 2. Specify a range of mailbox numbers in the From and To boxes, or click Select all mailboxes.
- 3. Click View Report.

Some reports can be viewed as a table or as a graph. For these reports, select "Table" or "Graph" under **View As** before clicking **View Report**.

#### To export a report

A report can be printed from Web Maintenance Console or exported as a text file or CSV file.

- 1. When viewing a report, select **Print Out (PC)**, **Text**, or **Comma-separated values (CSV)** from the drop-down menu.
- 2. Click Export.
- 3. If you select Print Out (PC):

A print command is sent to the PC. Follow any prompts to print the report.

If you select Text or Comma-separated values (CSV):

A file save dialogue is displayed. Specify the folder to export the report file to.

#### To clear a report

For each report, all data can be cleared. Follow the steps below to clear all report data. Some reports can also be set to automatically clear at specified times.

- 1. Select the Report Data Clear (Manual) tab.
- 2. Select the desired report from Report Parameters.
- 3. Click Report Data Clear.

#### To automatically clear report data:

- 1. Select the Report Data Clear (Scheduled) tab.
- 2. Select **Daily**, **Weekly**, **Monthly**, or **Yearly**, and specify the time, the day of week or day of month, and the month, as necessary.
- 3. Select the desired report from Report Parameters.
- 4. Click OK.

#### Note

For scheduling the Automatic Report Data Clear, if a day is specified that does not exist (i.e., February 31), the Automatic Report Data Clear will not be performed.

#### **Unified Messaging System Reports**

Report Type	Description
Mailbox Information Report	The mailbox information report displays configuration parameters (from owner's extension to e-mail options) for a specified mailbox or a range of mailboxes. 50 records are displayed at a time for this report.
Call Account Report*1	The call account report displays information about outgoing call activity. Information can be shown by UM port or by mailbox. The report includes date, starting time, used port, connection time, called telephone number, call type, exit status of each callout, total callouts number and the connection time for local or long distance call, and total number of outgoing calls. 400 records are displayed at a time for this report.
UM Extn. Usage Report <sup>-1</sup>	The port usage report displays information about each UM port, such as connection time and percentage of time which each UM port was busy.
Memory Card Usage Report <sup>-1</sup>	The memory usage report indicates the amount of storage space used and the amount of available space. Available space is expressed in minutes. Information for the number of messages stored in and deleted from the Unified Messaging system is displayed.

Report Type	Description
Mailbox Usage Report <sup>-1</sup>	The mailbox usage report displays information for a specified mailbox or range of mailboxes, including the number of recorded messages, the total time of outgoing calls, external messages, message notification, group message delivery, and number of faxes received.
	Specify the mailboxes for which you want to display a report, then click <b>View Report</b> .
	Items not marked as "current" are accumulated indications since the last clearing of this report.  100 records are displayed at a time for this report.
Fax Transfer Report <sup>1</sup>	The fax transfer report displays information about faxes received by the Unified Messaging system and transferred to a fax extension. It includes the fax reception date, the port number used, and the fax transfer status for a maximum of 64 fax messages.
Fax Server Report	The fax server report displays the log of all sent and received faxes. The report includes the user name or mailbox number that sent or received the fax, number of pages of the fax document, and the result of the fax transmission or reception. Images of sent and received faxes can also be displayed.
Call Handling Statistic Report*1	The call handling statistic report displays both a summary of and details of Unified Messaging activity over a specified period of time for the Automated Attendant service. This report includes the total number of incoming calls, transferred calls, held calls, calls which left a message, the result of transferred calls, etc.
Custom Service Report*1	The Custom Service report displays information such as Custom Service settings, message recording status, number of access, time of access, and number of access to each key.
Message Status Report	The message status report provides the status of all messages of specified subscribers, including faxes.
Subscriber Setup Report	The subscriber setup report displays the basic settings (owner's name, password, personal greeting, etc.) for a specified mailbox or range of mailboxes.
Security Information Report	The security information report displays information about mailbox accesses. The report includes the date of the last change and last access, number of total accesses, login, and failed accesses.
Hourly Statistics Report <sup>-1</sup>	The hourly statistics report displays information about the number of incoming or outgoing calls, the connected time per hour, etc.

This report can be set to be automatically cleared according to scheduled settings.

## 7.5.4 Utility—Report—E-mail Report

A log of information about e-mail messages sent using the functions of the PBX can be viewed in the E-mail

This screen can be accessed only in On-line mode.

The information in the report includes the following items for each e-mail message sent:

- · User name under which the message was sent
- · Unified Messaging mailbox number
- · Time sent
- · Destination e-mail address
- · Sending status of the e-mail message

The maximum number of entries included in the report is as follows, depending on the type of the message:

- Voice mail or fax message notifications: 5,000 entries
- · Missed call notifications: 1,000 entries
- Other e-mail messages (system messages, etc.): 1,000 entries

#### **Note**

Messages sent by the PBX, such as system alerts, will list the user as "System" and the mailbox number as "—".

If these maximum amounts are exceeded, older records beyond the maximum amount for each type will be deleted as new entries are recorded. To delete all e-mail report records, click **Delete all E-mail report**.

#### **Exporting the E-mail Report**

- 1. Select an export format from the drop-down list.
- 2. Click Export.
- **3.** A download dialogue for the e-mail report will be displayed. Open the file to view it, or save the file to the PC.

## 7.5.5 Utility—Report—IP-CS Information

## 7.5.5.1 Utility—Report—IP-CS Information—IP-CS Statistical Information

Displays accumulated statistical information on the usage of wireless channels and air synchronisation of IP-CSs.

This screen can be accessed only in On-line mode.

Item	Description
Date	The date the information was acquired.
Time	The time the information was acquired. Statistics are collected every hour.
Available Channel (Max / Min / Average)	Maximum, minimum, and average number of available channels for the previous 1 hour.
Number of Location Registration (OK / NG / Total)	The number of successful, failed, and total location registrations for the previous 1 hour.
Number of Outgoing Call (OK / NG / Total)	The number of successful, failed, and total number of outgoing calls made by the CS for the previous 1 hour.

Item	Description
Number of Incoming Call (OK / NG / Total)	The number of successful, failed, and total number of incoming calls received by the CS for the previous 1 hour.
Number of etc. (OK / NG / Total)	The number of successful, failed, and total number of other transactions made by the CS for the previous 1 hour.
Air Sync Change <sup>-1</sup>	The number of times the CS has changed its air synchronisation destination in the previous 1 hour.
Air Sync Self Running <sup>-1</sup>	The number of times the CS has switched to self-running mode in the previous 1 hour.
Air Sync Lost <sup>-1</sup>	The number of times the CS has lost synchronisation in the previous 1 hour.

<sup>&</sup>lt;sup>\*1</sup> A dash is displayed if the selected CS is synchronised using LAN synchronisation.

#### To view IP-CS statistical information

- In the Target IP-CS: CS Name drop-down list, select the CS whose statistics you want to view. Only CSs that support this feature are displayed in the drop-down list.
   The selected CS's CSID is displayed in CSID, and the statistics for the selected CS are displayed.
- 2. To refresh the display with the latest statistics, click **Refresh**.

#### **Note**

You can view a list of disconnected calls at the CS by clicking the "PS Call Disconnect Log" link in the upper-right corner of the screen. For details, see **7.5.5.3 Utility—Report—IP-CS Information—PS Call Disconnect Log**.

## 7.5.5.2 Utility—Report—IP-CS Information—LAN Sync Information

Displays accumulated statistical information on the performance of CSs being synchronised using LAN synchronisation. On this screen, you can view the performance of wireless devices on the LAN, which is useful for troubleshooting and determining whether the number of channels needs to be increased. This screen can be accessed only in On-line mode.

Item	Description
Date	The date the information was acquired.
Time	The time the information was acquired. Statistics are collected every hour.
IP Address	The IP address of the selected CS.
Sync Change	The number of times the CS has changed its synchronisation destination in the previous 1 hour.
Sync Lost	The number of times the CS has lost its synchronisation in the previous 1 hour.
Keep Sync	The number of times the CS has switched to keep sync in the previous 1 hour.
H.O Unable	The number of times handover has not been possible in the previous 1 hour.

Item	Description
Keep Sync Ratio (%)	The percentage of time the CS has been in keep sync in the previous 1 hour.
H.O Unable Ratio (%)	The percentage of time the CS has been unable to do handover in the previous 1 hour.
Keep Sync Time	The length of time in minutes the CS has been in keep sync.
H.O Unable Time	The length of time in minutes the CS has been unable to do handover.
Short Term Diag	The short term (within the previous 1 hour) diagnosis for LAN synchronisation.
	Indeterminable: Status cannot be determined.
	Indeterminable (IGMP Querier not found): Status cannot be determined because the IGMP querier could not be found.
	Under Diagnosis: Diagnosis is being performed.
	OK: Synchronisation is OK.
	Not OK (Signal Jitter): Synchronisation is susceptible to jitter.
	Not OK (Signal delay): Synchronisation is susceptible to delay.
	Conditional OK (Signal Jitter): Synchronisation is OK, but jitter is possible.
	Conditional OK (Signal delay): Synchronisation is OK, but delay is possible.
	Out of Sync: Synchronisation cannot be established.
	Out of Sync (10base-T): Synchronisation cannot be established on a 10Base-T connection.
	Out of Sync (100base-TX half): Synchronisation cannot be established on a 100Base-TX half-duplex connection.
	Out of Sync (IGMP Querier not found): Synchronisation cannot be established because an IGMP querier could not be found.

Item	Description
Long Term Diag	The long term diagnosis for LAN synchronisation.
	Indeterminable: Status cannot be determined.
	Indeterminable (IGMP Querier not found): Status cannot be determined because the IGMP querier could not be found.
	Under Diagnosis: Diagnosis is being performed.
	OK: Synchronisation is OK.
	Not OK (Signal Jitter): Synchronisation is susceptible to jitter.
	Not OK (Signal delay): Synchronisation is susceptible to delay.
	Conditional OK (Signal Jitter): Synchronisation is OK, but jitter is possible.
	Conditional OK (Signal delay): Synchronisation is OK, but delay is possible.
	Out of Sync: Synchronisation cannot be established.
	Out of Sync (10base-T): Synchronisation cannot be established on a 10Base-T connection.
	Out of Sync (100base-TX half): Synchronisation cannot be established on a 100Base-TX half-duplex connection.
	Out of Sync (IGMP Querier not found): Synchronisation cannot be established because an IGMP querier could not be found.

#### To view LAN synchronisation information

- 1. In the Target IP-CS: CS Name / MAC Address drop-down list, select the CS whose statistics you want to view. Only CSs that support this feature are displayed in the drop-down list.

  The selected CS's MAC address is displayed in the text box, and the statistics for the selected CS are displayed. The master CS's name and MAC address are also displayed for reference.
- 2. To refresh the display with the latest statistics, click Refresh.

#### Note

You can view a list of disconnected calls at the CS by clicking the "PS Call Disconnect Log" link in the upper-right corner of the screen. For details, see **7.5.5.3 Utility—Report—IP-CS Information—PS Call Disconnect Log**.

## 7.5.5.3 Utility—Report—IP-CS Information—PS Call Disconnect Log

Displays a list of PS calls that have been disconnected at the CS selected on the parent screen. This log can be saved as a text file.

This screen can be accessed by clicking the "PS Call Disconnect Log" link on either the **IP-CS Statistical Information** screen or the **LAN Sync Information** screen.

See 7.5.5.1 Utility—Report—IP-CS Information—IP-CS Statistical Information and 7.5.5.2 Utility—Report—IP-CS Information—LAN Sync Information.

This screen can be accessed only in On-line mode.

Item	Description
Index	The entry's index.
Date	The date the call was disconnected.
Time	The time the call was disconnected.
Error Message	The reason the call was disconnected.
	Connection Error: There was an error in the connection.
Extension Number	The extension number of the PS where the call was disconnected.
PS-ID	The ID of the PS where the call was disconnected.

### To save the log

- 1. Click Save.
  - The log information of CSs that support this feature is saved.
- 2. A download dialogue for the call disconnect report will be displayed. Open the file to view it, or save the file to the PC.

## 7.6 Utility—Activation Key Installation

Activation keys for various features of the PBX can be installed using this screen. Activation key files are copied from a PC to the PBX and activated. Use the below procedure to install activation key files to a PBX. This screen can be accessed only in On-line mode.

- 1. Click **Browse** and specify the directory where the activation key files are stored, and click **Open**.
- **2.** A list of activation key files stored in the specified directory is displayed. Check the boxes next to the activation keys to install to the PBX, and click **Install**.
- **3.** The activation keys will be copied to the Master unit, and then copied to the Slave units of the One-look network. When installation is complete, the message, "The activation key has been installed and activated successfully!" is displayed.
- 4. Click OK.

#### Note

- You can click the provided link to directly access 9.3 PBX Configuration—[1-1] Configuration—Slot
  —Activation Key Status to view activation key information and programme the number of activated
  IP-GW trunks and IP softphones.
- You can install an Activation Key through the Master Unit to any Slave Unit (regardless of the PBX model of the Slave Unit).

## 7.7 Utility—Email Notification

## 7.7.1 Utility—Email Notification—Alert

You can specify e-mail addresses that will receive messages regarding the PBX's status.

#### System Alarm

An e-mail message will be sent to the specified address when there is a system alarm. The e-mail message will contain details about the alarm.

- **1.** For **Filtering Setting**, select the check boxes to specify whether to receive e-mails when there is a Major alarm, a Minor alarm, or both.
- 2. Specify one or two e-mail addresses that will receive system alarm alert messages.

#### **Notice**

Be sure to enter e-mail addresses correctly. If an address is incorrectly entered, an alert will not be received when there is a system alarm, or information regarding the PBX may be sent unintentionally to a third party.

- 3. In Subject enter the text that will be used for the subject header of e-mails that are sent.
  For Format—Message body type, select the check boxes to specify whether to include the subject in the message body.
  - · Type1: Message body does not include the subject
  - Type2: Message body includes the subject
- 4. Click **OK** when finished.

#### **Licence Expiry**

- Partner activation keys (product activation keys with an expiration date)<sup>-1</sup>
   A notification e-mail will be sent to the specified addresses at midnight, 40 days before the activation key expires. Or, if the PBX is started within 40 days of the activation key's expiration, a notification e-mail will be sent at that time to the specified addresses. Only 1 notification will be sent.
- Non-product activation keys with an expiration date
   A notification e-mail will be sent to the specified addresses at midnight, 10 days before the activation key expires if the PBX is turned on. If the PBX is started within 10 days of the activation key's expiration, a notification e-mail will be sent each time the PBX is started.
- For the following activation keys, the e-mail will be sent 40 days before the activation key expires.
  - Poltys CCAccounting A.L.
  - Poltys CCAcc. Enterprise A.L.
  - Poltys CCView A.L.
  - Poltys CCView add. PBX A.L.
  - Poltys CCView Supervisor A.L. (1 user)
  - Poltys CCView Supervisor A.L. (5 users)
  - Poltys CCView CRM P-up A.L. (1 user)
  - Poltys CCView CRM P-up A.L. (5 users)
  - Poltys Number notice A.L.
  - Poltys CCAgent A.L. (1 user)
  - Poltys CCAgent A.L. (5 users)

- Poltys CCRecord Analogue A.L. (4 ports)
- Poltys CCRecord Analogue A.L. (8 ports)
- Poltys CCRecord Analogue A.L. (12 ports)
- Poltys CCRecord Analogue A.L. (16 ports)
- Poltys CCRecord Analogue A.L. (24 ports)
- Poltys CCRecord Digital A.L. (8 ports)
- Poltys CCRecord Digital A.L. (16 ports)
- Poltys CCRecord Digital A.L. (24 ports)
- Poltys CCRecord PRI A.L. (1 port)
- Poltys CCRecord PRI A.L. (2 ports)
- Poltys CCRecord SIP A.L. (4 ports)
- 1. Specify one or two e-mail addresses that will receive expiry notice messages.

#### **Notice**

Be sure to enter e-mail addresses correctly. If an address is incorrectly entered, an alert will not be received when activation keys are about to expire, or information regarding the PBX may be sent unintentionally to a third party.

- In Subject enter the text that will be used for the subject header of e-mails that are sent.
   For Format—Message body type, select the check boxes to specify whether to include the subject in the message body.
  - · Type1: Message body does not include the subject
  - · Type2: Message body includes the subject
- 3. Click OK when finished.

## 7.7.2 Utility—Email Notification—System Analysis

Send a specific log file to the designated e-mail address(es).

This screen can be accessed only in On-line mode.

- 1. Check the Log File Type drop-down menu, select a log file to send to the e-mail address.
- 2. Enter up to 2 e-mail addresses in Email Address 1 and Email Address 2.
- 3. In **Subject**, enter text to be used as the subject line of the e-mail sent.
- 4. Click **Execute** and the mail will be sent at that time.

## 7.7.3 Utility—Email Notification—Test Email

Send a test e-mail to confirm e-mail sending settings are correctly configured.

This screen can be accessed only in On-line mode.

- 1. Enter up to 2 e-mail addresses in **Email Address 1** and **Email Address 2**.
- 2. In Subject, enter text to be used as the subject line of the e-mail sent.
- 3. Click **Execute**. A test mail will be sent to the specified address(es).

Mail settings can be viewed and set in 28.3.6 Network Service—[3-6] Client Feature—SMTP.

## 7.8 Utility—Command

## 7.8.1 Utility—Command—UM Command

System commands can be sent directly to the Unified Messaging system using the Commands dialogue. This screen can be accessed only in On-line mode.

Follow the steps below to use the Commands dialogue:

- 1. Enter the desired command, then click RUN. Results from entered commands are displayed.
- 2. When finished, click Close.

## 7.8.2 Utility—Command—Router Command

Router commands can be sent directly to the built-in router using the Commands dialogue.

This screen can be accessed only in On-line mode.

Follow the steps below to use the Commands dialogue:

- 1. Enter the desired command, then click RUN. Results from entered commands are displayed.
- 2. When finished, click Close.

#### **Note**

• Some examples of supported commands are as follows: ROUTE, NETSTAT, ARP, DNSFLUSH.

## 7.9 Utility—UM – System Prompts Customisation

The System Prompts customisation screen is used to view, play, add, or delete system prompts. The programmer can also check the prompt number and text for these prompts.

This screen can be accessed only in On-line mode.

The following categories of system prompts can be customised from the System Prompts customisation screen:

- a. System Guidance
- b. Custom Service Menus
- c. Company Greetings
- d. Other
  - Company Name
  - Language Select Menu
  - Hold Announce Menu
  - Mailbox Group List
  - System Caller ID

To customise system prompts, select a tab in the **System Prompts** dialogue box.

#### **Notice**

The system prompts initially installed on the Storage Memory Card cannot be restored to their original state by initialising or resetting the PBX; any changes made to the initially installed system prompts cannot be undone. Before changing any system prompts, perform a backup of the initial system prompt data. See **6.9 Tool—UM Data Backup** for details. Then, you can restore the system prompts to their initial state by restoring the backup data. See **6.10 Tool—UM Data Restore** for details.

#### **Deleting Prompts**

The programmer is able to delete specified system prompts.

To delete a specific system prompt:

- 1. Select the cell for the desired prompt number.
- 2. Click Delete.

#### Recording System Prompts

- 1. Select the desired system prompt to record, and click Play/Record.
- 2. Select "Record from extension" or "Import from recorded file".

When "Record from extension" is selected:

- 1. Specify the extension number of the telephone used for recording, then click Connect.
- **2.** When the specified extension rings, go off-hook.
- 3. Click **Record**, **Stop**, or **Play** to record or play a system prompt.
- 4. Click Disconnect.
- Click OK.

When "Import from recorded file" is selected:

- 1. Click Browse.
  - The **Open** dialogue box appears.
- 2. Navigate to the folder containing the WAV files you wish to import. WAV files must meet the following specifications:

- G.711 PCM codec
- 8 kHz, 8-bit sampling rate
- Monaural
- A-law or μ-law encoding
- 3. Select the desired WAV file.
- 4. Click **Open** to import the file.
- 5. Click OK.

#### **Starting and Stopping System Prompt Playback**

- Select the desired system prompts.
- 2. Click Play/Record.
- 3. Click Play or Stop.

# 7.10 Utility—Automatic Two-way Recording

# 7.10.1 Utility—Automatic Two-way Recording—Supervisor Setting

Specify the extensions of supervisors that will control the Automatic Two-way Recording feature for agent extensions. These settings may be changed by a programmer with a User (Administrator) account.

- 1. Click Add/Delete.
- 2. Select supervisor extensions from the list, and click **OK**.
- 3. Repeat this procedure to add multiple supervisors. Click **OK** when finished.

# 7.10.2 Utility—Automatic Two-way Recording—Extension Setting

Specify the Automatic Two-way Recording settings for each supervisor. These settings may be changed by a programmer with a User (Administrator) account.

- 1. From the **Select a Supervisor** drop-down list, select a supervisor (specified in **7.10.1 Utility— Automatic Two-way Recording—Supervisor Setting**).
- 2. In **UM Group Destination Mailbox** specify the mailbox where the Automatic Two-way Recording data will be sent. Select **Add New Mailbox** and specify a new mailbox number, or select an existing mailbox from the **Select Mailbox** drop-down list.
- 3. Select a UM group from the **Assign a Destination UM-Group No.** drop-down list to specify the UM Group of the mailbox specified in **2**.
- **4.** In **What type of calls to record**, check the boxes to specify if internal calls, external calls, and/or calls made to an incoming call distribution group will be recorded to the mailbox.
- 5. In Select User Extensions, click Add.
- **6.** Select the check boxes for the agent extensions that the supervisor will control, and then click **OK**.
- Click List View to confirm the current Automatic Two-way Recording settings for each supervised extension.
- **8.** Click **OK** when you have finished configuring settings and adding agent extensions for a supervisor. Once these settings have been configured, supervisors can change settings for agent extensions they have been assigned in **8.3.1 Users—Automatic Two-way Recording—Edit a Recording**.

# 7.10.3 Utility—Automatic Two-way Recording—Extension Setting List

In this list you can view the settings of extensions that are programmed to have calls recorded by the Automatic Two-way Recording feature. Information for each extension, including the extension's supervisor, UM Group number, and Automatic Two-way Recording destination mailbox is displayed. You can specify which types of calls will recorded for each extension. These settings may be changed by a programmer with a User (Administrator) account.

- 1. For an extension, select a setting for Internal Call, External Call, and ICDG Incoming Only. (See below for details.)
  - Internal Call: Extension-to-extension calls are recorded.
  - External Call: Calls with outside parties are recorded.

- **ICDG Incoming Only**: Only calls from outside parties that are received through an incoming call distribution group are recorded.
- 2. Select On or Off for that setting.
- 3. Click **OK** when finished.

The programming items displayed on this screen are as follows.

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the extension (reference only).	Max. 5 digits (consisting of 0–9)	
Extension Name	Indicates the name of the extension (reference only).	Max. 20 characters	
Internal Call	Specifies whether intercom calls for the extension will be automatically recorded.  Note  Calls between extensions that are connected in a QSIG network are seen as external calls, irrespective of whether an activation key for QSIG enhanced features is used. To enable Automatic Two-way Recording for this type of call, set External Call	On, Off	Feature Manual References 3.2.1.4 Automatic Two-way Recording for Manager
External Call	to <b>On</b> .  Specifies whether trunk calls for the extension are automatically recorded.	On, Off	Feature Manual References 3.2.1.4 Automatic Two-way Recording for Manager
ICDG Incoming Only	Specifies whether only trunk calls that are received through an incoming call distribution group to the extension are automatically recorded.  Note  External Call must be set to "On" to set this item to "On".	On, Off	Feature Manual References 3.2.1.4 Automatic Two-way Recording for Manager
Supervisor	Indicates the extension designated as a supervisor that may play, delete, or confirm the information of two-way recordings (reference only).	Extension number and user name	PC Programming Manual References 7.10.1 Utility—Automatic Two- way Recording—Supervisor Setting Feature Manual References 3.2.1.4 Automatic Two-way Recording for Manager

Name	Description	Value Range	Links
UM Group No.	Indicates the UM group number in which the two-way recording will be performed (reference only).	Group number and group name	PC Programming Manual References 7.10.2 Utility—Automatic Two- way Recording—Extension Setting
			Feature Manual References 3.2.1.4 Automatic Two-way Recording for Manager
Mailbox Number	Indicates the Unified Messaging mailbox where two-way recordings will be stored (reference only).	Mailbox number	PC Programming Manual References 7.10.2 Utility—Automatic Two- way Recording—Extension Setting Feature Manual References 3.2.1.4 Automatic Two-way Recording for Manager

## 7.10.4 Utility—Automatic Two-way Recording—Maintenance

Automatic Two-way Recording can be enabled or disabled, or set to record until a specified date and time by a programmer with a User (Administrator) account.

- 1. To start Automatic Two-way Recording, click **Start**. The button will change to display **Stop**. Two-way recording for all designated extensions will continue until one of the following occurs:
  - The Stop button is clicked.
  - The two-way recording time limit or memory capacity has been reached.
  - The date and time set in Recording Period is reached.
- 2. To set a specific time when Automatic Two-way Recording will stop:
  - a. In Recording Period, select Yes for Setting.
  - **b.** In **Date & Time**, enter a year, month, day, hour, and minute. Click on the calendar and clock numbers to select them.
  - c. Click OK.
- 3. To end Automatic Two-way Recording any time, click **Stop**.

# 7.11 Utility—UM - System Maintenance

Programme settings for Unified Messaging (UM) system maintenance.

#### **System Maintenance Mode**

Specifies whether to enable or disable System Maintenance Mode.

#### **System Maintenance Start Time**

Specifies the System Maintenance start time. After specifying the settings on this screen, click **OK**.

# 7.12 Utility—CS-Web Connection

You can specify the URL of the Super Master CS for your system, which will be used for accessing online CS-Web system programming. For details about the Super Master CS and setting up SIP-CSs, refer to the SIP-CS Installation Guide.

- 1. In Super Master CS-Web URL, enter the URL of the Super Master CS.
- 2. Click **Test** to confirm if the input URL is correct. If the URL is correct, the CS-Web login screen will open in your web browser.
- 3. Click OK.

When programming in other screens, clicking the **SIP-CS Web** button on that screen will access CS-Web system programming at the URL specified here.

# Section 8 Users

This section serves as reference operating instructions for the Users menu of the Setup screen of Web Maintenance Console.

## 8.1 Users—User Profiles

Manage PBX settings on a per-user level. Information for each user account is displayed and can be added, edited, or and deleted by a User (Administrator) or Installer level account.

#### Note

- For User (Administrator) accounts to change User (User) account settings, the Installer account must
  use the Screen Customise tool to allow User (Administrator) accounts to view the Users—User
  Profiles screen. For details, see 6.8 Tool—Screen Customise.
- When a User (User) level account accesses this screen, he may view and edit items for his account
  as explained in 8.2.1 Users—Add User—Single User. In addition, some advanced settings are
  available for User (User) level accounts only. For details, see 8.1.1 Users—User Profiles—
  Advanced setting.

The settings that can be changed in the User Profile List for each user are as follows:

#### Common

Item	Description
First Name	Specifies the first name of the user.
Last Name	Specifies the last name of the user.
User Group	Specifies the user's group. User groups can be set in Extension Settings:
	• 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
	• 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
Ext. No.	Specifies the extension number associated with this user. Extension numbers can be set in Extension Settings:
	• 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
	• 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
Ext. COS	Select a Class of Service (COS) for the user from the drop-down list. COS settings can be set in 10.7 PBX Configuration—[2-7] System—Class of Service.
UM Group No.	Select a UM group for the user from the drop-down list.
Mailbox No.	Specifies the UM mailbox number for the user.
Mailbox COS	Select a mailbox COS for the user from the drop-down list. Mailbox COS settings can be set in 21.1 UM Configuration—[2] Class of Service.

#### FWD/DND

Item	Description
First Name	Specifies the first name of the user.
Last Name	Specifies the last name of the user.
FWD/DND setting - call from CO Mode	Specifies the FWD/DND setting for calls from trunks.

Item	Description
FWD setting - call from CO Destination	Specifies the FWD destination for calls from trunks.
FWD/DND setting - call from Ext. Mode	Specifies the FWD/DND setting for calls from extensions.
FWD setting - call from Ext. Destination	Specifies the FWD destination for calls from extensions.

For settings and details for **FWD/DND** items, refer to the following:

- 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension—FWD/DND
- 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station—FWD/DND

#### Option

Item	Description
Rule of copy to extension name	Determines how the <b>First Name</b> and <b>Last Name</b> set in <b>User Profiles</b> is used for the <b>Extension Name</b> of the following settings.
	<ul> <li>12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings</li> </ul>
	<ul> <li>12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings</li> </ul>

#### **User Controls**

#### Add Button

To add a user profile for a single extension, click the to open the Add User Wizard. See **8.2.1 Users—Add User—Single User**.

#### Edit Button

To edit information on an individual user level, select a user from the list by clicking on the row of the user to edit, then clicking the button to open the Add User Wizard with the selected user's information filled in. See **8.2.1 Users—Add User—Single User**.

#### Delete Button

To delete users:

- 1. Check the box(es) next to the user's name(s) and click the in button.
- 2. A confirmation message will appear. Click OK.
- 3. The user's information is deleted from the list.

#### Add Range Button

To add multiple user profiles for a range of extensions at one time, click the key button. See **8.2.2 Users—Add User—Multiple Users**.

#### Note

- In order to edit the settings of the **Unified Message** tab by clicking the button, you must be logged in to the PBX with the associated UM Group that your mailbox is assigned to. If you are logged in to a PBX that is different from the PBX with the associated UM Group of your mailbox, the following items will be greyed out:
  - Prompt Registration

- Mailbox Password
- Mailbox Password (Message Client)
- Advanced setting

If these items are greyed out, click **Direct Login** to log in directly to the PBX associated with the UM Group of your mailbox to make changes to these items.

• The \, \, and \, and \, buttons are not visible for User (User) level accounts.

### 8.1.1 Users—User Profiles—Advanced setting

When User (User) level accounts access their user profiles, they may view and edit items for their account as explained in **8.2.1 Users—Add User—Single User**. In addition, some advanced settings can also be programmed by users.

#### **Note**

The advanced settings described here are displayed only for User (User) level accounts.

#### Accessing advanced user profile settings

- 1. Log in Web Maintenance Console using a User (User) level account.
- 2. In the user profile, click the Unified Message tab.
- 3. Click the Advanced setting button.
- **4.** In addition to normal mailbox settings, **Advanced Call Transfer Setting** and **Scenario Setting** will be displayed.

#### **Advanced Call Transfer Setting**

By combining the settings for Call Transfer and Incomplete Call Handling, you can create a call handling "scenario" for your extension. Up to 20 scenarios can be created, and a scenario can be assigned to each absent message. Click the **Edit** button in **Advanced Call Transfer Setting** to open the window for programming. Select a Scenario number (1–20) from the drop-down menu, then programme the settings for that scenario. Click **OK** at the bottom of the window when finished.

Name	Description	Value Range	Links
Scenario Name	Specify a name for the scenario for identification.	Max. 32 Characters	Feature Manual References 3.2.2.7 Call Transfer Scenario

Name	Description	Value Range	Links
Call Transfer Status— Selection	Determines how the Unified Messaging system will handle a call in the selected scenario.	None: Rings the subscriber's extension.  Call blocking: Handles the call according to the Incomplete Call Handling for No Answer setting for the subscriber's extension. The subscriber's extension will not ring.  Call screening: The caller is prompted to record his or her name. The Unified Messaging system then calls the subscriber and plays back the caller name. The subscriber can choose whether to answer the call.  Leave a Message: Transfers the caller to the mailbox. Intercom Paging: Pages the subscriber by intercom. Transfer to specified Custom Service Menu: Transfers the caller to the specified Custom Service.	Feature Manual References 3.2.2.7 Call Transfer Scenario
Call Transfer Status—VIP Filter	Specifies whether calls from certain telephone numbers will be transferred directly to a specified extension or telephone number.  Note  This setting can only be set to "Enable" when Call Transfer Status—Selection is set to "Leave a Message".	Enable, Disable	Feature Manual References 3.2.2.7 Call Transfer Scenario
Call Transfer Status— Telephone Number 1, 2, 3	Specifies the telephone numbers that the VIP Filter setting will be applied to. When a call is received from any of the numbers specified here, the call will be transferred immediately to the destination specified in Call Transfer Status—Transfer to (Selection/Other).	Max. 32 digits	Feature Manual References 3.2.2.7 Call Transfer Scenario

Name	Description	Value Range	Links
Call Transfer Status— Transfer to (Selection/ Other)	Specifies the transfer destination for calls transferred according to the VIP Filter setting.	Extension: The call is transferred to the user's extension. Other: The call is transferred to the telephone number that is specified in Transfer to (Other).	Feature Manual References 3.2.2.7 Call Transfer Scenario
Call Transfer Status— Transfer to specified Custom Service Menu	Select a Custom Service from the drop-down menu if "Transfer to specified Custom Service Menu" is selected for Call Transfer Status-Selection.	Custom Service	PC Programming Manual References 23.3 UM Configuration—[4-3] Service Settings— Custom Service Feature Manual References 3.2.2.7 Call Transfer Scenario
Call Transfer Status— Transfer to specified telephone number - 1	If "None" or "Call screening" is selected for Call Transfer Status-Selection, specifying a telephone number here will transfer the caller to that telephone number.  Note  If "Call screening" is selected, the transfer destination will hear the call screening prompt before the call is transferred.	Max. 32 digits (consisting of 0–9, $\times$ , and #)	Feature Manual References 3.2.2.7 Call Transfer Scenario

Name	Description	Value Range	Links
Call Transfer Status— Transfer to specified telephone number 2, 3, 4, 5 (Selection/ Other)	If "None" or "Call screening" is selected for Call Transfer Status-Selection, and the call could not be transferred to the number specified in Call Transfer Status-Transfer to specified telephone number - 1, the call will be transferred according to these settings for this scenario, in numerical order of priority.	Other, Extension, Covering Extension If "Other" is specified, enter a maximum of 32 digits consisting of 0–9, *, and #.	Feature Manual References 3.2.2.7 Call Transfer Scenario
	• This sequence has higher priority than the alternate extension transfer sequence specified in 24.4 UM  Configuration—[5-4] System Parameters—Parameters—PBX Parameters—PBX Environment—Alternate Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;]).  • If "Call screening" is selected, the transfer destination will hear the call screening prompt before the call is transferred.		
Incomplete Call Handling for No Answer	Specifies how the scenario handles a call when there is no answer.  Note  More than one option can be selected.	Leave a Message: Allows the caller to record a message. Transfer to a covering extension: Transfers the caller to a covering extension. Page the mailbox owner by intercom paging: Pages the subscriber by intercom. Transfer to operator: Transfers the caller to an operator. Return to top menu: Lets the caller return to the top menu and try another extension. Transfer to specified Custom Service Menu: Transfers the caller to the specified Custom Service.	Feature Manual References 3.2.2.7 Call Transfer Scenario

Name	Description	Value Range	Links
Incomplete Call Handling for Busy	Specifies how the scenario handles a call when the destination is busy.  Note  More than one option can be selected.	Leave a Message: Allows the caller to record a message. Transfer to a covering extension: Transfers the caller to a covering extension. Page the mailbox owner by intercom paging: Pages the subscriber by intercom. Transfer to operator: Transfers the caller to an operator. Return to top menu: Lets the caller return to top menu and try another extension. Transfer to specified Custom Service Menu: Transfers the caller to the specified Custom Service.	Feature Manual References 3.2.2.7 Call Transfer Scenario

### **Scenario Setting**

You can select scenarios set in **8.1.1 Users—User Profiles—Advanced setting** for your extension. A scenario can be set temporarily, or scenarios can be selected for use according to the Absent Message setting of the extension of the subscriber. (→ **14.5 PBX Configuration—[6-5] Feature—Absent Message**) **Temporary Scenario**: Setting a scenario here will use that scenario indefinitely. A scenario set here will be used regardless of the subscriber's extension status. Selecting "None" will remove the setting. **Absent Message 1–9**: The selected scenario will be used when the indicated Absent Message is set at the extension.

## 8.2 Users—Add User

## 8.2.1 Users—Add User—Single User

The Add User—Single User screen provides a method to create user accounts and establish PBX settings on a per-user level. When adding a user, the following settings can be specified. This screen will also be displayed with information already entered when editing an existing user.

#### Note

User (User) level accounts may access this screen to edit their account information, but only the items marked with a "\*".

#### **User Information**

Item	Description
First Name*	Specifies the first name of the user (max 20 characters).
Last Name*	Specifies the last name of the user (max 20 characters).
Change Language*	Select the Web Maintenance Console language displayed for the user from the drop-down list. Users may select different display languages without affecting the display of other users.
Site name	Select a PBX site from the drop-down list for the account.
Department	Specifies a department description of up to 64 characters.
Section	Specifies a section description of up to 64 characters.
User Group	Select a User Group from the drop-down list. User groups can be set in Extension Settings:
	12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
	• 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
User Level	Select a User Level from the drop-down list.
	The Installer level account may select User (User) or User (Administrator) levels.
	User (Administrator) level accounts may only select the User (User) level.

The First Name and Last Name set on this screen are applied to system settings as follows.

• The **First Name** and **Last Name** are copied to the **Extension Name** for the user's extension number in the following settings.

A. 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main B. 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main The format of the extension name is determined by the setting in the **User Profiles—Option** tab:

- Rule-A: [First Name] [space] [Last Name]
- Rule-B: [Last Name] [,] [First Name]

#### **Notice**

If the length of the name copied to the **Extension Name** is longer than the maximum number of characters allowed for the setting, the letters at the end of the name exceeding the maximum will be discarded.

- The **First Name** and **Last Name** are copied to the corresponding **First Name** and **Last Name** on the following screen for the specified mailbox number.
  - C. 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters
- Changing the name settings in the Extension Settings or Mailbox Settings screens listed above will not change the **First Name** or **Last Name** on this screen (the copying function is one-way).

#### Contact

Item	Description	
Extension No.	Select an extension for the user from the drop-down list.	
Device	Displays the device type of the selected extension.	
Extension PIN*	Specifies the user's extension PIN.	
DDI	Specifies the user's Direct Dial In (DDI) number.	
Fax*	Specifies the user's fax number.	
Phone (Home)*	Specifies the user's home telephone phone number.	
Phone (Mobile)*	Specifies the user's mobile telephone phone number.	
Email 1-3*	Specifies the user's e-mail address(es).	

The **Extension PIN** set on this screen is applied to system settings as follows.

 The Extension PIN is copied to the Extension PIN for the user's extension number in the following settings.

A. 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main B. 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main

- If Automatic copy to Mailbox Password is checked when the Extension PIN is input, the Extension PIN is also copied to the following settings according to the user's designated mailbox.
  - Mailbox Password in the User Profiles—Unified Message tab.
  - 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—Mailbox Password

#### **Notice**

If the Extension PIN to be copied has less characters than the minimum number of characters required for the Mailbox Password, the data will not be copied and an error message is displayed. See 26.1 UM Configuration—[7] System Security—Subscriber—Minimum Password Length (0-16 digits).

The e-mail addresses set for **Email 1–3** on this screen are applied to system settings as follows.

- If **Use for missed call notification** is checked when the **Email 1–3** information is input, the user will receive an e-mail at the address(es) specified when a trunk call is missed.
- If Automatic copy to UM message notification is checked when the Email 1–3 information is input, the input address(es) are copied to the following setting. This process is one-way; changes to the below setting will not change the information input on this screen.
  - 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters—E-mail/Text Message Device—Device No. 1, 2, 3—E-mail Address

#### **Unified Message**

Item	Description	
UM Group No.	Select a UM group for the user from the drop-down list.	
Mailbox Number Enter the UM mailbox for the user.		

Item	Description	
Class of Service (COS)	Select a COS for the user from the drop-down list.	
Prompt Registration*	Click <b>Prompt Registration</b> to open the User Prompt Registration screen. The following prompts can be recorded in this screen:	
	Mailbox owner name	
	Personal greetings (No Answer, Busy, After Hour, Caller ID Greeting, Temporary Greeting and Absent Message)	
	Interview mailbox questions	
	Personal caller ID name	
	To record a prompt Select a prompt number and click Play/Record. When "Record from extension" is selected:	
	Specify the extension number of the telephone used for recording, then click Connect.	
	2. When the specified extension rings, go off-hook.	
	3. Click Record, Stop, or Play to record or play a system prompt.	
	4. Click Disconnect. When "Import from recorded file" is selected:	
	Click Browse. The Open dialogue box appears.	
	2. Navigate to the folder containing the WAV files you wish to import.	
	3. Select the desired WAV file.	
	4. Click Open to import the file.	
	5. Click Upload.	
	6. Click OK.	
	To start and stop prompt playback	
	Select the desired prompt.	
	2. Click Play/Record.	
	3. Click Play or Stop.	
	4. Click OK.	
	To delete a specific prompt	
	Select the desired prompt.	
	2. Click Delete.	
	3. Click OK.	
Mailbox Password*	Click to specify the password for the mailbox.	
	Note	
	If Extension PIN is input in the Contact tab, and Automatic copy to Mailbox Password is checked, the extension PIN will be copied to this setting and overwrite any previously input data here.	
Mailbox Password (Message Client)*	Click to specify the messaging client password for the mailbox.	

Item	Description	
Advanced setting*	Click to view the selected mailbox's settings. See <b>20.1 UM Configuration—</b> [1] Mailbox Settings.	
	Note	
	When User (User) level accounts access these settings, additional items are displayed. See 8.1.1 Users—User Profiles—Advanced setting.	
Unified Messaging Plug in	Click to open a new window in your Web browser and access the download site for the IMAP Session Controller software.	
Fax Driver Tool	Click to open a new window in your Web browser and access the download site for the Fax Driver software.	

#### **Telephony Feature**

Item	Description	
Class of Service (COS)	Select the COS for the user from the drop-down list.	
Forward / Do Not Disturb—For external calls*	Specifies the user's FWD/DND settings for trunk calls. For the FWD destination, <b>Phone (Home)</b> or <b>Phone (Mobile)</b> (as specified in the <b>Contact</b> tab), or a manually input number can be specified.	
Forward / Do Not Disturb—For internal calls*	Specifies the user's FWD/DND settings for extension calls.  For the FWD destination, <b>Phone (Home)</b> or <b>Phone (Mobile)</b> (as specified in the <b>Contact</b> tab), or a manually input number can be specified.	
Speed Dialling View/ Edit*	Click this button to open the Speed Dial screen. The appropriate screen (wired extension or portable station) will be opened according to the extension specified for the user.	
Flexible Button View/ Edit*	Click this button to open the Flexible Button screen. The appropriate screen (wired extension or portable station) will be opened according to the extension specified for the user.	

#### **Login Account**

Item	Description	
Login ID	Set a login ID for the user. (4-16 characters in length)	
	Note	
	Login IDs must be unique for each user.	
Password*	Set a password for the user. (4-16 characters in length)	
Re-enter*	Re-enter the password for confirmation.	

When all relevant information has been set, click **OK** to add or reflect changes to the user account.

#### Note

If the user changes any of their own settings, they will be applied to the user the next time they log into Web Maintenance Console.

# 8.2.2 Users—Add User—Multiple Users

The Add User—Multiple Users screen provides a method to create multiple user profiles for a range of extensions at one time.

- 1. In the **From** and **To** fields, specify the range of extensions to create profiles for.
- Select the Create mailboxes with the same number as the extensions check box if you want to create Unified Messaging mailboxes whose mailbox numbers are the same as the assigned extension numbers.
- 3. If you choose to create mailboxes in step 2, select where the mailboxes will be created:
  - Create mailboxes to the UM group of the PBX where extensions belong to:
     The mailbox for each extension will be created in the UM group of the site (PBX) to which the extension is assigned.

#### Note

When this setting is selected, mailboxes for PS extensions will be created in the UM group of the Master unit.

- Create mailboxes to the specified UM group:

  Mailboxes for the extensions will be created in the UM group that you select from the drop-down list.
- 4. Click OK.

#### Settings automatically programmed for each user

First Name/Last Name

The **Extension Name**, which is the name displayed on extension LCDs, can be copied all at once to the **First Name** and **Last Name** settings for each extension. The format for copying the **Extension Name** can be selected as follows.

- 1. Click Setup  $\rightarrow$  Users  $\rightarrow$  User Profiles.
- 2. On the Option tab, for Rule of copy to extension name select one of the following.
  - Rule-A: [First Name] [space] [Last Name]
  - Rule-B: [Last Name] [,] [First Name]

For more information, refer to "5.10 Configuration of Users" in the Installation Manual.

- **Login ID**: The extension number (i.e., if the extension is "101", the Login ID for the user will also be "101")
- Password: "PWD" + the extension number for the user (e.g., "PWD101")

#### **Note**

- When **OK** is clicked, if any extensions within the range specified in step **1** already have user accounts associated with them, the process will not complete, and an error message will be displayed.
- If the Create mailboxes with the same number as the extensions check box is selected and a
  mailbox number has already been assigned to another extension, the user profile will be created
  without a UM mailbox assigned to it.
- If the maximum number of digits for a mailbox number (Mailbox—Mailbox No. Max. Length (3-8) in 24.4 UM Configuration—[5-4] System Parameters—Parameters) is less than the number of digits for the specified extensions, the maximum number of digits for a mailbox number will be automatically increased to match the number of digits for the specified extensions.
- A maximum of 500 users can be created at once using this feature.

# 8.3 Users—Automatic Two-way Recording

This screen is accessible only by users designated as Automatic Two-way Recording supervisors. See **7.10.1 Utility—Automatic Two-way Recording—Supervisor Setting**.

This screen can be accessed only in On-line mode.

### 8.3.1 Users—Automatic Two-way Recording—Edit a Recording

On this screen, a user designated as a supervisor may change Automatic Two-way Recording settings for extensions they are supervising. Information for each extension, including the extension's supervisor, UM Group number, and Automatic Two-way Recording destination mailbox is displayed. You can specify which types of calls will recorded for each extension.

- 1. For an extension, click the setting for Internal Call, External Call, or ICDG Incoming Only.
  - · Internal Call: Extension-to-extension calls are recorded.
  - External Call: Calls with outside parties are recorded.
  - **ICDG Incoming Only**: Only calls that are received by the extension through an incoming call distribution group are recorded.
- 2. Select On or Off for that setting.

#### Note

To set ICDG Incoming Only to "On", External Call must first be set to "On".

Click OK when finished.

### 8.3.2 Users—Automatic Two-way Recording—Record List

Users designated as supervisors can view and play messages recorded using the Automatic Two-way Recording feature.

- 1. Select a UM group number from the Select a Destination UM-Group No. drop-down list.
- Click List View to display a list of the Automatic Two-way Recording mailboxes of the selected UM group.
- 3. Select one or more mailboxes, and click **OK**.
- **4.** Messages recorded in the selected mailbox(es) will be displayed. You can filter the list of messages displayed or play a message.

#### To filter the list of messages:

Specify any number of the following conditions, and then click **Search** to display the messages that match those conditions.

- Mailbox: Specify an Automatic Two-way Recording mailbox, or select ALL.
- **Extension**: Specify an extension to view all calls that were recorded using Automatic Two-way Recording for that extension, or select **ALL**.
- Status: Specify the status for the recorded messages in the mailbox.
- Internal/External: Specify whether the recorded conversations were intercom calls or trunk calls, or specify both.
- Call Type: Specify whether the recorded conversations were incoming calls or outgoing calls, or specify both.
  - If Internal/External is set to "Internal" or "Both", Call Type will be set to "Both".
  - If Internal/External is set to "External", Call Type can be set to "Incoming", "Outgoing", or "Both".
- Phone Number: Specify the phone number of the party calling the recorded extension.

- Caller Name: Specify the name of the party that called the recorded extension (may not be available for all recorded messages).
- Length: Specify the length of the recorded conversations.
- **Period**: Specify a time period in which calls were recorded.

#### To play a message:

#### For playback on the PC:

- 1. Select the check box of a message to play.
- 2. At the bottom of the screen, select PC.
- 3. Click the button.

The message will be downloaded as an audio file for playback on the PC being used to connect to Web Maintenance Console.

#### For playback using the supervisor's designated extension:

- In the Mailbox filter, select the mailbox whose messages you want to display, and then click Search.
- 2. Select the check boxes for one or more messages to play.
- 3. At the bottom of the screen, select **Phone**.
- **4.** Click the button.

#### Note

If **ALL** has been selected for the **Mailbox** filter, the button will be disabled. Select a specific mailbox to enable the button.

- **5.** In the window that appears, enter the extension number in **Specify Extension** of the extension at which to play back the messages, and then click **Connect**.
- **6.** Go off-hook when the extension rings to establish a call with the UM message playback system.
- 7. During the call, click **Play** to listen to the currently selected message. If multiple messages were selected in step **b**, you can click **Prev** and **Next** to cycle through and listen to the selected messages.
- **8.** When you are finished listening to messages, click **Disconnect** or go on-hook.

# 8.4 Users—Call Management

This screen is accessible only by users designated as an ACD supervisor. This screen can be accessed only in On-line mode.

## 8.4.1 Users—Call Management—Group Monitor

#### **Description**

Users designated as an ACD supervisor can specify an ICD group to monitor, set monitoring conditions, and begin monitoring.

Name	Description	Value Range	Links
Supervisor selection	Selects the ACD supervisor from a drop-down list. This operation is available only at the User (Administrator) level. For details about ACD supervisor settings, see 11.5.4 PBX Configuration–[3-5-4] Group—Incoming Call Distribution Group—ACD Supervisor.	Registered ACD supervisors	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Start Monitor	Click the <b>Start Monitor</b> button to start monitoring the target ICD group. This feature requires the Call Centre Feature Enhancement activation key or the <b>Built-in ACD report</b> activation key. If this activation key is not installed, the <b>Start Monitor</b> button is greyed out.		Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Basic Settings— Layout	Specifies the layout of monitoring results.	1 Group, 4 Groups	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Basic Settings— Select ICD Group	Selects the ICD groups to be managed by the ACD supervisor, from a drop-down list.	ICD groups	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Options—Member Status View Mode	Specifies the display mode of the status of group members.	Standard, Simple	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Options— Highlighted Display Settings —Number of Current Waiting Calls (1-30)	Specifies the threshold number of current waiting calls. When this number is matched or exceeded, calls are highlighted on the monitor screen.	1–30	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)

Name	Description	Value Range	Links
Options— Highlighted Display Settings —Waiting Time (0-10 min/10 sec)	Specifies the waiting time after which calls are highlighted on the monitor screen. When this setting is set to "0", all waiting calls are highlighted.	0–10'00	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Options— Highlighted Display Settings —Colour Mode	Specifies the colour mode of highlighted items on the monitor screen.	Mode 1, Mode 2, Mode 3	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Options— Highlighted Display Settings —Blinking	Specifies whether highlighted items blink on the monitor screen.	Enable, Disable	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Options— Highlighted Display Settings —Full Screen Display (pixels)	Select the display resolution of the monitor screen for full screen display.  Note  When you select Automatic, the system automatically recognises the specified resolution of your PC display and selects a full screen resolution from the following display resolutions. If any of these sizes do not match the specified resolution for your PC display, select the resolution that is smaller than and closest to your monitor's maximum display resolution.	Disable, Automatic, 1024 × 768, 1280 × 1024, 1920 × 1080	

## 8.4.2 Users—Call Management—ACD Report

#### **Description**

The ACD supervisor can check the conditions of the ICD group and extension lines. Follow the instructions on the screen. Refer to "2.2.2.10 Supervisory Feature (ACD)" in Feature Manual.

## 8.4.3 Users—Call Management—ACD Scheduled Export

On this screen, users can register or delete the schedule for the automatic export of ACD Report data. The PBX system will automatically export the selected ACD Report data at the scheduled times to an E-mail (SMTP), USB memory device or NAS connected to the PBX. (ACD scheduled exports cannot be made to a local PC.) For details about ACD reports, see **8.4.2 Users—Call Management—ACD Report**.

Follow the procedure below to schedule the automatic export of ACD Report data.

- **1.** Click to create a new scheduled export.
- 2. In **Description / E-mail Title**, enter a description for the export or an E-mail Title (maximum 32 characters). This information is shown as the description of the ACD Scheduled Export.

- 3. Select a report profile to be used for the scheduled export. If no report profile is selected, all items will be exported.
  - For the details about report profiles, see 8.4.2 Users—Call Management—ACD Report.
- **4.** Specify the file name for the exported ACD report data (maximum 32 characters).
- 5. Set the frequency (daily, weekly, etc.) and time of day for when the export should take place.
- **6.** Select the type of CSV separator value to be used for the exported CSV files.
- 7. In Export to, select a USB memory device or NAS, and then specify the folder on the selected device where you want to save the ACD scheduled export file. Or select E-mail (SMTP) to send an email, attaching the ACD report file that is scheduled and exported.
- 8. Click OK.

#### Note

- Installer and User (Administrator) level accounts can select a supervisor from the Supervisor selection drop-down list in 8.4.3 Users—Call Management—ACD Scheduled Export.
   Each supervisor can register up to 10 schedules for the automatic export of ACD reports.
- If an ACD report export is scheduled and a USB memory device has been selected in Export to, but a USB memory device is not connected to the PBX at the time of the scheduled export, the ACD scheduled export will not be performed.
- When using a NAS, make sure there is sufficient network bandwidth.
- If an ACD report export is scheduled and E-mail (SMTP) is selected in Export to, attach the ACD scheduled export files of User, Group, and Call when e-mailing.

#### **Editing ACD export schedules**

- 1. From the ACD Report-ACD Scheduled Export screen, select the schedule you wish to edit.
- 3. Edit the settings as desired.
- 4. Click OK.

#### Deleting a scheduled export

- 1. From the ACD Report–ACD Scheduled Export screen, select the schedule you wish to delete.
- 2. Click <u>m</u>.
- 3. Click OK.

### 8.4.4 Users—Call Management—ACD Export History

The export history for ACD Report data can be checked on this screen. The following items are recorded for each export:

- Date/Time
- Description
- Parameters
- · Report Profile
- · Completion Status

This screen can be accessed only in On-line mode.

#### Note

Installer and User (Administrator) level accounts can select a supervisor from the **Select Supervisor** drop-down list in 8.4.2 Users—Call Management—ACD Report.

The date/time display can be switched between 12 hour and 24 hour in 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT LCD—Time Display.

The export history of ACD Report data on the current screen is saved as a text file. When you export the ACD report manually, a hyphen will be displayed for the report profile in the ACD Report data export history.

# Section 9

# PBX Configuration—[1] Configuration

This section serves as reference operating instructions for the Configuration menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

# 9.1 PBX Configuration—[1-1] Configuration—Slot

The operating characteristics associated with each service card can be programmed. Move the mouse pointer over an installed card to display the menu of options for that card. To view a summary of status and versions for all cards installed in the PBX, click the **Summary** button (see **9.2 PBX Configuration—[1-1] Configuration—Slot—Summary**).

#### To select a shelf in the PBX

Click one of the following buttons to view the shelf in the PBX:

- Physical: View the physical card shelf.
- · Virtual: View the virtual card shelf.
- Legacy-GW1: View the physical card shelf of the legacy gateway connected to connection port 1 of the STACK-M card.
- Legacy-GW2: View the physical card shelf of the legacy gateway connected to connection port 2 of the STACK-M card.

#### Note

The **Legacy-GW1** and **Legacy-GW2** buttons will be greyed out if a STACK-M card has not been installed or if pre-installation for the card has not been performed. For details, see **To pre-install PBXs connected to the STACK-M card** below.

#### To install a new physical card to the PBX

- **1.** Click on the name of the card to install in the list on the right.

  An image of the card will be displayed, and information about the card will be shown.
- 2. Click and drag the image of the card to the slot, and release it. The card will move into the slot space.
- 3. Click OK to confirm.

#### To add new virtual cards to the PBX

- 1. Click on the name of the card to install at the top.
- 2. Select the number of cards to install of that type from the **Total number of cards** drop-down list. An according number of cards will fill free virtual slots.

#### To access card properties

**1.** Move the mouse pointer over a card. For combination physical cards, move the mouse pointer over the individual card name.

A menu will be shown under the mouse pointer.

2. Select Card Property.

The property screen for that card will be displayed.

#### To access port properties

1. Move the mouse pointer over a card. For combination physical cards, move the mouse pointer over the individual card name.

A menu will be shown under the mouse pointer.

2. Select Port Property.

The property screen for that card's port or ports will be displayed.

#### To remove a card from the PBX

- **1.** Move the mouse pointer over the card to remove. A menu will be shown under the mouse pointer.
- 2. Select Delete.
- Click **OK** to confirm.The card will be removed.

#### Note

When deleting a physical combination card, both cards must be set to OUS before selecting Delete.

#### To change the status (INS/OUS) of a card (On-line mode only)

**1.** Move the mouse pointer over the card. For combination physical cards, move the mouse pointer over the individual card name.

A menu will be shown under the mouse pointer.

- 2. Select the desired status:
  - · Click **INS** to set the card to in-service status.
  - Click OUS to set the card to out-of-service status.

#### To access IP-PT port properties

**1.** When you place the mouse cursor over the **IP Phone Registration** button on the Slot screen, the following choices appear. Click an option to open a port properties programming screen:

```
IP-PT: For KX-NT300/KX-NT500 series and KX-NT265 (software version 2.00 or later) IP-PTs (→ 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property)

SIP-MLT: For KX-UT series SIP phones, S-PSs, and SIP-CSs (→ 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property)

Standard SIP Phone: For third party SIP Phones (→ 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property)

Option: Opens the Site Property—Main screen. (→ 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main)
```

#### To pre-install PBXs connected to the STACK-M card

Before programming a legacy gateway, it must be pre-installed to enable the **Legacy-GW1** and **Legacy-GW2** shelf buttons.

- 1. Install the STACK-M card and connect the legacy gateway PBX to the STACK-M card using the supplied stacking cable. For details, refer to **4.6 Stacking Cards** in the KX-NS1000 Installation Manual.
- 2. In the Configuration—Slot physical shelf screen, click on the STACK-M card in the list on the right.
- 3. Click and drag the image of the STACK-M card to the slot, and release it. The card will move into the slot space.
- 4. Click **OK** to confirm.
- 5. Place the mouse cursor over the STACK-M card, and in the menu that appears, click Pre-Install.
- **6.** In **Cabinet Type**, select the model of the PBX connected to connection port 1 of the STACK-M card, and then click the arrow button.

- **7.** If a second legacy gateway PBX is connected to connection port 2 of the STACK-M card, select the model of the PBX connected to connection port 2, and then click the arrow button.
- 8. Click OK to complete pre-installation. You can now click the Legacy-GW1 or Legacy-GW2 shelf buttons to programme the cards of the legacy gateways.

#### Note

- If **Pre-Install** is not displayed as described in step **5**, pre-installation has already been completed. Click **Legacy-GW1** or **Legacy-GW2** on the slot screen to programme the PBXs connected to the STACK-M card.
- For information about hardware configuration restrictions and conditions for legacy gateways, refer to **Conditions for Connecting Legacy Gateways** in **4.6 Stacking Cards** in the KX-NS1000 Installation Manual.

#### **Supported Card Types**

Card	Maximum Number/PBX	Card Programming	
LCOT2+SLC2: A combination card including:			
2 analogue trunk ports		1.0070	
2 extension ports for SLTs		LCOT2: 9.24 PBX Configuration—[1-1]	
BRI4+SLC2: A combination card including:		Configuration—Slot—Card Property - LCO type	
4 ISDN Basic Rate Interface ports		SLC2:	
2 extension ports for SLTs		9.22 PBX Configuration—[1-1]	
PRI30+SLC2: A combination card including:	1	Configuration—Slot— SLC2 - Card Property	
1 ISDN Primary Rate Interface port (30B channels).	'	BRI/PRI: 9.26 PBX Configuration—[1-1]	
2 extension ports for SLTs		Configuration—Slot—Card Property - BRI type/PRI type  STACK-M: 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/ Legacy-GW2	
PRI23+SLC2: A combination card including:			
1 ISDN Primary Rate Interface port (23B channels).			
2 extension ports for SLTs			
STACK-M: Stacking Master Card for connecting PBXs as legacy gateways.			
V-IPEXT32: Virtual 32-Channel VoIP Extension Card	8 <sup>-1</sup> /20 <sup>-2</sup> /8 <sup>-3</sup>	9.14 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32— Card Property	
V-SIPEXT32: Virtual 32-Channel SIP Extension Card	20'1/8'2/12'3	9.16 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32 —Card Property	
V-UTEXT32: Virtual 32-Channel SIP Proprietary Telephone Card	20*1/8*2/12*3	9.20 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32 —Card Property	

Card	Maximum Number/PBX	Card Programming
V-IPGW16: Virtual 16-Channel VoIP Gateway Card	3'1/3'2/6'3	9.12 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16— Shelf Property
V-SIPGW16: Virtual 16-Channel SIP Trunk Card	16 <sup>-1</sup> /16 <sup>-2</sup> /10 <sup>-3</sup>	9.12 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16— Shelf Property
V-IPCS4: Virtual 4 IP Cell Station Interface Card	16	9.18 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4— Card Property

- If **Standard Type** is selected for **System Capacity Selection** in Easy Setup Wizard. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.
- <sup>12</sup> If **IP-Extension Type** is selected for **System Capacity Selection** in Easy Setup Wizard. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.
- If System Resource Type is selected for System Capacity Selection in Easy Setup Wizard. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.

For more information on the virtual cards and other optional cards, see the following sections in the Installation Manual:

- →4.4 Virtual Cards
- →4.5 Physical Trunk and Extension Cards

For information about cards supported by legacy gateway PBXs, see "System Components for Legacy Gateways" in the KX-NS1000 Installation Manual.

#### **Common Programming Reference Items**

When programming settings for cards, extensions, and other devices using Web Maintenance Console, depending on the screen being accessed, the following items may be listed on the screen for your reference:

Item	Description	
Site	Indicates the site number (1–16) of the PBX in the One-look Network where the card, extension, or device is located. For more information about One-look Networking, see <b>1.2.3 PBX Configuration Types</b> .	
Shelf	Indicates the physical or virtual shelf where the card, extension, or device is located in the PBX.	
	Shelf "1" is the physical shelf of the KX-NS1000 PBX.	
	Shelf "2" corresponds to the physical shelf of the PBX connected to Legacy Gateway 1.	
	Shelf "3" corresponds to the physical shelf of the PBX connected to Legacy Gateway 2.	
Slot	Indicates the slot number within the shelf where the card, extension, or device is located.	
Port	Indicates the port number assigned to the extension or device.	

# 9.2 PBX Configuration—[1-1] Configuration—Slot—Summary

Summary information is displayed for all cards installed in the PBX. Click one of the following buttons to view a summary of the shelf in the PBX:

- Physical: View the physical card shelf.
- · Virtual: View the virtual card shelf.
- Legacy-GW1: View the physical card shelf of the legacy gateway connected to connection port 1 of the STACK-M card.
- Legacy-GW2: View the physical card shelf of the legacy gateway connected to connection port 2 of the STACK-M card.

#### **Physical Shelf**

The **Site**, **Shelf**, and **Slot** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Card Type	Indicates the service cards installed in the slots of the physical shelf (reference only).	Card Type: SLC2: SLC2 card of an installed LCOT2+SLC2, BRI4+SLC2, PRI30+SLC2, or PRI23+SLC2 card LCOT2: LCOT2 card of an installed LCOT2+SLC2 card BRI4: BRI4 card of an installed BRI4+SLC2 card PRI23: PRI23 card of an installed PRI23+SLC2 card PRI30: PRI30 card of an installed PRI30+SLC2 card DOORPHONE: DOORPHONE Card STACK-M: Stacking Master Card for connecting PBXs as legacy gateways	PC Programming Manual References  9.1 PBX Configuration—[1-1] Configuration—Slot  9.22 PBX Configuration—[1-1] Configuration—Slot—SLC2 - Card Property  9.24 PBX Configuration—[1-1] Configuration—Slot—Card Property - LCO type  9.26 PBX Configuration—[1-1] Configuration—Slot—Card Property - BRI type/PRI type
Status	Indicates the card status (reference only).	INS: The card is in service. OUS: The card is out of service. Fault: The card is not communicating with the network. Pre-Install: A card has been added to the slot. IDLE: No card is installed in the slot.	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot
Version	Indicates the software version of the installed card (reference only).	Version number	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot

#### **Virtual Shelf**

The **Site**, **Shelf**, and **Slot** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Slot Type	Indicates the type of card slot (reference	Trunk, Extension	PC Programming Manual References
	only).		9.1 PBX Configuration—[1-1] Configuration—Slot
Card Type	Indicates the type of virtual card installed (reference only).	V-SIPGW16, V-IPGW16, V-IPEXT32, V-SIPEXT32, V-IPCS4, V-UTEXT32	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot
Status	Indicates the card status (reference only).	INS: The card is in service. OUS: The card is out of service. Fault: The card is not communicating with the network. Pre-Install: A card has been added to the slot.	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot

# Legacy Gateway 1 Shelf/Legacy Gateway 2 Shelf

Name	Description	Value Range	Links
Card Type	Indicates the type of card installed (reference only).	Card type. Available cards vary by the model of the legacy gateway.	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot
			Installation Manual References
			Equipment Compatibility for Legacy Gateways
Status	Indicates the card status (reference only).	INS: The card is in service. OUS: The card is out of service. Fault: The card is not communicating with the network. Pre-Install: A card has been added to the slot.	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot
Version	Indicates the software version of the installed card (reference only).	Version number	PC Programming Manual References 9.1 PBX Configuration—[1-1] Configuration—Slot

# 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status

Refreshes and displays information about activation keys provided by any activation key files on the Storage Memory Card and by pre-installed activation keys on the mother board. To access this screen, click the **Activation Key** button on the **Configuration—Slot** main screen.

It is possible to programme how the number of available IP Trunk channels is to be divided for H.323 and SIP trunks. In **Number of activated IP-GW**, type the number of IP Trunk channels to be used for H.323 trunks. The remaining number of IP Trunk channels will be used for SIP trunks.

#### **Note**

If you have changed the value for **Number of activated IP-GW**, you must click **Execute** to restart the V-IPGW16 cards for the change to take effect.

Similarly, you can programme how many IP softphones can be used through the IP Softphone/IP Proprietary Telephone activation key. In **Number of activated IP-Softphone**, type the number of IP softphones to be used through the IP Softphone/IP Proprietary Telephone activation key, and then click **OK**. The remainder is the number of IP-PTs that can be used through the IP Softphone/IP Proprietary Telephone activation key. By default, only IP softphones can be used.

Also, you can programme how many VPN connections can be used for multisite connections using an IPsec (VPN) activation key. In **Number of activated IPSec (VPN) for MultiSite**, type the number of multisite connections to be used through an IPsec (VPN) activation key, and then click **OK**. The remainder is the number of IPsec (VPN) connections that can be used for another purpose over the VPN.

You can click the **Activation Key Installation** link to access the Activation Key Installation screen (see **7.6 Utility—Activation Key Installation**) for installing activation keys.

#### **Trial Activation Keys**

The PBX includes free trials for some PBX features that normally require activation keys. The trials have a 60-day limit. To begin using the free trials:

- Click Activate Pre-installed Activation keys. A list of trial activation keys is displayed in a new window.
- 2. Select the check boxes next to the trial activation keys you want to activate.
- 3. Click OK.

The trial period for the selected trial activation keys will begin.

#### Trial activation keys:

- · One-look Network
- · Built-in Router
- IPsec (VPN) (16 sessions)
- Two-way Recording Control
- · Message Backup
- Two-way Recording (30 users)
- CTI interface
- CSTA Multiplexer (session)
- Mobile Extension (30 users)
- CA PRO (128 users)
- CA Supervisor (1 user)
- CA Operator Console (1 user)

- · CA Thin Client Server
- · Call Centre Feature Enhancement
- Enhanced Built-In ACD Report
- Call Statistics Report
- Poltys CCAccounting
- Poltys CCAcc. Enterprise
- Poltys CCView
- · Poltys CCView add. PBX
- Poltys CCView Supervisor (5 users)
- Poltys CCView CRM P-up (5 users)
- · Poltys Number notice
- Poltys CCAgent (5 users)
- Poltys CCRecord SIP (4 ports)

Name	Description	Value Range	Links
MPR-ID	Indicates the ID number of the mother board (reference only).	ID number of the mother board	
Activated Feature	Indicates the type of activation keys (reference only).  Note that the types of activation keys are subject to change without notice. For CA activation keys, refer to the documentation for CA.	IP Phone Capacity (ch): IP Phone capacity IP Trunk (ch): Activate H.323 IP-GW or SIP- Trunk IP Proprietary Telephone/IP Softphone/P-SIP Extension (ch): Activate Soft-phone /IP-PT /SIP- MLT /P-SIP IP Proprietary Telephone/P-SIP Extension (ch): Activate IP-PT/SIP-MLT/P-SIP SIP Extension (ch): Activate SIP-Phone for 3rd party /IP Conference Phone IP-CS channel expansion (CS unit): IP-CS channel expansion to 8ch One-look Network: Multi site connection with KX-NS1000 PBXs QSIG Network: QSIG Networking Built-in Router: Built-in Router function IPsec (VPN) (16 sessions): IP-VPN (IPsec) for Built-in Router Recording Time Expansion: Recording time 2h → 15h Remote Maintenance: Remote Maintenance annual Key	

Name	Description	Value Range	Links
		Two-way Recording Control: Two-way recording	
		(Manager control)	
		Message Backup: UM Message Back UP	
		UM Port (ch): Unified Message ports	
		UM/E-mail (user): Email (IMAP4) client / Email	
		Notification (Voice/Fax message)	
		Two-way Recording (user): Two-way Recording /	
		Two-way Transfer	
		CTI interface: CTI Server (3rd Party CTI link)	
		CSTA Multiplexer (session): CSTA(CTI) Multi-	
		session	
		Mobile Extension (user): Working with cellular	
		phone	
		CA Basic (No limit): CA Basic	
		CA Pro (user): CA PRO	
		CA Supervisor (user): CA ACD Supervisor	
		CA Network Feature (user): CA Network	
		CA Operator Console (user): CA Operator	
		Console	
		CA Thin Client Server: Thin Client Server	
		Connection	
		Call Centre Feature Enhancement: Built-in ACD	
		Report, Announcement of waiting number for	
		queuing Queue Position Announcement: Announcement	
		of waiting number for queuing	
		Built-in ACD report: Built-in ACD report	

Name	Description	Value Range	Links
		Enhanced Built-In ACD Report: Enhanced Built-In ACD Report Call Statistics Report: Call Statistics Report Poltys CCAccounting: CCAccounting Poltys CCAccounting A.L.: CCAccounting (annual licence) Poltys CCAcc. Enterprise: CCAccounting Enterprise Edition Additional Connection licence Poltys CCAcc. Enterprise A.L.: CCAccounting Enterprise Edition Additional Connection licence (annual licence) Poltys CCView: CCView Poltys CCView A.L.: CCView (annual licence) Poltys CCView add. PBX: CCView Enterprise Edition. Additional PBX Connection licence Poltys CCView add. PBX A.L.: CCView Enterprise Edition. Additional PBX Connection licence (annual licence) Poltys CCView Supervisor: CCView Supervisor Poltys CCView Supervisor A.L.: CCView Supervisor (annual licence) Poltys CCView CRM P-up: Independent Desktop CRM Popup SW with 1st Party TSP Poltys CCView CRM P-up A.L.: Independent Desktop CRM Popup SW with 1st Party TSP (annual licence)	
		Poltys Number notice: Dial Number Notification Poltys Number notice A.L.: Dial Number Notification (annual licence) Poltys CCAgent: CCAgent With Internal CRM Poltys CCAgent A.L.: CCAgent With Internal CRM (annual licence) Poltys CCRecord Analogue: CCRecord Analog Extensions/Trunks Poltys CCRecord Analogue A.L.: CCRecord Analog Extensions/Trunks (annual licence) Poltys CCRecord Digital: CCRecord Digital Extensions Poltys CCRecord Digital A.L.: CCRecord Digital Extensions (annual licence) Poltys CCRecord PRI: CCRecord for E1/T1 (PRI) Poltys CCRecord PRI A.L.: CCRecord for E1/T1 (PRI) (annual licence) Poltys CCRecord SIP: CCRecord SIP Extensions/Trunks Poltys CCRecord SIP A.L.: CCRecord SIP Extensions/Trunks (annual licence) PSDN Option-1: PSDN partner's optional licence No.1 PSDN Option-2: PSDN partner's optional licence	

### 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status

Name	Description	Value Range	Links
Pre- installed	Indicates the number of channels (or CA users) provided by the mother board (reference only).	Not applicable.	
Activation Key	Indicates the number of channels (or CA users) provided by activation key files on the Storage Memory Card (reference only).	Not applicable.	
Features in total	Indicates the total number of channels (or CA users) provided by the mother board and activation key files on the Storage Memory Card (reference only).	Not applicable.	
System Total	Indicates the total number of channels (or CA users) provided by activation keys in the One-look network.	Not applicable.	

# 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property

The properties of the PBX system can be specified.

### Main

Name	Description	Value Range	Links
DSP CODEC G.711 only (SIP extension)	Specifies whether or not to only use the G.711 codec for SIP extension calls.	Enable, Disable	
DSP CODEC G.711 only (IP-GW)	Specifies whether or not to only use the G.711 codec for IP trunk calls.	Enable, Disable	
DSP CODEC Priority-1 value only (others)	Specifies whether or not to only use the priority 1 codec set for the following types of calls:  • IP extension calls  • SIP trunk calls	Enable, Disable	
System Speed Dial Download For UT Extensions	Specifies the maximum number of system speed dial entries that will be downloaded to KX-UT series SIP phones.	0–300	PC Programming Manual References  9.21 PBX Configuration —[1-1] Configuration— Slot—V-UTEXT32—Port Property—Option— System Speed Dial Download

### **System Status**

Name	Description	Value Range	Links
CPU Usage	Displays the system CPU's current processor load, expressed as a percentage of total capacity (reference only).	0–100%	
Memory Usage	Displays the amount of system memory currently being used, displayed as a percentage of total capacity (reference only).	0–100%	

### **Multisite**

Name	Description	Value Range	Links
Voice Activity Detection for G. 711	Enables the use of the Voice Activity Detection feature for the G.711 codec. This feature conserves bandwidth by detecting silent periods during a call and suppressing the packets of silence from being sent to the network.	Disable, Enable	
DTMF	Specifies the type of DTMF tone to be sent out.	Inband, Outband (RFC2833), Outband (H.245)	

Name	Description	Value Range	Links
Payload Type	Specifies the payload type for DTMF tones using RFC2833. Programming this parameter is only necessary if <b>DTMF</b> is set to <b>Outband (RFC2833)</b> .	96–127	
Multisite message resend time	Specifies the re-sending time for message communication between the Master unit and Slave units.	500–8000 ms, in units of 500 ms	
Multisite message resend expired time	Specifies the number of seconds after which a message being re-sent between the Master unit and Slave units will timeout if it cannot be sent.	150–240 s	
Multisite for PBX UDP port number	Specifies the first of two contiguous UDP ports to be used for Type 1 message communication between the Master unit and Slave units.	1024–65534	
Multisite message UDP port number	Specifies the UDP port to be used for Type 2 message communication between the Master unit and Slave units.	Note  The UDP port specified here and the next contiguous port will be assigned for transmission.  Example: If the value set here is 4560, ports 4560 and 4561 will be assigned.	
Multisite Keepalive Time- out time	Specifies the Keep Alive Time-Out time in seconds for communication between the Master unit and Slave units.	30, 40, 50, 60, 120, 180, 300, 600, 1800, 3600 s	
Multisite Keepalive time for Isolated Mode	Specifies the Keep alive time for Isolated Mode in seconds for communication between the Master unit and Isolated Slave units.	40, 50, 60, 120, 180, 300, 600, 1800, 3600, 7200, 10800 s	
Multisite startup monitoring time	Specifies the amount of time in seconds required to pass before a PBX that loses its connection with the Master PBX switches to Master Backup or Isolated mode.	300, 360, 420, 480, 540, 600, 1800, 3600 s	
Master Suspend if Backup Master Detected	Specifies whether or not the Master unit enters suspended mode when it recovers from a fault, if it detects that a Master Backup unit exists. If the Master unit is suspended, all extension and trunk lines controlled by the Master unit are unusable.	Enable (Master unit enters suspended mode) Disable (Master unit does not enter suspended mode and resumes normal operation)	

### **V-IPGW**

Name	Description	Value Range	Links
Call Signalling Model	Specifies whether to carry out a call control (H.225) process directly between the cards or through a gatekeeper.	Direct, GateKeeper	
Gatekeeper Connection Checking Interval (*60s)	Specifies the time between periodic checks of connection to the gatekeeper.	0 (disabled), 1–1440	
Terminal type to Gatekeeper	Specifies the connection service type notified to the gatekeeper.	Terminal, Gateway	
Gatekeeper ID to Gatekeeper	Specifies the authentication ID notified to the gatekeeper.	Max. 20 Characters	
Bandwidth to Gatekeeper	Specifies the used bandwidth information notified to the gatekeeper.	1-255 kbps	
Primary Gatekeeper IP Address	Specifies the IP address of the primary gatekeeper.	1.0.0.0– 223.255.255.255	
Primary Gatekeeper Port Number	Specifies the port number of the primary gatekeeper.	1–65535	
Secondary Gatekeeper IP Address	Specifies the IP address of the secondary gatekeeper.	1.0.0.0– 223.255.255.255	
Secondary Gatekeeper Port Number	Specifies the port number of the secondary gatekeeper.	1–65535	
H.225 Port Number	Specifies the port number for the H.225 protocol (call control) in an H.323 protocol suite.	1–65535	
RAS Port Number	Specifies the port number for the H.225 protocol (RAS) in an H.323 protocol suite.	1–65535	
QSIG Connectionless Tunneling TCP Port Number	Specifies the TCP port number for connectionless tunnelling between gateway devices at different locations in a QSIG network.	1–65535	
QSIG Connectionless Tunneling UDP Port Number	Specifies the UDP port number for connectionless tunnelling between gateway devices at different locations in a QSIG network.	1–65535	
H.323 Dynamic Port Number	Specifies the starting port number from which 448 contiguous ports are used as dynamic ports.	1–65000	

## **GW Settings–Main**

Name	Description	Value Range	Links
GW Name	Specifies the name of the destination gateway device for programming reference.	Max. 20 characters	
GW IP Address	Specifies the IP address of the destination gateway device.	1.0.0.0– 223.255.255.255	

Name	Description	Value Range	Links
GW Group	Specifies the number of the gateway group to which the gateway entry belongs. A maximum of 256 gateway groups can be created.	1–256, None	
Connection for IP-GW16	Enables the use of the Voice Activity Detection feature between the V-IPGW and KX-TDE/KX-TDAIP-GW cards.	Disable (TDE), Enable (TDA)	
Protocol	Specifies the type of protocol for connectionless tunnelling between gateway devices at different locations in a QSIG network.	TCP, UDP	
Progress Tone Send Mode	Specifies whether to send call progress tones to the destination. When selecting <b>External</b> , call progress tones are audible at the destination.	External, Internal	

## **GW Settings–Option 1**

Name	Description	Value Range	Links
GW Name	Specifies the name of the destination gateway device for programming reference.	Max. 20 characters	
IP Codec Priority—1st, 2nd, 3rd	Specifies the priority of the codecs to be used. For fax communications, it is necessary to specify <b>G.711A</b> or <b>G.711Mu</b> for <b>1st</b> priority.	For 1st: G.711A, G.711Mu, G. 729A	
		For 2nd and 3rd: None, G.711A, G.711Mu, G.729A	
Packet Sampling Time (G.711A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Packet Sampling Time (G.711Mu)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Packet Sampling Time (G.729A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	

## **GW Settings–Option 2**

Name	Description	Value Range	Links
GW Name	Specifies the name of the destination gateway device for programming reference.	Max. 20 characters	

Name	Description	Value Range	Links
Voice Activity Detection for G.711	Enables the use of the Voice Activity Detection feature for the G.711 codec. This feature conserves bandwidth by detecting silent periods during a call and suppressing the packets of silence from being sent to the network.	Disable, Enable	
FAX Sending Method	Specifies the method of transporting the fax signal.	G.711 Inband, T.38	
Maximum Bit Rate	Specifies the maximum bit rate of the fax signal.	No Speed Limit, 2400 bps, 4800 bps, 7200 bps, 9600 bps, 12000 bps, 14400 bps	
FAX Detection Ability	Enables the use of the FAX Detection Ability feature. Since fax signals using a codec other than G.711 cannot be received accurately at the destination, this feature automatically switches the codec to G.711 to enable end-to-end fax signal relay over the network.	Disable, Enable	PC Programming Manual References  9.4 PBX Configuration—[1-1] Configuration—Slot— System Property— GW Settings—Option 1—IP Codec Priority —1st, 2nd, 3rd
DTMF	Specifies the method to transport DTMF tones.	Inband, Outband (RFC2833), Outband (H.245)	
Payload Type	Specifies the payload type for DTMF tones using RFC2833. Programming this parameter is only necessary if <b>DTMF</b> is set to <b>Outband (RFC2833)</b> .	96–127	

## **GW Settings–Option 3**

Name	Description	Value Range	Links
GW Name	Specifies the name of the destination gateway device for programming reference.	Max. 20 characters	
T38 FAX Max Datagram	Specifies the maximum datagram size when using the T.38 protocol.	272–512	
T38 FAX UDPTL Error Correction – Redundancy	Specifies whether to enable the redundancy feature when using the T.38 protocol.	Disable, Enable	
T38 FAX UDPTL Redundancy count for T.30 messages	Specifies the redundancy count for T.30 messages when using the T.38 protocol.	0–7	
T38 FAX UDPTL Redundancy count for data	Specifies the redundancy count for data when using the T.38 protocol.	0–3	
T38 FAX Rate Management Method	Specifies the rate management method when using the T.38 protocol.	Transferred TCF, Local TCF	

### **DN2IP**

Name	Description	Value Range	Links
Leading Number	Specifies the leading digits in dialled numbers by which to associate calls with the appropriate destination.	Max. 30 digits (consisting of 0–9)	
Remaining Number of Digits	Specifies the number of digits to be dialled following the leading number to access the destination.	0–29	
GW No./GW Group Selection	Specifies the type of destination when making calls: a gateway device or a gateway group.	GW Group, GW No.	
GW Group	Specifies the number of the destination gateway group. This setting is only available when <b>GW No./GW Group Selection</b> on this screen is set to <b>GW Group</b> .	1–256	
GW No.	Specifies the number of the destination gateway device. This setting is only available when <b>GW No./GW Group Selection</b> on this screen is set to <b>GW No.</b> .	1–512	

# 9.5 PBX Configuration—[1-1] Configuration—Slot—Site Property

The properties of the PBX site can be specified. When you place the mouse cursor over the **Site Property** button, **Main**, **FAX Card**, and **NSVM** buttons are displayed. Click a button to open that site property screen.

## 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main

Overall settings for the PBX site can be specified.

### Main

Name	Description	Value Range	Links
Storage Memory Size	Indicates the size of the installed storage memory card (reference only).	Card Size	
Multisite Connection Ability	Specifies whether the PBX may connect to other PBX sites as part of a One-look network.	Enable, Disable	
Isolated Mode	Specifies whether the PBX will continue to operate in Isolated mode if the PBX cannot connect to the Master unit or the Backup Master unit (if set).  Note  This setting is available for Slave	Enable, Disable	PC Programming Manual References 1.2.3.1 One-look Networking Survivability Feature Manual References
	unit PBXs in a One-look network that are not designated as the Backup Master unit.		4.2.3.1 Backup Master Mode and Isolated Mode
	<ul> <li>When this item is set to "Disable", system functions for the site will become unavailable if the Master unit and/or Backup Master unit fails.</li> </ul>		
Normal Mode Auto Recovery	Specifies whether a Slave unit in Isolated mode automatically switches to Normal mode when the Master unit recovers.	Disable, Enable	Feature Manual References 4.2.3.1 Backup Master Mode and Isolated Mode

Name	Description	Value Range	Links
Switch Time Service to "Break" in Isolated Mode	Specifies whether to set the Time Service to Break mode when the PBX enters Isolated Mode.	Enable, Disable	PC Programming Manual References  1.2.3.1 One-look Networking Survivability 10.6.2 PBX Configuration —[2-6-2] System— Numbering Plan—Quick Dial—Use Quick Dial for CO rerouting during Break Mode.  Feature Manual References  4.2.3.1 Backup Master Mode and Isolated Mode
Area ID for logical partition	Specifies the area ID for the Logical Partitioning feature of the site. This feature is available only in a One-look network.	1–16	PC Programming Manual References 7.3.5 Utility—Log—Call Control Log 10.9 PBX Configuration— [2-9] System—System Options—Option 2— Applying logical partitioning Feature Manual References 2.11.8 Trunk Call Limitation
P2P Group	Specifies the peer-to-peer group of the site.	1–256	Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection
P2P Group Name	Indicates the selected peer-to-peer group's name (reference only).	P2P Group Name	Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection
LLDP Packet Sending Ability	Specifies whether the PBX notifies IP-CSs (KX-NS0154 only) to enable or disable the ability to send and receive LLDP packets.	Disable, Enable	
IP Terminal Registration Mode	Specifies the IP terminal registration mode for registering IP telephones to the PBX.	Manual, Full Automatic, Extension Input	Installation Manual References 5.4.1 Easy Setup Wizard
IP-CS Registration Mode	Specifies the registration mode for registering IP-CSs to the PBX.	Manual, Full Automatic	

Name	Description	Value Range	Links
SIP over TCP/IP (V- SIPGW) *)	Specifies whether or not to use SIP over TCP/IP protocol for the site. When this setting is enabled, SIP trunks cannot use the UDP/IP protocol.	Disable, Enable	
	Note  If this setting is changed, the V-IPGW cards and/or V-SIPGW cards installed at the site will be deleted.		

## **VoIP-DSP Options**

The settings in this tab relate to IP extensions and IP trunks.

Name	Description	Value Range	Links
IP Extension Count of BGM	Specifies how many IP-PTs connected to the mother board can send out BGM.	0–117	Feature Manual References 2.28.1 Background Music (BGM)
Echo Cancellation Ports	Specifies the number of ports to be used for echo cancellation.	0–64	
Send Music On Hold to IP trunk (for P2P conversation)	Enables the sending of hold music to an IP trunk during a P2P connection call between an IP extension and IP trunk.	Disable, Enable	
Jitter Compensation Operation for G.711	Enables the use of a jitter buffer feature for voice communications using the G.711 codec.	Disable, Enable	
P2P Group Jitter Compensation Operation for G.711 FAX	Enables the use of a jitter buffer feature for fax communications using the G.711 codec.	Disable, Enable	
Jitter Compensation Operation for G.729A	Enables the use of a jitter buffer feature for communications using the G.729A codec.	Disable, Enable	
Jitter Buffer Delay Min. for Voice	Specifies the minimum size of the jitter buffer for voice communications.	0–200 ms	
Jitter Buffer Delay Max. for Voice	Specifies the maximum size of the jitter buffer for voice communications.	0–200 ms	
Jitter Buffer Delay Init. for Voice	Specifies the initial size of the jitter buffer for voice communications.	0–200 ms	
Jitter Buffer Adaptation Period for Voice	Specifies the length of time that the jitter buffer is applied for voice communications.	1000–65530 ms	
Jitter Buffer Delay Min. for FAX	Specifies the minimum size of the jitter buffer for fax communications.	0–200 ms	

Name	Description	Value Range	Links
Jitter Buffer Delay Max. for FAX	Specifies the maximum size of the jitter buffer for fax communications.	0–200 ms	
Jitter Buffer Delay Init. for FAX	Specifies the initial size of the jitter buffer for fax communications.	0–200 ms	
Jitter Buffer Adaptation Period for FAX	Specifies the length of time that the jitter buffer is applied for fax communications.	1000–65530 ms	
DTMF Detection Level for G.711A	Specifies the level of DTMF detection for the G.711A codec.	-45– -12 dB	
DTMF Detection Level for G.711Mu	Specifies the level of DTMF detection for the G.711Mu codec.	-39– -6 dB	
CNG Signal Effective Detection Width 1 (ON)	Specifies the length of time that the PBX detects the CNG signal.	20–5000 ms	
CNG Signal Effective Detection Width 2 (OFF)	Specifies the length of time that the PBX waits until another CNG signal is detected.	20–5000 ms	
CNG Signal Fixation Detection Counter	Specifies the number of times the CNG signal must be detected before the PBX proceeds the fax operation.	1–3	
CNG Signal Fixation Detection Pattern	Specifies the CNG signal pattern to be detected before the PBX proceeds the fax operation.	OFF, ON	
CED Signal Fixation Detection Time - SIP Extension	Specifies the minimum length of time required for the CED (called station identification) signal to be detected by the PBX.	50 × n (n=1– 100) ms	
CNG Signal Effective Detection Width 1 (ON) - SIP Extension	Specifies the length of time that the PBX detects the CNG signal for SIP extensions.	20 × n (n=1– 250) ms	
CNG Signal Effective Detection Width 2 (OFF) - SIP Extension	Specifies the length of time that the PBX waits until another CNG signal is detected for SIP extensions.	20 × n (n=1– 250) ms	
CNG Signal Fixation Detection Counter - SIP Extension	Specifies the number of times the CNG signal must be detected before the PBX proceeds the fax operation for SIP extensions.	1–3	
CNG Signal Fixation Detection Pattern - SIP Extension	Specifies the CNG signal pattern to be detected before the PBX proceeds the fax operation for SIP extensions.	Off, On	
CED Signal Fixation Detection Time - SIP Extension - SIP Extension	Specifies the minimum length of time required for the CED (called station identification) signal to be detected by the PBX for SIP extensions.	50 × n (n=1– 100) ms	

Name	Description	Value Range	Links
T38 FAX Transmit Level (Network to PBX) A-Law	Specifies the transmission level of G3 fax signals after being converted from T.38 protocol packets, when the codec used is G.711A.	-13–2 dB	
T38 FAX Transmit Level (Network to PBX) Mu-Law	Specifies the transmission level of G3 fax signals after being converted from T.38 protocol packets, when the codec used is G.711Mu.	-7–8 dB	
T38 FAX Transmit Level A-Law - SIP Extension	Specifies the transmission level of G3 fax signals after being converted from T.38 protocol packets, when the codec used is G.711A for SIP extensions.	-13–2 dB	
T38 FAX Transmit Level Mu-Law - SIP Extension	Specifies the transmission level of G3 fax signals after being converted from T.38 protocol packets, when the codec used is G.711Mu for SIP extensions.	-7–8 dB	

## **VoIP-DSP Options 2**

The settings in this tab relate to communications within a One-look network.

Name	Description	Value Range	Links
Echo Cancellation Ability	Specifies the echo cancellation ability time.	64 ms, 128 ms, Off	
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	
NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	Feature Manual References 5.2.1 IP Proprietary Telephone (IP- PT)
Jitter Compensation Operation for G.711	Enables the use of a jitter buffer feature for voice communications using the G.711 codec.	Disable, Enable	
Jitter Compensation Operation for G.729A	Enables the use of a jitter buffer feature for communications using the G.729A codec.	Disable, Enable	
Jitter Buffer Delay Min. for Voice	Specifies the minimum size of the jitter buffer for voice communications.	0–200 ms	
Jitter Buffer Delay Max. for Voice	Specifies the maximum size of the jitter buffer for voice communications.	0–200 ms	

Name	Description	Value Range	Links
Jitter Buffer Delay Init. for Voice	Specifies the initial size of the jitter buffer for voice communications.	0–200 ms	
Jitter Buffer Adaptation Period for Voice	Specifies the length of time that the jitter buffer is applied for voice communications.	1000–65530 ms	
Packet Sampling Time (G.711A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Packet Sampling Time (G.711Mu)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Packet Sampling Time (G.729A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	

## **Port Number**

Name	Description	Value Range	Links
Voice (RTP) UDP Port No. (Server)	Specifies the UDP port used by the system to transmit and receive RTP (Real-time Transfer Protocol) data. This must be changed if another network application is using the same port.  For voice communications, the system uses 128 contiguous UDP ports, starting from the port number specified here.	1024– 64000	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Voice (RTP) UDP Port No. (IP-PT / SIP-MLT)	Specifies the UDP port used to transmit and receive RTP (Real-time Transfer Protocol) data on the IP-PT side. This must be changed if another network application is using the same port.  For voice communications, an IP-PT uses 128 contiguous UDP ports, starting from the port number specified here.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.	1024– 65535	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
UDP Port No. for SIP Extension Server	Specifies the UDP port number used for the SIP Extension server. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	1024– 65535	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Signalling (PTAP) UDP Port No. (Server)	Specifies the UDP port used by the V-IPEXT card to transmit and receive PTAP (Panasonic Telephony Administration Protocol) data. This must be changed if another network application is using the same port. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	1024– 65535	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Signalling (MGCP) UDP Port No. (Server)	Specifies the UDP port used by the V-IPEXT card to transmit and receive MGCP (Media Gateway Control Protocol) data. This must be changed if another network application is using the same port.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.	1024– 65535	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Signalling (MGCP) TLS Port No. (Server)	Specifies the TLS port number used for the MGCP signalling server.	1024– 65535	
TLS Port No. for SIP Extension Server	Specifies the TLS port number used by the SIP extension server.	1024– 65535	
CWMP (HTTP) Port No. for SIP-MLT	Specifies the HTTP port of the PBX- side ACS for control communication with KX-UT series SIP phones.	0–65535 (Setting "0" will close port access for this feature)	Feature Manual References 5.2.2.3 Simple Remote Connection
CWMP (HTTPS) Port No. for SIP-MLT	Specifies the HTTPS port of the PBX- side ACS for control communication with KX-UT series SIP phones.	0–65535 (Setting "0" will close port access for this feature)	Feature Manual References 5.2.2.3 Simple Remote Connection
Data Transmission Protocol (HTTP) Port No. for SIP-MLT	Specifies the HTTP port of the PBX-side ACS for data communication with KX-UT series SIP phones.	0–65535 (Setting "0" will close port access for this feature)	Feature Manual References 5.2.2.3 Simple Remote Connection

Name	Description	Value Range	Links
Data Transmission Protocol (HTTPS) Port No. for SIP-MLT	Specifies the HTTPS port of the PBX-side ACS for data communication with KX-UT series SIP phones.	0–65535 (Setting "0" will close port access for this feature)	Feature Manual References 5.2.2.3 Simple Remote Connection
Firmware Update Port No. for IP-PT/ IP-CS (Media Relay)	Specifies the IP-PT/IP-CS firmware update port number.	0–65535	
LOGIN Port Number	Specifies the port number used to login to the PBX via the LAN.	1024– 65535	
CTI Port Number	Specifies the port number used to operate CTI via the LAN. Selecting "0" disables the 3rd Party CTI feature.	0, 1024– 65535	Feature Manual References 2.26 Computer Telephony Integration (CTI) Features
Built-in Communication Assistant Server	Specifies the port number for the Communication Assistant (CA) application.	0, 1024– 65535	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 9— Built-in Communication Assistant 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 9— Built-in Communication Assistant  Feature Manual References 2.26.2 CA (Communication Assistant)
FOS Interface Port	Specifies the port number used to communicate with a hotel application	0, 1024– 65535	Assistant)  Feature Manual References
ramboi	(FOS).	33000	2.23.4 Built-in FOS Interface

## **LAN Status**

Name	Description	Value Range	Links
LINK for Main Port	Indicates the current connection status of the main port (reference only).	1: Disconnect, 0: Connect	

Name	Description	Value Range	Links
LINK for Maintenance Port	Indicates the current connection status of the MNT port (reference only).	1: Disconnect, 0: Connect	

## **Media Relay**

Name	Description	Value Range	Links
Common—NAT - External IP Address	Specifies the NAT device external IP address (common).	Blank, 1.0.0.1– 223.255.255.254 (IP address), Max. 255 characters (FQDN)	Feature Manual References 5.2.2.3 Simple Remote Connection
Common—DNS Interval Time (min)	Specifies the DNS interval time.	1-60	
IP Extension / IP-CS —NAT - MGCP Server Port No.	Specifies the outside-facing MGCP port of the PBX-side network gateway for remote connections.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
IP Extension / IP-CS —NAT - MGCP-TLS Server Port No.	Specifies the outside-facing MGCP-TLS port of the PBX-side network gateway for remote connections.	0-65535	
IP Extension / IP-CS —NAT - MGCP Server Port No. for IP-CS	Specifies the outside-facing MGCP port of the PBX-side network gateway for remote connections.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
IP Extension / IP-CS  —Keep Alive Packet Type	Specifies the type of Keep Alive packets to be sent out for remote connections for IP extensions.	Blank UDP, None	Feature Manual References 5.2.2.3 Simple Remote Connection
IP Extension / IP-CS  —Keep Alive Packet Type for IP-CS	Specifies the type of Keep Alive packets to be sent out for remote connections for IP-CS (KX-NS0154 only).	Blank UDP, None	Feature Manual References 5.2.2.3 Simple Remote Connection
IP Extension / IP-CS  —Keep Alive Packet Sending Interval Time (s)	Specifies the time interval between transmissions of Keep Alive packets.	10–60 s	Feature Manual References 5.2.2.3 Simple Remote Connection
IP Extension / IP-CS —NAT - FTP Server Port No.	Specifies the port number of FTP server for IP-CS (KX-NS0154 only).	1–65535	
SIP Extension / UT Extension—NAT - SIP Proxy Server Port No.	Specifies the outside-facing port of the network gateway connected to the SIP proxy server.	0-65535 (except "50xx" and "x50xx")	Feature Manual References 5.2.2.3 Simple Remote Connection

Name	Description	Value Range	Links
SIP Extension / UT Extension—NAT - SIP TLS Server Port No.	Specifies the outside-facing port of the network gateway connected to the SIP TLS server.	0-65535 (except "50xx" and "x50xx")	
UT Extension—NAT - CWMP Server (HTTP) Port No.	Specifies the outside-facing HTTP port of the PBX-side network gateway for remote connections.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—NAT - CWMP Server (HTTPS) Port No.	Specifies the outside-facing HTTPS port of the PBX-side network gateway for remote connections.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—NAT - CWMP Server (HTTP) Port No. for Network Survivability	Specifies the outside-facing HTTP port of the PBX-side network gateway for remote connections. This setting specifies the port number used for the secondary server for network survivability.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—NAT - CWMP Server (HTTPS) Port No. for Network Survivability	Specifies the outside-facing HTTPS port of the PBX-side network gateway for remote connections. This setting specifies the port number used for the secondary server for network survivability.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—NAT - SIP-MLT Data Download Server (HTTP) Port No.	Specifies the outside-facing HTTP port of the PBX-side network gateway for remote connections used for downloading data to KX-UT series SIP phones.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—NAT - SIP-MLT Data Download Server (HTTPS) Port No.	Specifies the outside-facing HTTPS port of the PBX-side network gateway for remote connections used for downloading data to KX-UT series SIP phones.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—NAT - NTP Server Port No.	Specifies the outside-facing port of the network gateway connected to the NTP server.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—Keep Alive Packet Type	Specifies the type of Keep Alive packets to be sent out for remote connections.	Register, Blank UDP, None	Feature Manual References 5.2.2.3 Simple Remote Connection

Name	Description	Value Range	Links
UT Extension—Keep Alive Packet Sending Interval Time (s)	Specifies the time interval between transmissions of Keep Alive packets.	10–60 s	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension—SIP Register Expire Time (s)	Specifies the length of time that will elapse before the current registration expires.	10–3600 s	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension— PERIODIC Ability	Specifies whether alive monitoring is performed for connected remote extensions.	Disable, Enable	Feature Manual References 5.2.2.3 Simple Remote Connection
UT Extension— PERIODIC Packet Sending Interval Time (s)	Specifies the polling interval for alive monitoring when PERIODIC Ability is set to Enable.	30–3600 s	Feature Manual References 5.2.2.3 Simple Remote Connection
Option—NAT - RTP IP Address	Specifies the RTP server's IP address. If using a separate IP address from Common—NAT - External IP Address, configure this setting.	Blank, 1.0.0.1– 223.255.255.254	Feature Manual References 5.2.2.3 Simple Remote Connection
Option—NAT - SIP Proxy Server IP Address	Specifies the outside-facing IP address or host name of the network gateway connected to the SIP proxy server. If using a separate IP address from Common—NAT - External IP Address, configure this setting.	Blank, 1.0.0.1– 223.255.255.254	Feature Manual References 5.2.2.3 Simple Remote Connection
Option—NAT - CWMP Server IP Address	Specifies the outside-facing IP address of the PBX-side network gateway for remote connections. If using a separate IP address from Common—NAT - External IP Address, configure this setting.	Blank, 1.0.0.1– 223.255.255.254	Feature Manual References 5.2.2.3 Simple Remote Connection
Option—NAT - CWMP Server IP Address for Network Survivability	Specifies the outside-facing IP address of the PBX-side network gateway for remote connections. This setting specifies the port number used for the secondary server for network survivability.	Blank, 1.0.0.1– 223.255.255.254	Feature Manual References 5.2.2.3 Simple Remote Connection
Option—NAT - NTP Server IP Address	Specifies the outside-facing IP address of the network gateway connected to the NTP server. If using a separate IP address from Common—NAT - External IP Address, configure this setting.	Blank, 1.0.0.1– 223.255.255.254	Feature Manual References 5.2.2.3 Simple Remote Connection

### **SIP Extension**

Name	Description	Value Range	Links
SIP Location Hold Time Max.	Specifies the maximum length of time that the PBX holds information on the location of SIP Extensions.	10–3600 s	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
SIP Location Hold Time Min.	Specifies the minimum length of time that the PBX holds information on the location of SIP Extensions.	10–3600 s	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
SIP Location Hold Time Interval	Specifies the interval time that the PBX waits before starting to hold information on location of SIP Extensions.	1–10 s	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
SIP Session Timer Min.	Specifies the minimum length of time that the PBX waits before disconnecting SIP sessions when no communication is detected.	90–3600 s	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Setting parameters assigned to Remote SIP-MLT—NAT - CWMP Server IP Address	Specifies the outside-facing IP address or host name of the PBX-side network gateway for remote connections.	1.0.0.0– 223.255.255.255 (IP address), Max. 100 characters (host name)	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - CWMP Server (HTTP) Port No.	Specifies the outside-facing HTTP port of the PBX-side network gateway for remote connections.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - CWMP Server (HTTPS) Port No.	Specifies the outside-facing HTTPS port of the PBX-side network gateway for remote connections.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - SIP-MLT Data Download Server (HTTP) Port No.	Specifies the outside-facing HTTP port of the PBX-side network gateway for remote connections used for downloading data to KX-UT series SIP phones.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection

Name	Description	Value Range	Links
Setting parameters assigned to Remote SIP-MLT—NAT - SIP- MLT Data Download Server (HTTPS) Port No.	Specifies the outside-facing HTTPS port of the PBX-side network gateway for remote connections used for downloading data to KX-UT series SIP phones.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - SIP Proxy Server IP Address	Specifies the outside-facing IP address or host name of the network gateway connected to the SIP proxy server.	1.0.0.0– 223.255.255.255 (IP address), Max. 100 characters (host name)	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - SIP Proxy Server Port No.	Specifies the outside-facing port of the network gateway connected to the SIP proxy server.	1–65535 (except "50xx" and "x50xx")	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - NTP Server IP Address	Specifies the outside-facing IP address or host name of the network gateway connected to the NTP server.	1.0.0.0– 223.255.255.255 (IP address), Max. 100 characters (host name)	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - NTP Server Port No.	Specifies the outside-facing port of the network gateway connected to the NTP server.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - Keep Alive Packet Type	Specifies the type of Keep Alive packets to be sent out for remote connections.	Register, Blank UDP, None	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters assigned to Remote SIP-MLT—NAT - Keep Alive Packet Sending Interval Time (s)	Specifies the time interval between transmissions of the Keep Alive packet.  Note  This interval must be shorter than the NAT binding time of the router. The default value is appropriate in most cases.  This setting is available only when NAT - Keep Alive Packet Type is set to "Blank UDP".	10-60 s	Feature Manual References 5.2.2.3 Simple Remote Connection

Name	Description	Value Range	Links
Setting parameters assigned to Remote SIP-MLT—NAT - SIP Register Expire Time (s)	Specifies the length of time that will elapse before the current registration expires.  Note  This setting is available only when NAT - Keep Alive Packet Type is set to "Register".	10–3600 s	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters for Networking Survivability, assigned to Remote SIP-MLT— NAT - CWMP Server IP Address	Specifies the outside-facing IP address or host name of the PBX-side network gateway for remote connections that is used when the gateway specified in Setting parameters assigned to Remote SIP-MLT is not available.	1.0.0.0– 223.255.255.255 (IP address), Max. 100 characters (host name)	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters for Networking Survivability, assigned to Remote SIP-MLT— NAT - CWMP Server (HTTP) Port No.	Specifies the outside-facing HTTP port of the PBX-side network gateway for remote connections that is used when the gateway specified in Setting parameters assigned to Remote SIP-MLT is not available.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
Setting parameters for Networking Survivability, assigned to Remote SIP-MLT— NAT - CWMP Server (HTTPS) Port No.	Specifies the outside-facing HTTPS port of the PBX-side network gateway for remote connections that is used when the gateway specified in Setting parameters assigned to Remote SIP-MLT is not available.	1–65535	Feature Manual References 5.2.2.3 Simple Remote Connection
Control Condition of Remote SIP-MLT— PERIODIC Ability	Specifies whether alive monitoring is performed for connected remote extensions.	Enable, Disable	Feature Manual References 5.2.2.3 Simple Remote Connection
Control Condition of Remote SIP-MLT— PERIODIC Packet Sending Interval Time (s)	Specifies the polling interval for alive monitoring when PERIODIC Ability is set to "Enable".	30–3600 s	Feature Manual References 5.2.2.3 Simple Remote Connection

## **Echo Cancellation**

The settings in this tab are for non-IP calls.

Name	Description	Value Range	Links
Echo Cancellation Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	

Name	Description	Value Range	Links
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	
NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	

### **DSP Conference**

Name	Description	Value Range	Links
DSP Conference Priority	Specifies the Conference Priority (the conference resource you want to use).	Preferential: Conference resources on the DSP card are used. Alternative: Default conference resources are used.	
DSP Digital Gain (Up) on V-IPEXT side for conference	Specifies the DSP Digital Gain for the up voice path for conference calls using an extension of a V-IPEXT card.	-14–6 dB	
DSP Digital Gain (Up) on V-SIPEXT side for conference	Specifies the DSP Digital Gain for the up voice path for conference calls using an extension of a V-SIPEXT card.	-14–6 dB	
DSP Digital Gain (Up) on V-UTEXT side for conference	Specifies the DSP Digital Gain for the up voice path for conference calls using an extension of a V-UTEXT card.	-14–6 dB	
DSP Digital Gain (Up) on Multisite GW side for conference	Specifies the DSP Digital Gain for the up voice path for conference calls using a gateway between sites.	-14–6 dB	
Echo Cancellation Ability on TDM side for conference	Specifies the echo canceller ability time for conferencing using TDM circuit mode communication.	OFF, 64 ms, 128 ms	
DSP Digital Gain (Up) on TDM side for conference	Specifies the DSP Digital Gain for the up voice path for conferencing using TDM circuit mode communication.	-14–6 dB	
DSP Digital Gain (Down) on TDM side for conference	Specifies the DSP Digital Gain for the down voice path for conferencing using TDM circuit mode communication.	-14–6 dB	
EC Gain on TDM side for conference	Specifies the error correction gain for conferencing using TDM circuit mode communication.	-14–6 dB	
NLP Setting on TDM side for conference	Specifies the NLP (Non-Linear Processor) setting for conferencing using TDM circuit mode communication.	Disable, Weak, Normal, Strong	

### QoS

Name	Description	Value Range	Links
Setting for extension RTP <sup>-1</sup> —QoS Ability	Specifies the type of value to be stored in the ToS field in the IP header, it sends to IP terminals from the PBX.	ToS DSCP HEX	
Setting for extension RTP**—QoS-ToS Priority	Specifies the priority level in the ToS field, it sends to IP terminals from the PBX.	0-7: When "ToS" is selected in QoS Ability 0-63: When "DSCP" is selected in QoS Ability 00-FF: When "HEX" is selected in QoS Ability	
Setting for extension RTP**—QoS-ToS Type	Specifies the ToS type in the ToS field when "ToS" is selected in Setting for extension RTP—QoS Ability	Normal Monetary Cost Reliability Throughput Delay	
Setting for multi- connection signalling (SSAP/PSAP) <sup>2</sup> —QoS Ability	Specifies the type of value to be stored in the ToS field in the IP header, it sends to other sites from the PBX.	ToS DSCP HEX	
Setting for multi- connection signalling (SSAP/PSAP)*2—QoS- ToS Priority	Specifies the priority level in the ToS field, it sends to other sites from the PBX	0-7: When "ToS" is selected in QoS Ability 0-63: When "DSCP" is selected in QoS Ability 00-FF: When "HEX" is selected in QoS Ability	
Setting for multi- connection signalling (SSAP/PSAP) <sup>2</sup> —QoS- ToS Type	Specifies the ToS type in the ToS field when "ToS" is selected in Setting for multi-connection signalling (SSAP/PSAP)—QoS Ability	Normal Monetary Cost Reliability Throughput Delay	

Applies to incoming communication from the PBX main unit to the IP terminals. The QoS setting of the IP terminals is configured individually for each terminal.

## 9.5.2 PBX Configuration—[1-1] Configuration—Slot—Site Property—FAX Card

Information and settings for the FAX Card for the PBX site can be confirmed and specified.

Name	Description	Value Range	Links
Status	Indicates if a FAX Card is installed in the PBX (reference only).	Installed, None	
Version	Indicates the version of the FAX Card firmware (reference only).	Version Number	

Any setting changes made at a site in the One look network will be applied to the setting of all sites, including the master site.

Name	Description	Value Range	Links
FAX Extension number	Specifies the extension number assigned to the FAX Card for making and receiving faxes directly from the PBX.	Extension number	

## 9.5.3 PBX Configuration—[1-1] Configuration—Slot—Site Property—NSVM

Settings related to audio quality and sound detection for the PBX site can be specified.

Name	Description	Value Range	Links
Echo Cancellation Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	
NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	
FAX Detection Ability	Enables the use of the FAX Detection Ability feature. Since fax signals using a codec other than G.711 cannot be received accurately at the destination, this feature automatically switches the codec to G.711 to enable end-to-end fax signal relay over the network.	Disable, Enable	
CNG Signal Effective Detection Width 1 (ON)	Specifies the length of time that the PBX detects the CNG signal.	20-5000 ms	
CNG Signal Effective Detection Width 2 (OFF)	Specifies the length of time that the PBX waits until another CNG signal is detected.	20-5000 ms	
CNG Signal Fixation Detection Counter	Specifies the number of times the CNG signal must be detected before the PBX proceeds the fax operation.	1–3	
CNG Signal Fixation Detection Pattern	Specifies the CNG signal pattern to be detected before the PBX proceeds the fax operation.	OFF, ON	
Maximum Silence Time	Specifies the length of time of silence that the PBX will detect as the end of a call.	1000-60000 (ms)	
Maximum Continuous Tone Time	Specifies the length of time of a continuous tone that the PBX will detect as the end of a call.	1000-60000 (ms)	
Unique Cyclic Tone Detection	Specifies whether the system will detect the end of a call when there is a unique cyclic tone.	Disable, Enable	
Maximum Cyclic Tone Time	Specifies the length of time of a continuing cyclic tone that the PBX will detect as the end of a call.	1000-60000 (ms)	

# 9.6 PBX Configuration—[1-1] Configuration—Slot—UM Card Property

The properties of the Unified Messaging (UM) system can be specified.

### Main

Name	Description	Value Range	Links
Echo Cancellation Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	
NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	
FAX Detection Ability	Enables the use of the FAX Detection Ability feature. Since fax signals using a codec other than G.711 cannot be received accurately at the destination, this feature automatically switches the codec to G.711 to enable end-to-end fax signal relay over the network.	Disable, Enable	
CNG Signal Effective Detection Width 1 (ON)	Specifies the length of time that the PBX detects the CNG signal.	20–5000 ms	
CNG Signal Effective Detection Width 2 (OFF)	Specifies the length of time that the PBX waits until another CNG signal is detected.	20-5000 ms	
CNG Signal Fixation Detection Counter	Specifies the number of times the CNG signal must be detected before the PBX proceeds the fax operation.	1–3	
CNG Signal Fixation Detection Pattern	Specifies whether or not the Unified Messaging system will respond to CNG signals.	OFF, ON	

# 9.7 PBX Configuration—[1-1] Configuration—Slot—UM Port Property

The properties of the Unified Messaging (UM) system's ports can be specified.

### Main

The Port for each item is displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	PC Programming Manual References  9.1 PBX Configuration— [1-1] Configuration— Slot–To change the status (INS/OUS) of a card (On-line mode only)
UM Group Number	Selects the number of the UM group.	1–16	

# 9.8 PBX Configuration—[1-1] Configuration—Slot—Port Property—Port Type View

Displays the number of connected telephones, devices, and Cell Stations (CSs). This screen can be accessed from the Port Property screen of any extension cards in use in the PBX system, including extension cards of legacy gateways. For information about legacy gateways, see **9.29 PBX Configuration**—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2. For information about extension cards for legacy gateways, refer to the documentation for the legacy gateway PBX. This screen can be accessed only in On-line mode.

Name	Description	Value Range	Links
Туре	Indicates the types of telephones, devices, or CSs (reference only).	IP-EXT, SIP-MLT, SIP, DPT(40V) (KX-DT300 series/KX-DT500 series/KX-T7600 series DPTs), DPT(15V) (DPTs other than KX-DT300 series/KX-DT500 series/KX-T7600 series), APT (15V), SLT, DSS Console, UM, VM, Other, CS, High-density CS, IP-CS, SIP-CS, S-PS	PC Programming Manual References  9.1 PBX Configuration —[1-1] Configuration— Slot
Total Count	Indicates the total number of each type of telephone, device, and CS connected to the PBX (reference only). CSs are counted on the basis of the number of ports in service plus the number of extension ports to which CSs are connected. For details about CSs connected to the extension cards of legacy gateways, refer to the documentation for the legacy gateway PBX or the CS.	Not applicable.	PC Programming Manual References  9.1 PBX Configuration —[1-1] Configuration— Slot

# 9.9 PBX Configuration—[1-1] Configuration—Slot —V-SIPGW—Shelf Property

Common settings for all of the V-SIPGW cards installed in the Virtual Shelf can be programmed.

### **Icon Description**

In this section, the following icons show the different parameter type.

Icon	Description for Parameter Type	
(🔘)	Manual programming is compulsory under certain conditions.	
<b>♦</b>	Manual programming is optional.	

### Main

Name	Description	Value Range	Links
SIP Client Port Number	Specifies the port number of the PBX used for communications with the SIP server.	1024–65535	
◆ SIP Called Party Number Check Ability	Specifies whether to receive a SIP trunk call when receiving the INVITE message with an incorrect target SIP-URI. The setting specified here is also applied when the request header is blank or contains characters that cannot be modified to a receivable number.	Disable (High->Low), Disable (Low->High), Enable	
◆ SIP Called Party Number Search Mode	Specifies the search mode for the notified SIP Called Party Number information.	Mode 1: Searches SIP accounts only.  Mode 2: Searches SIP accounts, then DDI/DID numbers. Searches the SIP trunks of the tenant of the search-matched DDI/DID number, in ascending order (Low → High).  Mode 3: Searches SIP accounts, then DDI/DID numbers. Searches the SIP trunks of the tenant of the search-matched DDI/DID number, in descending order (High → Low).	
<ul><li>Symmetric Response Routing Ability</li></ul>	Enables this feature to request that the SIP server sends the response back to the source IP address and port from which the request originated.	Disable, Enable	

Name	Description	Value Range	Links
◆ 100rel Ability	Specifies whether to add the option tag 100rel to the header field of the INVITE message.	Disable: This feature is not activated. Enable (Active): Activates this feature only if the other device supports the feature. Enable (Passive): Activates this feature only when requested by the other device.	
<ul><li>Ringback</li><li>Tone to Outside</li><li>Caller</li></ul>	Enables the PBX to send a ringback tone to an outside caller when the network cannot send the tone.	Disable, Enable	
♦ SIP QoS Ability	Specifies the type of value to be stored in the ToS field in the IP header.	ToS, DSCP, HEX	
♦ SIP QoS-ToS Priority	Specifies the priority level in the ToS field when "ToS" is selected in <b>SIP QoS Ability</b> .	0–7	
♦ SIP QoS-ToS Type	Specifies the ToS type in the ToS field when "ToS" is selected in <b>SIP QoS Ability</b> .	Normal, Monetary Cost, Reliability, Throughput, Delay	

### **Timer**

Name	Description	Value Range	Links
♦ SIP T1	Specifies the retransmission interval time for INVITE requests and responses.	5–255 × 100 ms	
♦ SIP T2	Specifies the retransmission interval time for INVITE responses and non-INVITE requests.	40–255 × 100 ms	

### **NAT Traversal 1-8**

Name	Description	Value Range	Links
◆ Name	Specifies the name of NAT Traversal configuration. This value is displayed in NAT Traversal Table in 9.11 PBX Configuration—[1-1] Configuration—Slot —V-SIPGW—Port Property—NAT	Max. 20 characters	
◆ NAT Traversal	Specifies the NAT traversal method.	Off, Fixed IP Addr., STUN	
	<ul> <li>STUN: A STUN Server, used alongside the SIP Server, finds out the global IP address of the router with NAT enabled.</li> </ul>		
	<ul> <li>Fixed IP Addr.: The global IP address of the router with NAT enabled is fixed.</li> </ul>		
	Note		
	Manual programming is optional except when programming is required depending on the network conditions.		
NAT - Voice (RTP) UDP Port No.	Specifies the starting port number of the dynamic ports used for NAT Traversal.	1024–65535	

Name	Description	Value Range	Links
NAT - Keep Alive Packet Sending Ability	Specifies whether to send Keep Alive packets in order to maintain the NAT binding information. This setting may be compulsory depending on the network conditions.	Disable, Enable	
◆ NAT - Keep Alive Packet Type	Specifies the type of Keep Alive packets to be sent out.	Blank UDP, None	
◆ NAT - Keep Alive Packet Sending Interval	Specifies the interval time until the next Keep Alive packet is sent.  Note	1–60 s	
	This interval must be shorter than the NAT binding time of the router. The default value is appropriate in most cases.		
(iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Specifies the global IP address of the router with NAT enabled. This setting is compulsory if <b>Fixed IP Addr.</b> is selected in <b>NAT Traversal</b> .	1.0.0.0– 223.255.255.255	
◆ STUN Ability	Specifies whether to open a protocol port of the STUN server to enable STUN feature.	Disable, Enable	
STUN Client Port Number	Specifies the port number of the PBX used for communications with the STUN server.	1–65535	
<ul> <li>STUN External Address Detection Retry Counter</li> </ul>	Specifies the number of times that a query is retried when no response is received from the STUN server.	0–8	
◆ STUN Resending Interval	Specifies the length of time until a query is retried when no response is received from the STUN server.	0–1600 ms	

## 9.10 PBX Configuration—[1-1] Configuration—Slot **—V-SIPGW—Card Property**

Common card settings for all of the V-SIPGW cards installed in the Virtual Shelf can be programmed.

Name	Description	Value Range	Links
DNS SRV Record Resolve Ability	Specifies whether to request that the DNS server translates domain names into IP addresses using the DNS SRV record. Click <b>Common Settings</b> to change this setting.	Disable, Enable	

# 9.11 PBX Configuration—[1-1] Configuration—Slot —V-SIPGW—Port Property

### **Programming Port Properties**

Some of the parameters can be automatically programmed by selecting the desired SIP provider for each virtual SIP gateway port.

### **Icon Description**

In this section, the following icons show the different parameter type.

Icon	Description for Parameter Type	
*	Programmed automatically by selecting the desired SIP provider in <b>Select Provider</b> .	
0	Manual programming is compulsory.	
(©)	Manual programming is compulsory under certain conditions.	
<b>♦</b>	Manual programming is optional.	

### **Automatic Programming**

Some of the parameters on this screen can be automatically programmed by selecting the desired SIP provider for each virtual SIP gateway port. A maximum of 32 SIP providers can be programmed, and a different SIP provider can be assigned to each virtual SIP gateway port. Follow the steps below to configure a SIP provider.

1. Click Select Provider.

A dialogue box will appear. Available virtual SIP gateway port numbers are displayed in the list.

- 2. From the **Provider** menu, select the desired SIP provider.
- **3.** Highlight the desired port numbers or click **Select All** to select all the virtual SIP gateway port numbers to be assigned to the SIP provider selected in step **2**.
- 4. Click Execute.
- 5. Click OK.
- 6. Click Apply.

Appropriate setting values designated by the SIP provider will be set in the parameters for the virtual SIP gateway ports.

#### Manual Programming

Follow the steps below to programme the parameters which are not automatically programmed by selecting a provider.

- 1. Click a desired tab.
- 2. Enter information or select from the list for each parameter.

### Adding Settings to Provider Profiles

Follow the steps below to add the settings to provider profiles.

- 1. Click Add Provider.
  - A dialogue box will appear. Available virtual SIP gateway port numbers are displayed in the list.
- 2. Highlight the desired port numbers or click **Select All** to select all the virtual SIP gateway port numbers to add the settings to provider profiles.

#### 3. Click Execute.

### **Trunk Adaptor**

To connect to a Trunk Adaptor, follow the steps below.

- 1. Ensure that the Trunk Adaptor is connected to the network and a power supply, and that all ports to be set are OUS.
- 2. Click Trunk Adaptor. The Trunk Adaptor List screen is displayed.
- 3. Enter a name (20 characters or less) for the Trunk Adaptor in Trunk Adaptor Name.
- 4. Enter the Trunk Adaptor's IP address in Trunk Adaptor IP Address.
- 5. To confirm that the setting is correct, click CONNECT. If the setting is correct, the Trunk Adaptor's Web Maintenance Console will open in a new browser window.
  For details about the Trunk Adaptor's Web Maintenance Console, refer to the documentation of the Trunk Adaptor.
- 6. Click Next. The Set Trunk Adaptor window will open.
- 7. In Virtual SIP Gateway Port Property No. Range, specify From and To to select a range of SIP connections to be used with the Trunk Adaptor. These numbers correspond to the No. column of the main Port Property screen.
- **8.** In **Name: IP Address**, select a name and IP address previously entered on the **Trunk Adaptor List** screen.
- 9. In SIP Server Port Number, enter the SIP server's port number.
- **10.** In **SIP Account / User Name**, enter a 3- to 5-digit number in **From**.
- **11.** Click **Finish**, and the following settings are implemented:
  - Provider Name and ( SIP Server IP Address in the Main tab will be set to match the selected Trunk Adaptor.
  - The User Name and Authentication ID in the Account tab will be set to the value specified in SIP Account / User Name, increased by 1 for each connection (i.e. if "401" was specified, User Name and Authentication ID for No. 1 will be set to "401", and then for No. 2 they will be set to "402", etc.).
- **12.** In the Calling Party tab of the V-SIPGW—Port Property screen, set ★ From Header—User Part to PBX-CLIP for each port that was set to be used with the Trunk Adaptor.

#### Main

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	

Name	Description	Value Range	Links
Connection	Specifies whether to connect a port to a Trunk Adaptor or use it	SIP Provider, Trunk Adaptor	Feature Manual References
Attribute	as a SIP gateway.		5.3.2 Trunk Adaptor Connection
◆ Trunk Property	Specifies the networking type of each SIP trunk.	Public, VPN	
	Note  If ◆ Connection Attribute is set to "Trunk Adaptor" for		
	the port, only "Public" will be available for this setting.		

Name	Description	Value Range	Links
◆ Channel Attribute	Specifies the channel property of each port to enable several sessions to be performed for one subscription with the SIP provider.	Basic channel: The subscriber channel that is assigned the SIP registration information.  Additional channel for SlotN (N=1–4) ChN (N=1–16): The subordinate channel that uses the same registration information as a Basic channel for SIP sessions. Select the Slot number and the Basic channel number to which the Additional channel belongs.  Not Used: The channel is not in use.	
		Note	
		The Basic channel and Additional channel can belong to different V-SIPGW16 cards.	
		When you save the data on the Main screen, for each virtual SIP gateway port that has Channel Attribute set to Basic channel, the following items are checked for duplication: SIP Server Name, SIP Server IP Address, and SIP Service Domain.  A maximum of 32 different SIP providers can be programmed.	
★ Provider Name	Specifies the name of the SIP provider.	Max. 20 characters	
★ SIP Server Name	Specifies the domain name of the SIP proxy server.  Note  Specify the domain name of the outbound proxy server, if provided by the SIP provider.	Max. 100 characters	Installation Manual References 8.6.5 DNS Client

Name	Description	Value Range	Links
( SIP Server IP Address	Specifies the IP address of the SIP proxy server. This setting is compulsory when not using the DNS server.	1.0.0.0–223.255.255.255	
	Note		
	Specify the IP address of the outbound proxy server, if provided by the SIP provider.		
♦ SIP Server IP	Specifies the IP address of the SIP proxy server for failover.	1.0.0.0–223.255.255.255	
Address for Failover	Note		
	Specify the IP address of the outbound proxy server for failover, if provided by the SIP provider. This setting cannot be changed while the V-SIPGW16 card is set to INS.		
★ SIP Server Port Number	Specifies the port number of the SIP proxy server.	1–65535	
★ SIP Service Domain	Specifies the domain name provided by the SIP provider.	Max. 100 characters	
Subscriber Number	Specifies the number used as the CLIP number.	Max. 16 digits (consisting of 0–9, $\times$ , and #)	
Backup	Specifies if the port will be used	Normal, Backup	PC Programming
	in Master Backup mode to perform the functions of a port	Note	Manual References
	on the Master unit PBX when the Master unit PBX fails.	The "Backup" setting is only effective when the site the card is installed in is designated as the	1.2.3.1 One-look Networking Survivability
		Master Backup unit.	Feature Manual References
			4.2.3 One-look Networking Survivability

Name	Description	Value Range	Links
◆ P2P Group	Specifies the peer-to-peer group of the IP-Trunk.	1–256	PC Programming Manual References  9.5.1 PBX Configuration—[1-1] Configuration—Slot— Site Property—Main —Main—P2P Group
			Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection
◆ P2P Group Name	Indicates the selected peer-to- peer group's name (reference only).	P2P Group Name	PC Programming Manual References 9.5.1 PBX Configuration—[1-1] Configuration—Slot— Site Property—Main —Main—P2P Group Name
			Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection

### **Account**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
User Name*	Specifies the user name (SIP Account) provided by the SIP provider.	Max. 64 characters	
Authentication ID*	Specifies the authentication ID required for registration with the SIP server.	Max. 64 characters	
Authentication Password*	Specifies the authentication password used for registration with the SIP provider.	Max. 32 characters	

<sup>\*</sup> The available characters are following to RFC3986.

<sup>&</sup>quot;0" — "9"

Other characters are not allowed.

### Register

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Register Ability	Specifies whether to send the REGISTER message to the SIP server.	Disable, Enable	
★ Register Sending Interval	Specifies the maximum length of interval time after which the PBX sends the REGISTER message.	10–86400 s	
<ul><li>Un-Register Ability when port INS</li></ul>	Specifies whether to unregister the previous registration and send the REGISTER message to the SIP server when the port status is set back to INS.	Disable, Enable	
★ Registrar Server Name	Specifies the domain name of the SIP server.	Max. 100 characters	Installation Manual References 8.6.5 DNS Client
<ul><li>Registrar</li><li>Server IP</li><li>Address</li></ul>	Specifies the IP address of the SIP server. This setting is compulsory when a register IP address is provided.	1.0.0.0– 223.255.255.255	
♠ Registrar Server IP Address for Failover	Specifies the IP address of the SIP registrar server for failover.  Note  Specify the IP address of the outbound registrar server for failover, if provided by the SIP provider. This setting cannot be changed while the V-SIPGW16 card is set to INS.	1.0.0.0– 223.255.255.255	
★ Registrar Server Port Number	Specifies the port number of the SIP server.	1–65535	

Name	Description	Value Range	Links
Register Resending Interval (s)	Specifies the interval time for resending the REGISTER message.	0-65535 s	

### **NAT**

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
NAT Traversal Table	Selects the NAT traversal configuration to apply to the port. For details about NAT traversal settings, see 9.9 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Shelf Property—NAT Traversal 1-8.  Note  When Connection Mode in the Links field is set to other than Disable, and Dynamic NAPT Enabled setting is set to Enable, this setting item will not be displayed.	None, 1-8	PC Programming Manual References  27.2.1 Router Configuration—Setup —[1-2-1] WAN— Connection Settings— Connection Mode 27.3.1 Router Configuration—Setup —[1-3-1] LAN—IPv4— Dynamic NAPT— Dynamic NAPT Enabled
★ STUN Server— Name	Specifies the domain name of a STUN server.	Max. 100 characters	Installation Manual References 8.6.5 DNS Client
STUN Server—IP Address	Specifies the IP address of the STUN server. This setting is compulsory when the STUN method is selected and a DNS server is not used.	1.0.0.0– 223.255.255.255	
★ STUN Server Port Number	Specifies the port number of the STUN server.	1–65535	

### **Option**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
★ Session Timer Ability	Enables the PBX to periodically refresh SIP sessions by sending repeated requests.	Disable: This feature is not activated. Enable (Active): Activates this feature only if the other device supports the feature. Enable (Passive): Activates this feature only when requested by the other device.	
★ Session Expire Timer	Specifies the length of time that the PBX waits before terminating SIP sessions when no reply to the repeated requests is received.	90–3600 s	
★ Session Refresh Method	Specifies the type of request that the PBX sends to periodically refresh SIP sessions.	UPDATE, re-INVITE	
<ul><li>Session Incoming Refresher Request</li></ul>	Specifies the type of method used for establishing the session interval.	UAC, UAS	
♦ SIP 200 Response Timer (*100 ms)	Specifies the amount of time to wait for a SIP 200 (OK) response when establishing a connection between two parties. (Specifying "0" will disable the timer.)	0–18000 × 100 ms	
◆ SIP 18x Response Timer (s)	Specifies the amount of time to wait for a 18x response when establishing a connection between two parties.	0–255 s	
Proxy-Require Option	Specifies option tags in a Proxy-Require header field so that the SIP server is notified that the client is behind a router with NAT enabled and firewall.	Max. 100 characters	
◆ Failover Timer(INVITE)	Specifies the amount of time to wait for a response for an INVITE request.	0–30 s	

Name	Description	Value Range	Links
◆ Failover Timer(REGISTER)	Specifies the amount of time to wait for a response for a REGISTER request.	0–30 s	
	Note		
	<ul> <li>If 0 is specified, failover operation follows the T1/T2 timer.</li> </ul>		
	<ul> <li>While monitoring failover with OPTIONS, the applicable timer setting is applied to OPTIONS as well.</li> </ul>		
	<ul> <li>This setting cannot be changed while the V-SIPGW16 card is set to INS.</li> </ul>		
	<ul> <li>This setting cannot be changed when an additional channel is active.</li> </ul>		

### **Calling Party**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
★ Header Type	Specifies the header of the SIP message in which the caller information is stored.	From Header, P-Preferred- Identity Header	
★ From Header— User Part	Specifies the value to be stored in the username part of the SIP-URI of the From header.	User Name, Authentication ID, PBX-CLIP	
◆ From Header— SIP-URI	Specifies the complete SIP-URI address of the From header. The configuration in From Header—User Part will be invalid if this parameter is set.	Max. 100 characters	
<ul><li>★ P-Preferred- Identity Header— User Part</li></ul>	Specifies the value to be stored in the username part of the SIP-URI of the P-Preferred-Identity header.	User Name, Authentication ID, PBX-CLIP	
<ul><li>◆ P-Preferred- Identity Header— SIP-URI</li></ul>	Specifies the complete SIP-URI address of the P-Preferred-Identity header. The configuration in P-Preferred-Identity Header—User Part will be invalid if this parameter is set.	Max. 100 characters	

Name	Description	Value Range	Links
★ Number Format	Selects the format of the CLIP number to be sent to the called party.	International, +International, National	
( Remove Digit	Specifies the number of leading digits of the CLIP number to be removed. This setting is compulsory when PBX-CLIP is selected in From Header—User Part or P-Preferred-Identity Header—User Part.	0–32	
( Additional Dial	Specifies the number to be added to the CLIP number in the place of the removed digits. This setting is compulsory when PBX-CLIP is selected in From Header—User Part or P-Preferred-Identity Header—User Part.	Max. 20 digits (consisting of 0–9, *, and #)	
♠ Anonymous format in "From" header	Specifies the format of the "From" header when not sending caller ID.	Display name and SIP-URI, Display name only	
neduci		If "Display name and SIP- URI" is selected, the display name part and the SIP-URI of the "From" header will be displayed as "Anonymous". [Example] From: Anonymous <sip:anonymous@anonymo us.invalid=""> If "Display name only" is selected, only the display name part of the "From" header will be displayed as "Anonymous". [Example] From: Anonymous <sip: 1234@example.com=""></sip:></sip:anonymous@anonymo>	
◆ P-Asserted- Identity Header	Select whether to include a P-Asserted-Identity header with caller information. This header will be sent independent of the selection for  Header Type (From Header/ P-Preferred-Identity Header).	Note  • To copy values from one location to another, click Copy to.  • If the Channel Attribute setting of the port is "Additional", the setting cannot be changed.	

### **Called Party**

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
★ Number Format	Specifies the format of an incoming call number.	International, +International, National	
★ Туре	Specifies the header of the incoming SIP message in which the dialled number is stored.	Request-URI, To header	
◆ MEX - Prefix for Incoming/E.164 - Prefix for own system	Specifies the Mobile Device Access prefix for incoming calls from MEX-enabled mobile devices.	Max. 16 characters	
◆ MEX - Prefix for Outgoing/E.164 - Prefix for other system	Specifies the Mobile Device Access outgoing prefix for calls made to MEX-enabled mobile devices.	Max. 16 characters	
◆ MEX/E.164 - Additional Dial	Specifies additional digits to be inserted before the dialled number of an incoming call from a MEX-enabled mobile device.	Max. 7 digits (consisting of 0–9, *, and #)	

### Voice/FAX

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
◆ IP Codec Priority—1st, 2nd, 3rd	Specifies the priority of the codecs to be used. <b>None</b> is only available for 2nd and 3rd priorities.	G.711A, G.711Mu, G.729A, None	
◆ Packet Sampling Time (G.711A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	

Name	Description	Value Range	Links
◆ Packet Sampling Time (G.711Mu)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
◆ Packet Sampling Time (G.729A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
<ul><li>◆ Voice Activity Detection for G.</li><li>711</li></ul>	Enables the use of the Voice Activity Detection feature for the G.711 codec. This feature conserves bandwidth by detecting silent periods during a call and suppressing the packets of silence from being sent to the network.	Disable, Enable	
◆ Informed Annex B Status (G.729A)	Specifies whether to inform that Annex B for the G.729 codec is not supported.	Note  Annex B expansion features for the G.729 codec are not supported by the V-SIPGW16 card. However, it is necessary to inform some carriers of this fact to avoid having calls disconnected. Carriers can be informed by enabling this feature.	
FAX Sending Method	Specifies the method of transporting the fax signal.	G.711 Inband, T.38	
Maximum Bit Rate	Specifies the maximum bit rate of the fax signal.	No Speed Limit, 2400 bps, 4800 bps, 7200 bps, 9600 bps, 12000 bps, 14400 bps	
◆ FAX Detection Ability	Enables the use of the FAX Detection Ability feature. This feature enables end-to- end fax signal relay when the other party prefers a codec other than G.711. This feature functions only if the other party supports G.711.	Disable, Enable	
★ DTMF	Specifies the method to transport DTMF tones.	Inband, Outband (RFC2833), Outband (SIP INFO)	
Payload Type	Specifies the payload type of RFC2833 for DTMF tones.	96–127	
	Note  Manual programming is required if  DTMF is set to Outband (RFC2833).		

### RTP/RTCP

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
◆ RTP QoS Ability	Specifies the type of value to be stored in the ToS field in the IP header.	ToS, DSCP, HEX	
♦ RTP QoS-ToS Priority	Specifies the priority level in the ToS field.	0–7	
♠ RTP QoS-ToS Type	Specifies the ToS type in the ToS field.	Normal, Monetary Cost, Reliability, Throughput, Delay	
♦ RTP QoS- DSCP	Specifies the value in the ToS field by a DSCP for DiffServ.	0–63	
♦ RTP QoS-HEX	Specifies the value in the ToS field by a hexadecimal number.	00-FF	
RTCP Packet Sending Ability	Specifies whether to enable each port to send RTCP packets.	Disable, Enable	
♠ RTCP Packet Interval	Specifies the interval time until the next RTCP packet is sent.	5–60 s	
◆ Keep Alive Timer	Specifies the length of time to send Keep Alive packets for the connection. Specifying "0 s" will disable the sending of Keep Alive packets.	0 s, 10 s, 20 s, 30 s, 40 s, 50 s, 60 s	

### **T.38**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
◆ T38 FAX Max Datagram	Specifies the maximum datagram size when using the T.38 protocol.	272–512	
◆ T38 FAX UDPTL Error Correction – Redundancy	Specifies whether to enable the redundancy feature when using the T.38 protocol.	Disable, Enable	

Name	Description	Value Range	Links
◆ T38 FAX UDPTL Redundancy count for T. 30 messages	Specifies the redundancy count for T.30 messages when using the T.38 protocol.	0–7	
◆ T38 FAX UDPTL Redundancy count for data	Specifies the redundancy count for data when using the T.38 protocol.	0–3	
◆ T38 FAX Rate Management Method	Specifies the rate management method when using the T.38 protocol.	Transferred TCF, Local TCF	
◆ Reject T.38 Request from Network	Specifies whether T.38 protocol data requests are rejected or accepted.	Disable, Enable	
◆ T.38 FAX NAT Traversal	Specifies the NAT Traversal packet type when sending or receiving faxes using the T.38 protocol.	Disable, Blank UDP	

### **T.38 Option**

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
◆ T38 FAX QoS Available	Specifies the type of value to be stored in the ToS field in the IP header when using the T.38 protocol.	ToS, DSCP, HEX	
◆ T38 FAX QoS- ToS Priority	Specifies the priority level in the ToS field when using the T.38 protocol.	0–7	
◆ T38 FAX QoS- ToS Type	Specifies the ToS type in the ToS field when using the T.38 protocol.	Normal, Monetary Cost, Reliability, Throughput, Delay	
(©) T38 FAX QoS- DSCP	Specifies the value in the ToS field by a DSCP for DiffServ when using the T.38 protocol. This setting is compulsory when <b>DSCP</b> is selected in <b>T38 FAX QoS Available</b> .	0–63	
(©) T38 FAX QoS- HEX	Specifies the value in the ToS field by a hexadecimal number when using the T.38 protocol. This setting is compulsory when <b>HEX</b> is selected in <b>T38 FAX QoS Available</b> .	00-FF	

### **DSP**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
◆ Echo Canceller Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	
◆ DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	
◆ DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	
◆ EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	
♦ NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	

### **Supplementary Service**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
◆ CLIP (Receive)	Specify where caller information about an incoming call is obtained:	P-Asserted-Identity Header, From Header	
	<ul> <li>Prioritised: P-Asserted-Identity→P-Preferred-Identity→From Header</li> <li>Fixed: From Header</li> </ul>	To copy values from one location to another, click Copy to.     If the Channel Attribute setting of the port is "Additional", the setting cannot be changed.	
◆ CLIR	Specifies whether to allow restriction of the display of the CLIP number on the called party's telephone when making a SIP trunk call.	Yes, No	
★ CNIP (Send)	Specifies whether to send the caller's name to be displayed on the called party's telephone when making a SIP trunk call.	Yes, No	

Name	Description	Value Range	Links
★ CNIP (Receive)	Specifies whether to receive the caller's name to be displayed on the called party's telephone when receiving a SIP trunk call.	Yes, No	
◆ Blind Transfer(REFER)	Specifies whether to allow blind transfers using REFER.	Yes, No	
◆ Attended Transfer(REFER)	Specifies whether to allow attended transfers using REFER.	Yes, No	

### **Advanced**

Name	Description	Value Range	Links
◆ Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Diversion Header	Enable this setting to allow the specified SIP trunks to detect incoming Mobile Device Access calls from MEX-enabled mobile devices.	Disable, Enable	

## 9.12 PBX Configuration—[1-1] Configuration—Slot —V-IPGW16—Shelf Property

Common settings for all of the V-IPGW cards installed in the Virtual Shelf can be programmed.

### Main

Name	Description	Value Range	Links
Gatekeeper Available	Specifies whether to use a gatekeeper. This setting can only be changed when all V-IPGW cards are set to OUS.	Disable, Enable	
RTCP Packet Sending Ability	Specifies whether to enable the PBX to send RTCP packets.	Disable, Enable	
RTCP Packet Interval	Specifies the length of time until the PBX retries to send RTCP packets when no reply is received.	5–60 s	
RTP QoS Available	Specifies the type of value to be stored in the ToS field of the packet.	ToS, DSCP, HEX	
RTP QoS-ToS Priority	Specifies the priority level in the ToS field.	0–7	
RTP QoS-ToS Type	Specifies the ToS type in the ToS field.	Normal, Monetary Cost, Reliability, Throughput, Delay	
RTP QoS-DSCP	Specifies the value in the ToS field by a DSCP for DiffServ.	0–63	
RTP QoS-HEX	Specifies the value in the ToS field by a hexadecimal number.	00-FF	
T38 FAX QoS Available	Specifies the type of value to be stored in the ToS field in the IP header when using the T.38 protocol.	ToS, DSCP, HEX	
T38 FAX QoS- ToS Priority	Specifies the priority level in the ToS field when using the T.38 protocol.	0–7	
T38 FAX QoS- ToS Type	Specifies the ToS type in the ToS field when using the T.38 protocol.	Normal, Monetary Cost, Reliability, Throughput, Delay	
T38 FAX QoS- DSCP	Specifies the value in the ToS field by a DSCP for DiffServ when using the T.38 protocol. This setting is compulsory when DSCP is selected in T38 FAX QoS Available.	0–63	
T38 FAX QoS- HEX	Specifies the value in the ToS field by a hexadecimal number when using the T. 38 protocol. This setting is compulsory when <b>HEX</b> is selected in <b>T38 FAX QoS Available</b> .	00-FF	

Name	Description	Value Range	Links
Echo Canceller Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
QSIG-CT	Enables a call to be transferred to a destination extension at another PBX in a QSIG network.	No, Yes	Feature Manual References 4.3.4.4 Call Transfer (CT)—by QSIG
QSIG-CF	Enables a call to be forwarded to a destination extension at another PBX in a QSIG network.	No, Yes	Feature Manual References 4.3.4.3 Call Forwarding (CF)— by QSIG
Trunk Property	Indicates the networking type of each trunk.	Public, Private, VPN	

### **Outgoing Call**

Name	Description	Value Range	Links
First-digit Timer (T302-1)	Specifies the length of time within which the first digit of a dial number must be dialled after seizing a virtual IP trunk.	5–30 s	
Inter-digit Timer (T302-2)	Specifies the length of time within which subsequent digits of a dial number must be dialled.	1–10 s	
Dial End Code	Specifies the delimiter code to be used to signal the end of a dialled number.	0–9, #, *	

### **Incoming Call**

Name	Description	Value Range	Links
Voice Activity Detection for G. 711	Enables the use of the Voice Activity Detection feature for the G.711 codec. This feature conserves bandwidth by detecting silent periods during a call and suppressing the packets of silence from being sent to the network.	Disable, Enable	
Voice Codec Priority 1st	Specifies the highest priority codec type. For fax communications, it is necessary to specify <b>G.711A</b> or <b>G.711Mu</b> for this parameter.	G.711A, G.711Mu, G.729A	
Voice Codec Priority 2nd	Specifies the second highest priority codec type.	None, G.711A, G. 711Mu, G.729A	
Voice Codec Priority 3rd	Specifies the third highest priority codec type.	None, G.711A, G. 711Mu, G.729A	
Packet Sampling Time for G.711A	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Packet Sampling Time for G.711Mu	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Packet Sampling Time for G.729A	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
FAX Detection Ability	Enables the use of the FAX Detection Ability feature. Since fax signals using a codec other than G.711 cannot be received accurately at the destination, this feature automatically switches the codec to G.711 to enable end-to-end fax signal relay over the network.	Disable, Enable	PC Programming Manual References 9.12 PBX Configuration— [1-1] Configuration— Slot—V-IPGW16 —Shelf Property —Incoming Call— Voice Codec Priority 1st
FAX Sending Method	Specifies the method of transporting the fax signal.	G.711 Inband, T.38	

Name	Description	Value Range	Links
Maximum Bit Rate	Specifies the maximum bit rate of the fax signal.	No Speed Limit, 2400 bps, 4800 bps, 7200 bps, 9600 bps, 12000 bps, 14400 bps	
DTMF	Specifies the type of DTMF tone to be sent out.	Inband, Outband (RFC2833), Outband (H.245)	
Payload Type	Specifies the payload type for DTMF tones using RFC2833. Programming this parameter is only necessary if DTMF is set to Outband (RFC2833).	96–127	
T38 FAX Max Datagram	Specifies the maximum datagram size when using the T.38 protocol.	272–512	
T38 FAX UDPTL Error Correction – Redundancy	Specifies whether to enable the redundancy feature when using the T.38 protocol.	Disable, Enable	
T38 FAX UDPTL Redundancy count for T.30 messages	Specifies the redundancy count for T.30 messages when using the T.38 protocol.	0–7	
T38 FAX UDPTL Redundancy count for data	Specifies the redundancy count for data when using the T.38 protocol.	0–3	
T38 FAX Rate Management Method	Specifies the rate management method when using the T.38 protocol.	Transferred TCF, Local TCF	

### **Timer**

Name	Description	Value Range	Links
T301	Specifies the maximum time that the PBX waits for a reply after making a call.	0–18000 × 100 ms	
T302	Specifies the maximum time allowed between each digit on an incoming call. Applies to overlap receiving.	0–600 × 100 ms	
T303	Specifies the maximum time that the PBX waits for a reply after sending the SETUP (call setting) message.	0–600 × 100 ms	
T304	Specifies the maximum time allowed between each digit on an outgoing call. Applies to overlap sending.	0-3000 × 100 ms	
T305	Specifies the maximum time that the PBX waits for a reply after sending the DISC (disconnection) message.	0-3000 × 100 ms	
T308	Specifies the maximum time that the PBX waits for a reply after receiving the Release message.	0–600 × 100 ms	
T309	Specifies the length of time after which the PBX tries to disconnect the data link, before disconnecting the call.	0-3000 × 100 ms	

Name	Description	Value Range	Links
T310	Specifies the maximum time that the PBX waits for a continuance message after receiving the Incoming Call Proceeding message.	0–3000 × 100 ms	
T313	Specifies the maximum time that the PBX waits for a reply after sending the Connect message.	0–600 × 100 ms	
T316	Specifies the maximum time that the PBX waits for a reply after sending the Restart message.	0-3000 × 100 ms	
T318	Specifies the maximum time that the PBX waits for a reply after sending the Resume message.	0–600 × 100 ms	
T319	Specifies the maximum time that the PBX waits for a reply after sending the Suspend message.	0–600 × 100 ms	
T322	Specifies the maximum time that the PBX waits for a reply after sending the Status enquiry message.	0–600 × 100 ms	
T3D3	Specifies the length of time after which the PBX tries to establish L2 in "Permanent" mode.	0-3000 × 100 ms	
T3D9	Specifies the length of time after which the PBX tries to disconnect L2 in "Call by Call" mode.	0–3000 × 100 ms	

## 9.12.1 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16—Shelf Property—GK Settings

Gatekeeper registration information can be programmed.

Name	Description	Value Range	Links
Destination Number	Specifies a telephone number to register with a gatekeeper.	Max. 30 digits (consisting of 0–9)	
Device Name	Specifies the name of the device for programming reference.	Max. 20 characters	

## 9.12.2 PBX Configuration—[1-1] Configuration—Slot—Shelf Property - Virtual IP Gateway—Hunt Pattern

The related settings of hunt patterns can be programmed. The hunt pattern determines how to route incoming calls through virtual IP trunks to the PBX.

A maximum of 32 hunt patterns can be programmed.

### **Hunt Pattern 1–16**

Name	Description	Value Range	Links
Leading Number	Specifies the leading digits of dialled numbers by which to determine the call distribution port group to direct incoming calls.	Max. 30 digits (consisting of 0–9)	

Name	Description	Value Range	Links
Call Distribution Port Group—	Specifies the number of the call distribution port group to	For 1st: CDPG1–CDPG48	PC Programming Manual References
1st-16th	which incoming calls are directed in priority.	For 2nd–16th: None, CDPG1– CDPG48	9.13 PBX Configuration—[1-1] Configuration—Slot— V-IPGW16—Port Property— Call Distribution Port Group
			Feature Manual References
			4.3.2.3 Call Distribution Port Group

## 9.13 PBX Configuration—[1-1] Configuration—Slot —V-IPGW16—Port Property

Various settings can be programmed for each virtual IP Gateway port.

The **Site**, **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

### **Trunk Adaptor**

To connect to a Trunk Adaptor, follow the steps below.

- 1. Ensure that the Trunk Adaptor is connected to the network and a power supply, and that all ports to be set are OUS.
- 2. Click Trunk Adaptor. The Trunk Adaptor List screen is displayed.
- 3. Enter a name (20 characters or less) for the Trunk Adaptor in Trunk Adaptor Name.
- 4. Enter the Trunk Adaptor's IP address in Trunk Adaptor IP Address.
- 5. To confirm that the setting is correct, click CONNECT. If the setting is correct, the Trunk Adaptor's Web Maintenance Console will open in a new browser window.
  For details about the Trunk Adaptor's Web Maintenance Console, refer to the documentation of the Trunk Adaptor.

#### 6. Click OK.

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Connection Attribute	Specifies whether to connect a port to a Trunk Adaptor or use it as an IP gateway.	Gateway, Trunk Adaptor	Feature Manual References 5.3.2 Trunk Adaptor Connection
Call Distribution Port Group	Specifies a call distribution port group to which incoming trunk calls are directed through the virtual VoIP gateway port.	1–48	Feature Manual References 4.3.2.3 Call Distribution Port Group
Ringback Tone to Outside Caller	Enables the PBX to send a ringback tone to an outside caller when the network cannot send the tone.	Disable, Enable	

# 9.14 PBX Configuration—[1-1] Configuration—Slot —V-IPEXT32—Card Property

The properties of the V-IPEXT card can be specified.

Name	Description	Value Range	Links
Signalling (MGCP) UDP Port No. (IP-PT)	Indicates the UDP port used to transmit and receive MGCP (Media Gateway Control Protocol) data on the IP-PT side (reference only).	2427	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Keep Alive Time-Out	Specifies the length of time that the PBX will continue to consider an IP-PT to be active even if it receives no transmissions from that IP-PT. The PBX constantly confirms the status of IP-PTs. If no communications are received from an IP-PT for the duration specified here, the PBX considers the IP-PT to be unreachable, and sets the port status to Fault.  During operation, set between 10 s and 60 s. Settings over 60 s, and Disable, are used for debugging purposes, and IP-PTs cannot be guaranteed to function normally in these circumstances. Do not use debugging settings unless instructed to do so.  To change the value displayed here, click Common Settings and set the desired value.	Disable, 10–120 s	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
First Resending Time (PTAP)	Specifies the length of time that the PBX waits before starting to resend PTAP (Panasonic Telephony Administration Protocol) data. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	500 × n (n=1–16) ms	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Resending Time Out (PTAP)	Specifies the length of time after which the PBX terminates resending PTAP (Panasonic Telephony Administration Protocol) data. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	150–240 s	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
First Resending Time (MGCP)	Specifies the length of time that the PBX waits before starting to resend MGCP (Media Gateway Control Protocol) data. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	500 × n (n=1–8) ms	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Resending Time Out (MGCP)	Specifies the length of time after which the PBX terminates resending MGCP (Media Gateway Control Protocol) data.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.	75–120 s	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
LCD Off Timer	These setting items are downloaded to	Refer to the Web	
Brightness when colour LCD is turned off	the IP-PT.	Maintenance Console.	
Automatic switching of page for keys			
Picture display			
PT Tone volume (except the incoming call)			
NT500 Series— Echo Canceller Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	Feature Manual References
/ tollity			5.2.1 IP Proprietary Telephone (IP-PT)
NT500 Series— DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
NT500 Series— DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
NT500 Series— EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
NT500 Series— NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
NT300 Series— Echo Canceller	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	Feature Manual References
Ability			5.2.1 IP Proprietary Telephone (IP-PT)
NT300 Series— DSP Digital Gain	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	Feature Manual References
(Down)			5.2.1 IP Proprietary Telephone (IP-PT)
NT300 Series— DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
NT300 Series— EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
NT300 Series— NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo	Disable, Weak, Normal, Strong	Feature Manual References
	sound quality.		5.2.1 IP Proprietary Telephone (IP-PT)

## 9.15 PBX Configuration—[1-1] Configuration—Slot —V-IPEXT32—Port Property

Various settings can be programmed for each virtual IP extension port.

### **Exporting and Importing IP-PT registration information**

You can export/import the extension number, extension name, MAC address of the IP-PT (KX-NT series) in CSV file format.

### **IP-PT Registration and De-registration**

An IP-PT must be registered to the PBX by programming the PBX and IP-PT before it can be used.

Programming instructions for the PBX are given below.

It is possible to de-register the IP-PT later.

IP-PT Registration, De-registration, and Forced De-registration can be performed only in On-line mode.

#### Note

Registration, De-registration, and Forced De-registration cannot be performed for ports set as secondary extensions. For details, see **Secondary Setting** below.

Name	Description	Value Range	Links
Preparation	Open 28.1 Network Service—[1] IP Address/Ports—Basic Settings, and confirm that the IP addresses of the mother board and DSP card, subnet mask address, and default gateway address are set.		
Registration	Follow the steps below to register the IP-PT.		
	Connect the IP-PT to be registered to the network and, if necessary, the power supply.		
	Click Registration.     A dialogue box will appear. Non-registered (available) extension numbers and names are displayed on the left.		
	Highlight numbers and names and click the right arrow to select them for registration. Click <b>Next</b> .		
	4. Click Next.		
	5. If the registration is still in progress, the dialogue box will show "Registration Executing".  If the registration is successful, the dialogue box will show "Registration Completed". Click Close.  Once the IP-PT is successfully registered, the status of the IP-PT will update to show "Registered".		

Name	Description	Value Range	Links
De-	Follow the steps below to de-register the IP-PT.		
registration	Click <b>De-registration</b> .     A dialogue box will appear. Registered extension numbers and names are displayed on the left.		
	<ol> <li>Highlight numbers and names and click the right arrow to select them for de-registration. Click Next.</li> <li>A dialogue box will appear.</li> </ol>		
	<ol><li>Click Confirm. If the de-registration is successful, the dialogue box will show "De-registration Succeed".</li></ol>		
	4. Click Close. Once the IP-PT is successfully de-registered, the status of the IP-PT will update to show "None".		
Forced De- registration	Follow the steps below to forcibly de-register the IP-PT when normal de-registration has been unsuccessful or IP address settings have been changed or deleted only on the IP-PT.		
	Click Forced De-registration.     A dialogue box will appear. Registered extension numbers and names are displayed on the left.		
	<ol> <li>Highlight numbers and names and click the right arrow to select them for forced de-registration. Click Next.</li> <li>A dialogue box will appear.</li> </ol>		
	3. Click OK. A dialogue box will appear.		
	4. Click Confirm.  If the de-registration is successful, the dialogue box will show "Forced De-registration Succeed".		
	<ol> <li>Click Close.         Once the IP-PT is successfully de-registered, the status of the IP-PT will update to show "None".     </li> </ol>		

### Main

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

### Note

Settings for ports that have been set as secondary ports for IP extensions in the **Secondary Setting** tab cannot be changed on this screen.

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References
			5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
Extension Name	Specifies the extension name of the port.	Max. 20 characters	Feature Manual References 5.2.1 IP Proprietary
IP-PT Type	Displays the IP-PT type of the terminal that is currently connected or was connected to the port. For KX-NT265, a hyphen(-) is displayed. For IP softphone, KX-NT3xxS is displayed.		Telephone (IP-PT)
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select INS or OUS for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Status	Indicates whether a certain IP-PT is registered (reference only).	None, Registered	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
IP Phone Registration ID (MAC Address)	Specifies the MAC address of the IP-PT. This parameter can only be modified when <b>Connection</b> on this screen is set to <b>OUS</b> .	00:00:00:00:00- FF:FF:FF:FF:FF	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Current IP Address	Indicates the current IP address of the IP-PT (reference only).	1.0.0.0–223.255.255.255	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Program Ver.	Indicates the programme software file version of the IP-PT (reference only).	Version number	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)

### **Option**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References
			5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
Extension Name	Specifies the extension name of the port.	Max. 20 characters	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Headset OFF/ON	Turns on or off the use of a headset with the IP-PT.	Headset OFF, Headset ON	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
C.Waiting with Headset	When headset mode is enabled, selects whether a call waiting tone is heard through the telephone's speaker phone or the ear piece of the headset. However, this setting is available only for telephones that support both EHS headsets and waiting tone path switching. (KX-NT556, KX-NT553 only)	PT-Tone, Headset	Feature Manual References 2.10.4.2 Call Waiting Tone
Ringing Tone	Selects the dual-tone switching pattern of the ring tone for incoming calls.	A: 64 ms (697 Hz), 64 ms (852 Hz) B: 32 ms (697 Hz), 32 ms (852 Hz) C: 128 ms (697 Hz), 128 ms (852 Hz) D: 32 ms (697 Hz), 96 ms (852 Hz)	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
IP Codec Priority	Specifies the codec used for compression and decompression of transmitted data.  Some codecs may become unavailable depending on the value set here, as follows:	G.711, G.729A, G. 722	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
	<ul> <li>When G.722 is selected, the priority is G.722 → G.711 → G. 729A.</li> </ul>		
	<ul> <li>When G.711 is selected, the priority is G.711 → G.729A (G.722 is unavailable).</li> </ul>		
	<ul><li>When G.729A is selected, both G.</li><li>711 and G.722 are unavailable.</li></ul>		

Name	Description	Value Range	Links
Packet Sampling Time (G. 711/G.722)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 60 ms	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Packet Sampling Time (G. 729A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 60 ms	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Announce Mode	Specifies if the extension's built-in ANNOUNCE feature is enabled. A KX-NT265, KX-NT300 series, or KX-NT500 series phone in a remote location with ANNOUNCE enabled can provide the PBX's IP Address information to other terminals in the remote location in place of manually programming the PBX's IP address at each terminal.	Enable, Disable	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Colour LCD Design Mode	Selects the Colour LCD Design Mode.	Type 1, Type 2	
IP-PT Log Collection	Sets the IP-PT Log Collection feature to Enable (KX-NT600 series only). This item is recorded by Syslog.	Disable, Enable	PC Programming Manual References 7.3.2 Utility—Log— Syslog

### Voice

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References
	Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports below for details.		5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
Extension Name	Specifies the extension name of the port.  Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports below for details.	Max. 20 characters	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
DTMF	Specifies the type of DTMF tone to be sent out.	Inband, Outband (RFC2833)	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Payload Type	Specifies the payload type for DTMF tones using RFC2833. Programming this parameter is only necessary if <b>DTMF</b> is set to <b>Outband (RFC2833)</b> .	96–127	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)

### **Secondary Setting**

The settings on this screen are for programming the Automatic Rerouting to Secondary PBX feature for use among IP extensions in a networked environment. For details and conditions regarding the use of this feature, refer to "4.2.3.2 Automatic Rerouting to Secondary PBX" in the Feature Manual.

### **Setting Secondary Ports**

Follow the steps below to designate secondary ports for IP extensions.

- 1. Specify the secondary ports.
  - a. Access the port property screen of the site where the ports will be set as secondary ports.
  - **b.** In **Primary/Secondary**, set the unused ports that will be used as secondary ports to "Secondary".

#### **Note**

Ports that have already been registered (A value other than the default of "00:00:00:00:00:00" is set for **IP Phone Registration ID (MAC Address)** on the **Main** tab) cannot be set to "Secondary" here.

- **2.** Access the port property screen of the site where primary ports will be assigned secondary ports.
- 3. Click Set Secondary. A dialogue box will appear.
- 4. From the drop-down list, select a site where secondary ports will be assigned.

#### Note

The number displayed for **Available ports** indicates the maximum number of available ports at the selected site that can be registered as secondary ports.

**5.** Extensions' primary ports and names are displayed on the left. Select the extensions for which to want to register secondary ports, and then click the right arrow.

### **Note**

Ports that are already assigned as secondary ports will not be displayed in this list.

- 6. Click Execute. A message confirming the registration will be displayed.
- 7. Repeat steps 2–6 for each site where you want to designate secondary ports.

### **Removing Secondary Port Settings**

Follow the steps below to remove secondary port settings for IP extensions.

- 1. Click Remove Secondary. A dialogue box will appear.
- 2. Primary ports of extensions that have secondary ports assigned are displayed on the left. Select the extensions whose secondary setting you want to remove, and then click the right arrow.
- 3. Click Execute. A message confirming the setting removal will be displayed.

Name	Description	Value Range	Links
Extension Number	Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports above for details.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Extension Name	Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports above for details.	Max. 20 characters	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
Primary/ Secondary	Specifies the designation of the port as a primary port or secondary port.  Note  If an extension has been registered to the port, this setting cannot be changed from "Primary" to "Secondary". Deregister the port to change this setting.	Primary, Secondary	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Site	Indicates the site where the assigned secondary port is located (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Site number and name	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Slot	Indicates the number of the virtual card slot in the site where the assigned secondary port is located (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Virtual slot number	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Port	Indicates the port number of the assigned secondary port (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Port number	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX

### **Remote Place (Location / P2P)**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References
	Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports above for details.		5.2.1 IP Proprietary Telephone (IP-PT)

Name	Description	Value Range	Links
Extension Name	Specifies the extension name of the port.  Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports above for details.	Max. 20 characters	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select INS or OUS for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
Phone Location	Specifies the type of extension connected to the port.	Local only: The extension is located on the same network as the PBX (standard configuration).  Remote + Local: The extension is accessing the PBX remotely (use Media Relay Gateway).	Feature Manual References 5.2.1 IP Proprietary Telephone (IP-PT)
MGCP-TLS / SRTP	Specifies whether to enable the MGCP-TLS / SRTP (in case of KX-NT600 series with remote connection).  The DSP resource consumption used by the SRTP (G.711) is 1.3 times larger than the RTP (G.711).	Disable, Enable (Remote only)	
P2P Group	Specifies the peer-to-peer group of the IP-PT.	1–256	PC Programming Manual References  9.5.1 PBX Configuration— [1-1] Configuration—Slot— Site Property—Main— Main—P2P Group  Feature Manual References  5.2.3 Peer-to-Peer (P2P) Connection

Name	Description	Value Range	Links
P2P Group Name	Indicates the selected peer-to- peer group's name (reference	P2P Group Name	PC Programming Manual References
	only).		9.5.1 PBX Configuration— [1-1] Configuration—Slot— Site Property—Main— Main—P2P Group Name
			Feature Manual References
			5.2.3 Peer-to-Peer (P2P) Connection

### **NT Local Settings**

You can set the NT Local Settings from this tab. For more detail, refer to the Web Maintenance Console.

### Note

For the following settings where a connecting destination PBX is specified, IP Address or FQDN can be entered.

- Primary PBX IP Address
- Secondary PBX IP Address

# 9.16 PBX Configuration—[1-1] Configuration—Slot —V-SIPEXT32—Card Property

The properties of the virtual SIP Extension card can be specified.

To change the value displayed here, click **Common Settings** and set the desired value.

Name	Description	Value Range	Links
Echo Canceller Ability	Specifies the echo canceller ability time.	OFF, 64 ms, 128 ms	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
NLP Setting	Specifies the NLP (Non- Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

## 9.17 PBX Configuration—[1-1] Configuration—Slot —V-SIPEXT32—Port Property

Various settings can be programmed for each virtual SIP extension port.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
Forced De-	The following settings are deleted.		
registration	Password		
	SIP Phone Type		
	Current IP Address		

### Main

Name	Description	Value Range	Links
Extension Number (SIP Username)	Specifies the extension number (SIP Username) of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Password	Specifies the password used for registering a SIP Extension to the PBX. While it is possible to enter a password manually for each SIP Extension, you can copy Extension Number to Password by clicking the Copy to button. This parameter can only be modified when the virtual SIP extension port is set to OUS, and the programmer must be in Online mode.	4–16 characters (consisting of 0–9, a–z, A–Z)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
SIP Phone Type	Indicates the connected SIP phone type (reference only).	KX-HDV/TGP600 KX-NTV Mobile Softphone Other	

Name	Description	Value Range	Links
Current IP Address	Indicates the current IP address of the SIP Extension (reference	1.0.0.0–223.255.255.255	Feature Manual References
	only).		5.2.2 SIP (Session Initiation Protocol) Extension
MWI Method	Message Waiting Indications for		Feature Manual References
	SIP extensions.	Note  If "Standard" is selected, a maximum of 64 SIP extensions can be used.	2.20.1 Message Waiting 5.2.2 SIP (Session Initiation Protocol) Extension

### **Option**

Name	Description	Value Range	Links
Extension Number (SIP Username)	Specifies the extension number (SIP Username) of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Password	Specifies the password used for registering a SIP Extension to the PBX. While it is possible to enter a password manually for each SIP Extension, you can copy the value for Extension Number to Password by clicking the Copy to button. This parameter can only be modified when the virtual SIP extension port is set to OUS, and the programmer must be in On-line mode.	4–16 characters (consisting of 0–9, a–z, A–Z)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service OUS: The port is out of service Fault: The port is not communicating with the network.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Bearer	Selects the bearer mode. When <b>Automatic</b> is selected, the bearer mode is set to <b>Speech</b> automatically.	Automatic, Speech, Audio	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

Name	Description	Value Range	Links
Packet Sampling	Specifies the time interval between measurements (samples) of sound	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	Feature Manual References
Time (G. 711/G.722)	data during a conversation. The smaller this number, the higher the quality of the transmitted sound.		5.2.2 SIP (Session Initiation Protocol) Extension
Packet Sampling Time (G. 729A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

## **Remote Place (Location / P2P)**

Name	Description	Value Range	Links
Extension Number (SIP Username)	Specifies the extension number (SIP Username) of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Password	Specifies the password used for registering a SIP Extension to the PBX. While it is possible to enter a password manually for each SIP Extension, you can copy the value for Extension Number to Password by clicking the Copy to button. This parameter can only be modified when the virtual SIP extension port is set to OUS, and the programmer must be in Online mode.	4–16 characters (consisting of 0–9, a– z, A–Z)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service OUS: The port is out of service Fault: The port is not communicating with the network.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Phone Location	Specifies the type of extension connected to the port.	Local only: The extension is located on the same network as the PBX (standard configuration).  Remote + Local: The extension is accessing the PBX remotely (Media Relay Gateway).	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

Name	Description	Value Range	Links
Panasonic SIP Phone only	Enable this setting to allow only P-SIP phones connect to the PBX.  Note  This setting cannot be changed while Phone Location is set to Local only. If Phone Location is set to Remote + Local, this setting will be set to Yes (Only) automatically.	Yes (Only), No	Feature Manual References 5.2.2.4 Panasonic SIP Phones (P-SIP)
P2P Group	Specifies the peer-to-peer group.	1–256	PC Programming Manual References  9.5.1 PBX Configuration— [1-1] Configuration—Slot—Site Property—Main—Main—P2P Group  Feature Manual References  5.2.3 Peer-to-Peer (P2P) Connection
P2P Group Name	Indicates the selected peer-to-peer group's name (reference only).	P2P Group Name	PC Programming Manual References  9.5.1 PBX Configuration— [1-1] Configuration—Slot—Site Property—Main—Main—P2P Group 11.10 PBX Configuration—[3-10] Group—P2P Group  Feature Manual References  5.2.3 Peer-to-Peer (P2P) Connection

### **FAX/T.38**

Name	Description	Value Range	Links
Extension Number (SIP Username)	Specifies the extension number (SIP Username) of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

Name	Description	Value Range	Links
Password	Specifies the password used for registering a SIP Extension to the PBX. While it is possible to enter a password manually for each SIP Extension, you can copy the value for Extension Number to Password by clicking the Copy to button. This parameter can only be modified when the virtual SIP extension port is set to OUS, and the programmer must be in On-line mode.	4–16 characters (consisting of 0–9, a– z, A–Z)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service OUS: The port is out of service Fault: The port is not communicating with the network.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
FAX Detection Ability	Enables the use of the FAX Detection Ability feature.	Disable, Enable	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
FAX Sending Method	Specifies the method of transporting the fax signal.	G.711 Inband, T.38	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Maximum Bit Rate	Specifies the maximum bit rate of the fax signal.	No Speed Limit, 2400 bps, 4800 bps, 7200 bps, 9600 bps, 12000 bps, 14400 bps	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
T38 FAX Max Datagram	Specifies the maximum datagram size when using the T. 38 protocol.	272–512	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
T38 FAX UDPTL Error Correction – Redundancy	Specifies whether to enable the redundancy feature when using the T.38 protocol.	Disable, Enable	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

Name	Description	Value Range	Links
T38 FAX UDPTL Redundancy	Specifies the redundancy count for T.30 messages when using	0–7	Feature Manual References
count for T.30 messages	the T.38 protocol.		5.2.2 SIP (Session Initiation Protocol) Extension
T38 FAX UDPTL Redundancy count for data	Specifies the redundancy count for data when using the T.38 protocol.	0–3	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
T38 FAX Rate Management	Specifies the rate management method when using the T.38	Transferred TCF, Local TCF	Feature Manual References
Method	protocol.		5.2.2 SIP (Session Initiation Protocol) Extension

# 9.18 PBX Configuration—[1-1] Configuration—Slot —V-IPCS4—Card Property

The properties of the V-IPCS card can be specified.

Name	Description	Value Range	Links
Signalling (PTAP) UDP Port No. (Server)	Specifies the UDP port used by the V-IPCS card to transmit and receive PTAP (Panasonic Telephony Administration Protocol) data. This must be changed if another network application is using the same port.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.		
Signalling (MGCP) UDP Port No. (Server)	Specifies the UDP port used by the V-IPCS card to transmit and receive MGCP (Media Gateway Control Protocol) data. This must be changed if another network application is using the same port.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.	1024– 65535	
Signalling (MGCP) UDP Port No. (IP- CS)	Indicates the UDP port used to transmit and receive MGCP (Media Gateway Control Protocol) data on the IP-CS side (reference only).	2427	
Voice (RTP) UDP Port No. (IP-CS)	Specifies the UDP port used to transmit and receive RTP (Real-time Transfer Protocol) data on the IP-CS side. This must be changed if another network application is using the same port. For voice communications, an IP-CS uses 128 contiguous UDP ports, starting from the port number specified here. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	1024– 65024	
Keep Alive Time-Out	Specifies the length of time that the PBX will continue to consider an IP-CS to be active even if it receives no transmissions from that IP-CS. The PBX constantly confirms the status of IP-CSs. If no communications are received from an IP-CS for the duration specified here, the PBX considers the IP-CS to be unreachable, and sets the port status to <b>Fault</b> . During operation, set between 10 s and 60 s. Settings over 60 s, and <b>Disable</b> , are used for debugging purposes, and IP-CSs cannot be guaranteed to function normally in these circumstances. Do not use debugging settings unless instructed to do so. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	Disable, 10–120 s	
First Resending Time (PTAP)	Specifies the length of time that the PBX waits before starting to resend PTAP (Panasonic Telephony Administration Protocol) data.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.	500 × n (n=1–16) ms	

Name	Description	Value Range	Links
Resending Time Out (PTAP)	Specifies the length of time after which the PBX terminates resending PTAP (Panasonic Telephony Administration Protocol) data.  To change the value displayed here, click <b>Common Settings</b> and set the desired value.	150–240 s	
First Resending Time (MGCP)	Specifies the length of time that the PBX waits before starting to resend MGCP (Media Gateway Control Protocol) data. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	500 × n (n=1–8) ms	
Resending Time Out (MGCP)	Specifies the length of time after which the PBX terminates resending MGCP (Media Gateway Control Protocol) data. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	75–120 s	
CS Repeater Mode	Specifies the CS Repeater Mode setting. If <b>Normal</b> is selected, DECT communication will not be encrypted. To change the value displayed here, click <b>Common Settings</b> and set the desired value.	Normal, Optional	

## 9.19 PBX Configuration—[1-1] Configuration—Slot —V-IPCS4—Port Property

Various settings can be programmed for each virtual IP-CS port.

### **IP-CS** Registration and De-registration

An IP-CS must be registered to the PBX by programming the PBX and IP-CS before it can be used. Programming instructions for the PBX are given below.

It is possible to de-register the IP-CS later.

IP-CS Registration, De-registration, and Forced De-registration can be performed only in On-line mode.

#### **Note**

Registration, De-registration, and Forced De-registration cannot be performed for ports set as secondary IP-CSs. For details, see **Secondary Setting** below.

Name	Description	Value Range	Links
Preparation	Open 28.1 Network Service—[1] IP Address/Ports—Basic Settings, and confirm that the IP addresses of the mother board and DSP card, subnet mask address, and default gateway address are set.		
Registration	Follow the steps below to register the IP-CS.		
	Connect the IP-CS to be registered to the network and, if necessary, the power supply.		
	Click Registration.     A dialogue box will appear. Non-registered (available) IP-CSs are displayed on the left.		
	Highlight IP-CSs and click the right arrow to select them for registration. Click <b>Next</b> .		
	4. If the registration is still in progress, the dialogue box will show "Registration Executing".  If the registration is successful, the dialogue box will show "Registration Completed". Click Close.  Once the IP-CS is successfully registered, the status of the IP-CS will update to show "Registered".		
De-	Follow the steps below to de-register the IP-CS.		
registration	Click <b>De-registration</b> .     A dialogue box will appear. Registered IP-CSs are displayed on the left.		
	Highlight IP-CSs and click the right arrow to select them for deregistration. Click <b>Next</b> .     A dialogue box will appear.		
	3. Click Confirm.  If the de-registration is successful, the dialogue box will show "Deregistration Succeed".		
	4. Click Close. Once the IP-CS is successfully de-registered, the status of the IP-CS will update to show "None".		

Name	Description	Value Range	Links
Forced De- registration	Follow the steps below to forcibly de-register the IP-CS when normal de-registration has been unsuccessful or IP address settings have been changed or deleted only on the IP-CS.		
	Click Forced De-registration.     A dialogue box will appear. Registered IP-CSs are displayed on the left.		
	<ol> <li>Highlight IP-CSs and click the right arrow to select them for forced de-registration. Click Next.</li> <li>A dialogue box will appear.</li> </ol>		
	3. Click OK. A dialogue box will appear.		
	4. Click Confirm.  If the de-registration is successful, the dialogue box will show "Forced De-registration Succeed".		
	<ol> <li>Click Close.</li> <li>Once the IP-CS is successfully de-registered, the status of the IP-CS will update to show "None".</li> </ol>		

### Main

Name	Description	Value Range	Links
CS Name	Specifies the CS name of the port.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Status	Indicates whether a certain IP-CS is registered (reference only).	None, Registered	
Channel expansion	Specifies whether to expand the number of channels for the IP-CS. This setting is available only for KX-NS0154 IP-CSs. This setting will be greyed out if the IP-CS's port is not set to OUS, or a non-supported type of IP-CS (e.g., KX-NCP0158) is connected to the port.	For KX-NS0154: Yes, No For other IP-CSs: - (hyphen)	
MAC Address	Indicates the MAC address of the IP-CS (reference only).	00:00:00:00:00:00- FF:FF:FF:FF:FF	
Current IP Address	Indicates the current IP address of the IP-CS (reference only).	1.0.0.0– 223.255.255.255	

Name	Description	Value Range	Links
Program Ver.	Indicates the programme software file version of the IP-CS (reference only).	Version number	
Air Sync Group No	Assigns an Air Synchronisation Group number to the IP-CS. This setting is available only if the	None, 1–16	PC Programming Manual References
	IP-CS's port is set to OUS.		19.2.1 PBX Configuration— [11-2-1] Maintenance —CS Synchronisation—Air Synchronisation
LAN Sync Group No.	Specifies the LAN sync group number when using an IP-CS (KX-NS0154 only) in a LAN sync group. A maximum of 64 IP-CSs can be assigned to one group. This setting is available only if the IP-CS's port is set to OUS.	None, 1–16	PC Programming Manual References  19.2.2 PBX Configuration— [11-2-2] Maintenance —CS Synchronisation— LAN Synchronisation 19.2.3 PBX Configuration— [11-2-3] Maintenance —CS Synchronisation— LAN Sync Group Setting

## **Option**

Name	Description	Value Range	Links
CS Name	Specifies the CS name of the port.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
IP Codec Priority	Specifies the codec used for compression and decompression of transmitted data.	G.711, G.729A	
Packet Sampling Time (G.711)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	

Name	Description	Value Range	Links
Packet Sampling Time (G.729A)	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms, 50 ms, 60 ms	
Voice Activity Detection for G. 711	Enables the use of the Voice Activity Detection feature for the G.711 codec. This feature conserves bandwidth by detecting silent periods during a call and suppressing the packets of silence from being sent to the network.	Disable, Enable	
Announce Mode	Specifies if the IP-CS's (KX-NS0154 only) built-in ANNOUNCE feature is enabled. An IP-CS (KX-NS0154 only) in a remote location with ANNOUNCE enabled can provide the PBX's IP Address information to other terminals in the remote location in place of manually programming the PBX's IP address at each terminal.	Disable, Enable	

### **Secondary Setting**

The settings on this screen are for programming the Automatic Rerouting to Secondary PBX feature for use among IP-CSs (KX-NS0154 only) in a networked environment. For details and conditions regarding the use of this feature, refer to "4.2.3.2 Automatic Rerouting to Secondary PBX" in the Feature Manual.

### **Setting Secondary Ports**

Follow the steps below to designate secondary ports for IP-CSs.

- 1. Specify the secondary ports.
  - **a.** Access the port property screen of the site where the ports will be set as secondary ports.
  - **b.** In **Primary/Secondary**, set the unused ports that will be used as secondary ports to "Secondary".

#### Note

Ports that have already been registered (A value other than the default of "00:00:00:00:00:00" is set for **MAC Address** on the **Main** tab) cannot be set to "Secondary" here.

- 2. Access the port property screen of the site where primary ports will be assigned secondary ports.
- 3. Click Set Secondary. A dialogue box will appear.
- 4. From the drop-down list, select a site where secondary ports will be assigned.

#### **Note**

The number displayed for **Available ports** indicates the maximum number of available ports at the selected site that can be registered as secondary ports.

**5.** IP-CSs' primary ports and names are displayed on the left. Select the IP-CSs for which to want to register secondary ports, and then click the right arrow.

#### Note

Ports that are already assigned as secondary ports will not be displayed in this list.

- **6.** Click **Execute**. A message confirming the registration will be displayed.
- 7. Repeat steps 2–6 for each site where you want to designate secondary ports.

### **Removing Secondary Port Settings**

Follow the steps below to remove secondary port settings for IP-CSs.

- 1. Click Remove Secondary. A dialogue box will appear.
- 2. Primary ports of IP-CSs that have secondary ports assigned are displayed on the left. Select the IP-CSs whose secondary setting you want to remove, and then click the right arrow.
- 3. Click **Execute**. A message confirming the setting removal will be displayed.

Name	Description	Value Range	Links
CS Name	Specifies the IP-CS (KX-NS0154 only) name of the port.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Primary/ Secondary	Specifies the designation of the port as a primary port or secondary port.	Primary, Secondary	Feature Manual References
	Note  If an IP-CS has been registered to the port, this setting cannot be changed from "Primary" to "Secondary". Deregister the port to change this setting.		4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Site	Indicates the site where the assigned secondary port is located (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Site number and name	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Slot	Indicates the slot number of the assigned secondary port (reference only).	Slot number	Feature Manual References
	Note  A value will be displayed here only after the Set Secondary command has been executed (see above).		4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Port	Indicates the port number of the assigned secondary port (reference only).	Port number	Feature Manual References
	Note  A value will be displayed here only after the Set Secondary command has been executed (see above).		4.2.3.2 Automatic Rerouting to Secondary PBX

## **Remote Place**

Name	Description	Value Range	Links
CS Name	Specifies the IP-CS (KX-NS0154 only) name of the port.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.6 IP-CS (KX-NS0154)
Phone Location	Specifies the location of IP-CS (KX-NS0154 only) connected to the port.	Local: The IP-CS is located on the same network as the PBX (standard configuration). Remote (MRG): The IP-CS is accessing the PBX remotely (use Media Relay Gateway).	Feature Manual References 5.2.6 IP-CS (KX-NS0154)

# 9.20 PBX Configuration—[1-1] Configuration—Slot —V-UTEXT32—Card Property

Various settings can be programmed for V-UTEXT32 cards. Click **Common Settings** to change these settings.

#### Main

Name	Description	Value Range	Links
Echo Cancellation Ability	Specifies the echo canceller ability time.	OFF, 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128 ms	
DSP Digital Gain (Down)	Specifies the DSP Digital Gain for the down voice path.	-14–6 dB	
DSP Digital Gain (Up)	Specifies the DSP Digital Gain for the up voice path.	-14–6 dB	
EC Gain	Specifies the Echo Canceller Gain.	-14–6 dB	
NLP Setting	Specifies the NLP (Non-Linear Processor) setting to control echo sound quality.	Disable, Weak, Normal, Strong	
PERIODIC Inform	Specifies whether alive monitoring is performed for connected extensions.	Enable, Disable	
PERIODIC Inform Interval	Specifies the polling interval for alive monitoring when <b>PERIODIC Inform</b> is set to "Enable".	30–3600 s	
INFORM retransmission counter	Specifies the number of times the PERIODIC Inform is sent for extensions when attempting to establish a connection.	2–10 times	
NTP Query Interval	Specifies the interval at which connected extensions poll the specified NTP server for a time update.	1–24 hours	
Failover Timer (For S-PS/SIP-CS)	Specifies the time period after which a SIP- CS that cannot connect to its primary PBX will re-route to its assigned secondary PBX.	0–64 s	Feature Manual References
	Note		4.2.3.2 Automatic
	For SIP-CSs, primary PBX and secondary PBX settings must be made through the Web programming interface of the Master SIP-CS or through configuration file programming. For details, refer to the documentation of the SIP-CS.		Rerouting to Secondary PBX

## 9.21 PBX Configuration—[1-1] Configuration—Slot —V-UTEXT32—Port Property

Various settings can be programmed for the ports of V-UTEXT32 cards.

### KX-UT Series SIP Phone, S-PS, and SIP-CS Registration and De-registration

A KX-UT series SIP phone, S-PS, or SIP-CS must be registered to the PBX by programming the PBX and SIP phone, S-PS, or SIP-CS before it can be used.

Programming instructions for the PBX are given below.

It is possible to de-register the SIP phone, S-PS, or SIP-CS later.

Registration, De-registration, and Forced De-registration can be performed only in On-line mode.

#### Note

Registration, De-registration, and Forced De-registration cannot be performed for ports set as secondary extensions. For details, see **Secondary Setting** below.

Name	Description	Value Range	Links
Preparation	Open 28.1 Network Service—[1] IP Address/Ports—Basic Settings, and confirm that the IP addresses of the mother board and DSP card, subnet mask address, and default gateway address are set.		
Registration	Follow the steps below to register a SIP phone.		
	<ol> <li>Connect the device to be registered to the network and, if necessary, the power supply.</li> </ol>		
	Click Registration.     A dialogue box will appear. Non-registered (available) extension numbers and names are displayed on the left.		
	<ol><li>Highlight numbers and names and click the right arrow to select them for registration. Click Next.</li></ol>		
	4. Click Next.		
	5. If the registration is still in progress, the dialogue box will show "Registration Executing".  If the registration is successful, the dialogue box will show "Registration Completed". Click Close.  Once the device is successfully registered, the status of the device will update to show "Registered".		
	Note		
	S-PSs and SIP-CSs will be automatically registered to the PBX after settings have been made via CS web programming for the Super Master CS. For details, refer to the documentation for the SIP-CS.		

Name	Description	Value Range	Links
De-	Follow the steps below to de-register a SIP phone, S-PS, or SIP-CS.		
registration	Click <b>De-registration</b> .     A dialogue box will appear. Registered extension numbers and names are displayed on the left.		
	Highlight numbers and names and click the right arrow to select them for de-registration. Click <b>Next</b> .     A dialogue box will appear.		
	Click Confirm.     If the de-registration is successful, the dialogue box will show "Deregistration Succeed".		
	Click Close.     Once the device is successfully de-registered, the status of the device will update to show "None".		
Forced De- registration	Follow the steps below to forcibly de-register a SIP phone, S-PS, or SIP-CS when normal de-registration has been unsuccessful or IP address settings have been changed or deleted only on the target device.		
	Click Forced De-registration.     A dialogue box will appear. Registered extension numbers and names are displayed on the left.		
	Highlight numbers and names and click the right arrow to select them for forced de-registration. Click <b>Next</b> .     A dialogue box will appear.		
	3. Click OK. A dialogue box will appear.		
	4. Click Confirm.  If the de-registration is successful, the dialogue box will show "Forced De-registration Succeed".		
	Click Close.     Once the device is successfully de-registered, the status of the device will update to show "None".		
SIP-CS Web	To access the system's Super Master CS for related programming, click <b>SIP-CS Web</b> . The CS Web login screen will open in your web browser.		
	Note		
	For this button to be enabled, you must specify the URL of the Super Master CS on the <b>Utility—CS-Web Connection</b> screen. See <b>7.12 Utility—CS-Web Connection</b> .		

### Main

Note

Settings for ports that have been set as secondary ports for IP extensions in the **Secondary Setting** tab cannot be changed on this screen.

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Extension Name	Specifies the extension name of the port.	Max. 20 characters	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Telephone Type	Specifies the connected device type.  Note  This setting cannot be changed if a device has already been registered for the port. De-register the device set for the port before changing the setting.  To change this setting when programming in Off-line mode, and a device is already registered to the port, change the setting of IP Phone Registration ID (MAC Address) for the port to "00:00:00:00:00:00", and then click Apply. The setting can then be changed.	UT: A KX-UT series SIP phone is connected. S-PS: A SIP Portable Station phone is connected. SIP-CS: A SIP Cell Station is connected. Master-CS: A SIP Master Cell Station is connected.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Password	Specifies the password used for registering a SIP phone, S-PS, or SIP-CS to the PBX. This parameter can only be modified when the virtual SIP extension port is set to OUS.	4–16 characters (consisting of 0–9, a–z, A–Z)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension

Name	Description	Value Range	Links
Status	Indicates whether a certain SIP phone, S-PS, or SIP-CS is registered (reference only).	None, Registered	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
IP Phone Registration ID (MAC Address)	Specifies the MAC address of the SIP phone, S-PS, or SIP-CS. This parameter can only be modified when <b>Connection</b> on this screen is set to <b>OUS</b> .	00:00:00:00:00- FF:FF:FF:FF:FF:FF Note  For S-PSs and SIP-CSs, this value will be "FF:FF:FF:FF:FF:FF.	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Current IP Address	Indicates the current IP address of the SIP phone, S-PS, or SIP-CS (reference only).	1.0.0.0–223.255.255.255	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
Program Ver.	Indicates the programme software file version of the SIP phone (reference only).  Note  Software file version numbers are not displayed for S-PSs or SIP-CSs.	Version number	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
P2P Group	Specifies the peer-to-peer group.	1–256	PC Programming Manual References 11.10 PBX Configuration— [3-10] Group—P2P Group Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection

Name	Description	Value Range	Links
P2P Group Name	Indicates the selected peer-to-peer group's name (reference only).	P2P Group Name	PC Programming Manual References
			11.10 PBX Configuration— [3-10] Group—P2P Group
			Feature Manual References
			5.2.3 Peer-to-Peer (P2P) Connection

## **Option**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the extension name of the port.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
System Speed Dial Download	Specifies if the connected SIP phone will download system speed dial entries from the PBX.	Enable, Disable	PC Programming Manual References 9.4 PBX Configuration— [1-1] Configuration —Slot—System Property—Main— System Speed Dial Download For UT Extensions
SIP QoS-DSCP	Specifies the value in the ToS field by a DSCP for DiffServ.	0–63	
RTP QoS-DSCP	Specifies the value in the ToS field by a DSCP for DiffServ.	0–63	

Name	Description	Value Range	Links
UT Codec Priority - 1st— UT Codec Priority - 4th	Specifies the priority of the codecs to be used. <b>None</b> is only available for 2nd, 3rd, and 4th priorities.	G.722, G711A, G. 729A, G711Mu, None	
Packet Sampling Time	Specifies the time interval between measurements (samples) of sound data during a conversation. The smaller this number, the higher the quality of the transmitted sound.	20 ms, 30 ms, 40 ms	
Jitter Buffer - Maximum Delay	Specifies the maximum size of the jitter buffer for voice communications.	3–50 ms	
Jitter Buffer - Minimum Delay	Specifies the minimum size of the jitter buffer for voice communications.	1–2 ms	
Jitter Buffer - Initial Delay	Specifies the initial size of the jitter buffer for voice communications.	1–7 ms	
Gain Type	Specifies the type of gain file to distribute to connected SIP devices.	Default, Type1, Type2, Type3	

### **Secondary Setting**

The settings on this screen are for programming the Automatic Rerouting to Secondary PBX feature for use among IP extensions in a networked environment. For details and conditions regarding the use of this feature, refer to "4.2.3.2 Automatic Rerouting to Secondary PBX" in the Feature Manual.

#### **Setting Secondary Ports**

Follow the steps below to designate secondary ports for IP extensions.

- 1. Specify the secondary ports.
  - a. Access the port property screen of the site where the ports will be set as secondary ports.
  - b. In Primary/Secondary, set the unused ports that will be used as secondary ports to "Secondary".

#### **Note**

Ports that have already been registered (A value other than the default of "00:00:00:00:00:00" is set for **IP Phone Registration ID (MAC Address)** on the **Main** tab) cannot be set to "Secondary" here.

- 2. Access the port property screen of the site where primary ports will be assigned secondary ports.
- 3. Click Set Secondary. A dialogue box will appear.
- 4. From the drop-down list, select a site where secondary ports will be assigned.

#### Note

The number displayed for **Available ports** indicates the maximum number of available ports at the selected site that can be registered as secondary ports.

**5.** Extensions' primary ports and names are displayed on the left. Select the extensions for which to want to register secondary ports, and then click the right arrow.

#### Note

Ports that are already assigned as secondary ports will not be displayed in this list.

- 6. Click Execute. A message confirming the registration will be displayed.
- **7.** Repeat steps **2–6** for each site where you want to designate secondary ports.

### **Removing Secondary Port Settings**

Follow the steps below to remove secondary port settings for IP extensions.

- 1. Click Remove Secondary. A dialogue box will appear.
- 2. Primary ports of extensions that have secondary ports assigned are displayed on the left. Select the extensions whose secondary setting you want to remove, and then click the right arrow.
- 3. Click Execute. A message confirming the setting removal will be displayed.

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Extension Number	Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports above for details.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the extension name of the port.  Note  This setting cannot be changed on this screen until the port has been assigned as a secondary port using the Set Secondary command. See Setting Secondary Ports above for details.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Primary/ Secondary	Specifies the designation of the port as a primary port or secondary port.  Note  If an extension has been registered to the port, this setting cannot be changed from "Primary" to "Secondary". De-register the port to change this setting.	Primary, Secondary	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX

Name	Description	Value Range	Links
Pair Site	Indicates the site where the assigned secondary port is located (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Site number and name	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Slot	Indicates the number of the virtual card slot in the site where the assigned secondary port is located (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Virtual slot number	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX
Pair Port	Indicates the port number of the assigned secondary port (reference only).  Note  A value will be displayed here only after the Set Secondary command has been executed (see above).	Port number	Feature Manual References 4.2.3.2 Automatic Rerouting to Secondary PBX

### **Remote Place**

The settings on this screen are for programming the Simple Remote Connection feature for connecting SIP phones in remote locations to the PBX. For details and conditions regarding the use of this feature, refer to "5.2.2.3 Simple Remote Connection" in the Feature Manual.

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the extension name of the port.	Max. 20 characters	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	

Name	Description	Value Range	Links
Phone Location	Specifies the type of extension connected to the port.	Local: The extension is located on the same network as the PBX (standard configuration). Remote (SBC): The extension is accessing the PBX remotely (Simple Remote Connection). Remote (MRG): The extension is accessing the PBX remotely (use Media Relay Gateway).	Feature Manual References 5.2.2.3 Simple Remote Connection
Web-MC Ability	Specifies whether the Web programming is allowed on the KX-UT series SIP phone connected to the port by enabling the Web port setting on the phone's menu. For details about Web programming for KX-UT series SIP phones, refer to the documentation of the phone.	Enable, Disable	Feature Manual References 5.2.2.3 Simple Remote Connection
Protocol for Remote SIP- MLT	Specifies the protocol to use for remote SIP phone data communication. HTTPS is strongly recommended for remote SIP-MLT connections.	Note  A total of 20 HTTPS connections can be set per PBX site. If "HTTPS" is selected but the total number of HTTPS connections available at the site will be exceeded by changing this setting, a warning message will be displayed and the setting change will be cancelled.	Feature Manual References 5.2.2.3 Simple Remote Connection

# 9.22 PBX Configuration—[1-1] Configuration—Slot — SLC2 - Card Property

The property for the extension cards can be specified.

Name	Description	Value Range	Links
SLT Pulse Dial Mode	Selects the type of pulse dial transmission appropriate to your area.	Normal, Sweden, New Zealand	
SLT Off Hook Time	Specifies the minimum length that a pulse dial sent from an SLT must be for the PBX to recognise it as an off-hook signal.	8 × n (n=3–255) ms	
SLT Off Hook Guard Time	Specifies the length of guard time used for off-hook signals from SLTs, to prevent the PBX mistaking them for pulse dials.	8 × n (n=12–63) ms	
SLT Pulse Maximum Break Width	Specifies the maximum length of the break signal in a pulse dial.	8 × n (n=9–20) ms	
SLT Pulse Minimum Make Width	Specifies the minimum length of the make signal in a pulse dial.	8 × n (n=1–5) ms	
SLT Flash Detection	Enables the PBX to detect the flash signal sent when an SLT user presses the hookswitch or the Flash/Recall button.	Disable: The PBX disconnects the line to prevent placing the call on hold. Enable: The PBX places the call on consultation hold.	Feature Manual References 2.13.3 Call Splitting
Flash Timing - Min.	Specifies the minimum length that a signal sent from an SLT must be for the PBX to recognise it as a hookswitch flash signal.	8 × n (n=3–63) ms	
Flash Timing - Range	Specifies the maximum length that a signal sent from an SLT can be for the PBX to recognise it as a hookswitch flash signal.	8 × n (n=3–191) ms	
DTMF-R STD Detection Time	Specifies the minimum length that a DTMF tone must be for the PBX to recognise it as a DTMF tone.	2 × n (n=1–31) ms	
Hook Threshold PD A-law	Specifies the current threshold (A-law) for switching from Power Save mode to an active state. Please consult the seller where you purchased this PBX for more information.	1.5–4.0 mA	
Hook Threshold PD Mu-law	Specifies the current threshold (µ-law) for switching from Power Save mode to an active state. Please consult the seller where you purchased this PBX for more information.	1.5–4.0 mA	

# 9.23 PBX Configuration—[1-1] Configuration—Slot—SLC2 - Port Property

Various settings can be programmed for each extension port.

To view the total number of each type of extension connected, click **Port Type View**.

The Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

#### Note

Other programming items that are displayed on this screen but not listed below are used only when programming extensions connected to a legacy gateway (KX-TDE/KX-NCP/KX-TDA PBX). For additional information about programming items not described here, refer to the PC Programming Manual of the legacy gateway PBX.

For information about legacy gateways, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**.

Name	Description	Value Range	Links
Port Type	Indicates the port type (reference only).	SLT: SLT port (SLC)	
Telephone Type	Indicates the connected telephone type (reference only).	SLT: SLT is connected (or no telephone is connected to the SLT port).	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the PBX.	
Extension Number	Specifies the extension number of the port.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the extension name of the port.	Max. 20 characters	

# 9.24 PBX Configuration—[1-1] Configuration—Slot —Card Property - LCO type

The properties of the analogue trunk cards can be specified.

Name	Description	Value Range	Links
Outgoing Guard Time	Specifies the length of time after a trunk is disconnected, during which the PBX cannot seize the line.	3–6 s	
First Dial Timer (CO)	Specifies the minimum time that the PBX waits after seizing a trunk, before sending the dialled digits to the telephone company. This allows the telephone company to have enough time to accept the dialled digits correctly.	0.5 × n (n=1– 16) s	
CO Feed Back Tone	Specifies whether the pulse feedback tone is turned on or not. For outgoing trunk calls, audible tones can be heard as the dialled number is sent out, which informs the extension user that the number has been dialled.	No, Yes	
Bell Detection—Bell Start Detection Timer	Specifies the minimum length of a bell signal that can be recognised by the PBX as the bell signal sent from the telephone company, before the PBX detects an arriving call.	24 × n (n=1– 50) ms	
Bell Detection—Bell Off Detection Timer	Specifies the duration of the bell off detection timer. If the PBX receives no bell signal from the telephone company for the length of time specified here, the PBX treats the call as lost.	1.0 s–15.0 s	
Pulse / DTMF Dial— DTMF Inter-digit Pause	Specifies the length of the DTMF inter-digit pause. This allows the telephone company to have enough time to accept the dialled digits correctly.	64 + 16 × n (n=0–11) ms	
Pulse / DTMF Dial— Pulse Inter-digit Pause	Specifies the length of the pulse inter-digit pause. This allows the telephone company to have enough time to accept the dialled digits correctly.	630 ms, 830 ms, 1030 ms	

Name	Description	Value Range	Links
Low Speed Pulse Dial—Pulse % Break	Specifies the % break for a low speed pulse dial. This is the ratio between the break (on-hook) signal and make (off-hook) signal in a pulse dial.	Other, 60%, 67%	PC Programming Manual References 9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port
Low Speed Pulse Dial—Break Width	Specifies the maximum length of the break signal in a low speed pulse dial. Low Speed Pulse Dial-Pulse % Break on this screen determines the value that can be specified here.	20 + (4 × n) (n=1–15) ms	PC Programming Manual References 9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port
Low Speed Pulse Dial—Make Width	Specifies the minimum length of the make signal in a low speed pulse dial. Low Speed Pulse Dial-Pulse % Break on this screen determines the value that can be specified here.	4 × n (n=3–15) ms	PC Programming Manual References 9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port
High Speed Pulse Dial—Pulse % Break	Specifies the % break for a high speed pulse dial. This is the ratio between the break (on-hook) signal and make (off-hook) signal in a pulse dial.	Other, 60 %, 67 %	PC Programming Manual References  9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port
High Speed Pulse Dial—Break Width	Specifies the maximum length of the break signal in a high speed pulse dial. High Speed Pulse Dial-Pulse % Break on this screen determines the value that can be specified here.	12+ (4 × n) (n=1–15) ms	PC Programming Manual References  9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port
High Speed Pulse Dial—Make Width	Specifies the minimum length of the make signal in a high speed pulse dial. High Speed Pulse Dial-Pulse % Break on this screen determines the value that can be specified here.	4 × n (n=3–15) ms	PC Programming Manual References 9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port
Pulse Type	Selects the type of pulse dial transmission appropriate to your area.	Normal, Sweden, New Zealand	

Name	Description	Value Range	Links
Option Card Equipment—Option 1 and Option 2	Indicates the type of the card that is installed on the LCOT card (reference only).	None, Caller ID Card, Pay Tone Card	PC Programming Manual References 9.25 PBX Configuration —[1-1] Configuration— Slot—Port Property - LCO Port—Caller ID Detection
			Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID Signalling	Selects the type of Caller ID signalling provided by the telephone company.	FSK, FSK (with Visual Caller ID), DTMF	Feature Manual References 2.19.1 Caller ID
Caller ID—Max Receive Time	Specifies the maximum number of Caller ID series that are sent from the network.	0 (no limit), 1, 2, 3	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (FSK) Carrier Detection	Enables the PBX to detect the carrier when receiving Caller ID. To enable this setting, Caller ID—Caller ID Signalling on this screen should be set to FSK.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (FSK) END Detection	Selects the method used to detect the end of Caller ID information.	Length + Timer, Timer	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (FSK) Header Examination	Enables the PBX to check the header of received Caller ID information. To enable this setting, Caller ID—Caller ID Signalling on this screen should be set to FSK.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (FSK) Detection Start Timer	Specifies the length of time that the PBX waits before attempting to detect Caller ID information, after receiving a call. To enable this setting, Caller ID—Caller ID Signalling on this screen should be set to FSK.	None, 80 × n (n=1–15) ms	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (FSK) Detection Timer	Specifies the total time required by the PBX to detect Caller ID information. To enable this setting, Caller ID—Caller ID Signalling on this screen should be set to FSK.	1040 + (80 × n) (n=0–37) ms	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (DTMF) Start Code 1 and Start Code 2	Selects the DTMF code used to detect the beginning of a Caller ID series. Start Code 1 is prior to Start Code 2.	None, *, #, A, B, C, D	Feature Manual References 2.19.1 Caller ID

Name	Description	Value Range	Links
Caller ID—Caller ID (DTMF) Information Start Code	Selects the DTMF code used to detect the beginning of the information segment of a Caller ID series.	None, *, #, A, B, C, D	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (DTMF) End Code	Selects the DTMF code used to detect the end of a Caller ID series.	None, *, #, A, B, C, D	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID (DTMF) Information Code-PRIVATE, OUT OF AREA, TECHNICAL REASON, UNKNOWN NUMBER, RESTRICTED NUMBER	Specifies the number used to identify each type of information code.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 2.19.1 Caller ID
Caller ID—Caller ID Header[03]	Selects the type of the 3rd header in a Caller ID signal.	DDN, Caller ID	Feature Manual References 2.19.1 Caller ID
Pay Tone—Pay Tone Frequency	Selects the frequency of the pay tone appropriate to your telephone company.	12 KHz, 16KHz	Feature Manual References 2.22.3 Call Charge Services
Pay Tone—Pay Tone Gain	Specifies the signal strength of the pay tone.	0–31 dB	Feature Manual References 2.22.3 Call Charge Services
Pay Tone—Pay Tone Pulse - MIN	Specifies the minimum length that a received pay tone signal must be for the PBX to recognise it as a pay tone signal.	8 × n (n=1– 250) ms	Feature Manual References 2.22.3 Call Charge Services
Pay Tone—Pay Tone Pulse - MAX	Specifies the maximum length that a received pay tone signal can be for the PBX to recognise it as a pay tone signal.	None, 8 × n (n=1–250) ms	Feature Manual References 2.22.3 Call Charge Services
Pay Tone—Pay Tone Pulse - Interval	Specifies the maximum length of time between pay tone signals.	8 × n (n=1– 250) ms	Feature Manual References 2.22.3 Call Charge Services
Pay Tone—Sending Flash while end talk	Enables the PBX to send a flash signal at the end of call to demand a pay tone signal.	Disable, Enable	Feature Manual References 2.22.3 Call Charge Services

## 9.25 PBX Configuration—[1-1] Configuration—Slot —Port Property - LCO Port

Various settings can be programmed for each analogue trunk port.

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service.	
Busy Out Status	Indicates the Busy Out status (reference only).	Normal, Busy Out	Feature Manual References 2.5.4.6 Trunk Busy Out
Dialling Mode	Selects the type of signal used to dial out to the analogue trunk.	DTMF, Pulse	Feature Manual References 2.5.4.4 Dial Type Selection
CPC Signal Detection Time— Outgoing, Incoming	Specifies the length of time required by the PBX to detect a CPC signal on outgoing or incoming trunk calls before disconnecting the line. When <b>None</b> is selected here, the line will not be disconnected when a CPC signal is not detected.	None, 6.5 ms, 8 × n (n=1–112) ms	Feature Manual References 2.11.9 Calling Party Control (CPC) Signal Detection
DTMF Width	Selects the length of the DTMF tone sent to the analogue trunk.	80 ms, 160 ms	
Pulse Speed	Selects the speed at which pulse dials are sent to the analogue trunk.	Low, High	
Reverse Detection	Selects the type of trunk call for which the reverse signal from the telephone company is detected.	Disable: For no trunk call Outgoing: For outgoing trunk calls only Both Call: For both outgoing and incoming trunk calls	Feature Manual References 2.5.4.5 Reverse Circuit

Name	Description	Value Range	Links
Caller ID Detection	Enables the PBX to detect a Caller ID signal from the analogue trunk.	Disable, Enable	PC Programming Manual References 9.24 PBX Configuration— [1-1] Configuration—Slot— Card Property - LCO type Feature Manual
			References 2.19.1 Caller ID
Paytone Detection	Enables the PBX to receive a pay tone signal from the telephone company.  Note  This feature is available for extensions connected to legacy gateway PBXs only.	Disable, Enable	Feature Manual References 2.22.3 Call Charge Services
Pause Time	Specifies the length of a pause.	1.5 s, 2.5 s, 3.5 s, 4.5 s	Feature Manual References 2.5.4.7 Pause Insertion 2.5.4.8 Host PBX Access Code (Access Code to the Telephone Company from a Host PBX) 2.5.4.9 Special Carrier Access Code
Flash Time	Specifies the length of a flash signal.	None, 16 × n (n=1–255) ms	Feature Manual References 2.11.7 External Feature Access (EFA)
Disconnect Time	Specifies the length of time after a trunk is disconnected, during which the PBX cannot seize the line.	0.5 s, 1.5 s, 2.0 s, 4.0 s, 12.0 s	Feature Manual References 2.11.6 Flash/Recall/ Terminate

# 9.26 PBX Configuration—[1-1] Configuration—Slot —Card Property - BRI type/PRI type

The properties of the BRI or PRI card can be specified.

Name	Description	Value Range	Links
ISDN CO / QSIG Master / QSIG Slave —T200	Specifies the maximum time that the PBX waits for a reply after sending the L2 command to ISDN.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T202	Specifies the maximum time that the PBX waits for a reply after resending the request to use an ISDN line as a TIE line.	0–600 × 100 ms	Feature Manual References 4.3.1 TIE Line Service
ISDN CO / QSIG Master / QSIG Slave —T203	Specifies the length of time to detect no communication status of L2.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T301	Specifies the maximum time that the PBX waits for a reply after making a call to ISDN.	0–18000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T302	Specifies the maximum time allowed between each digit on an incoming call. Applies to overlap receiving.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T303	Specifies the maximum time that the PBX waits for a reply after sending the SETUP (call setting) message to ISDN.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T304	Specifies the maximum time allowed between each digit on an outgoing call. Applies to overlap sending.	0–3000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T305	Specifies the maximum time that the PBX waits for a reply after sending the DISC (disconnection) message to ISDN.	0–3000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T308	Specifies the maximum time that the PBX waits for a reply after receiving the Release message from ISDN.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T309	Specifies the length of time that the PBX tries to disconnect the data link, before disconnecting the call.	0–3000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T310	Specifies the maximum time that the PBX waits for a continuance message after receiving the Incoming Call Proceeding message.	0–3000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T313	Specifies the maximum time that the PBX waits for a reply after sending the Connect message.	0–600 × 100 ms	

Name	Description	Value Range	Links
ISDN CO / QSIG Master / QSIG Slave —T316	Specifies the maximum time that the PBX waits for a reply after sending the Restart message.	0–3000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T318	Specifies the maximum time that the PBX waits for a reply after sending the Resume message.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T319	Specifies the maximum time that the PBX waits for a reply after sending the Suspend message.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T322	Specifies the maximum time that the PBX waits for a reply after sending the Status enquiry message.	0–600 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T3D3	Specifies the length of time that the PBX tries to establish L2 in "Permanent" mode.	0–3000 × 100 ms	
ISDN CO / QSIG Master / QSIG Slave —T3D9	Specifies the length of time that the PBX tries to disconnect L2 in "Call by Call" mode.	0–3000 × 100 ms	
ISDN Extension— T200	Specifies the maximum time that the PBX waits for a reply after sending the L2 command to ISDN.	0–600 × 100 ms	
ISDN Extension— T201	Specifies the maximum time that the PBX waits for a reply after resending the TEI check request to ISDN.	0–600 × 100 ms	
ISDN Extension— T203	Specifies the length of time to detect no communication status of L2.	0–600 × 100 ms	
ISDN Extension— T301	Specifies the maximum time that the PBX waits for a reply after making a call to ISDN.	0–18000 × 100 ms	
ISDN Extension— T302	Specifies the maximum time allowed between each digit on an incoming call. Applies to overlap receiving.	0–600 × 100 ms	
ISDN Extension— T303	Specifies the maximum time that the PBX waits for a reply after sending the SETUP (call setting) message to ISDN.	0–600 × 100 ms	
ISDN Extension— T304	Specifies the maximum time allowed between each digit on an outgoing call. Applies to overlap sending.	0–3000 × 100 ms	
ISDN Extension— T305	Specifies the maximum time that the PBX waits for a reply after sending the DISC (disconnection) message to ISDN.	0–3000 × 100 ms	
ISDN Extension— T306	Specifies the maximum time that the PBX waits for a reply after sending the DISC (disconnection) message to ISDN. This setting is used when inband tones are supplied.	0–3000 × 100 ms	

Name	Description	Value Range	Links
ISDN Extension— T307	Specifies the maximum time that the PBX maintains a suspended call, before restarting.	0–6000 × 100 ms	
ISDN Extension— T308	Specifies the maximum time that the PBX waits for a reply after receiving the Release message from ISDN.	0–600 × 100 ms	
ISDN Extension— T309	Specifies the length of time that the PBX tries to disconnect the data link, before disconnecting the call.	0–3000 × 100 ms	
ISDN Extension— T310	Specifies the maximum time that the PBX waits for a reply after receiving the Incoming Call Proceeding message.	0–3000 × 100 ms	
ISDN Extension— T312	Specifies the maximum time that the PBX waits for a reply after sending the SETUP (call setting) message to ISDN.	0–600 × 100 ms	
ISDN Extension— T316	Specifies the maximum time that the PBX waits for a reply after sending the Restart message.	0–3000 × 100 ms	
ISDN Extension— T320	Specifies the maximum time that the PBX waits for packet protocol.	0–3000 × 100 ms	
ISDN Extension— T322	Specifies the maximum time that the PBX waits for a reply after sending the Status enquiry message.	0–600 × 100 ms	
ISDN Extension— T3D3	Specifies the length of time that the PBX tries to establish L2 in "Permanent" mode.	0–3000 × 100 ms	
ISDN Extension— T3D9	Specifies the length of time that the PBX tries to disconnect L2 in "Call by Call" mode.	0–3000 × 100 ms	

# 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port

Various settings can be programmed for each BRI port.

#### Main

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN) —SUMMARY 4.3.4.1 QSIG Standard Features— SUMMARY
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
LLC Information	Enables the PBX to send LLC (Low Level Compatibility) information to the network when an outgoing call is made when the ISDN bearer mode is speech.	Disable, Enable	
Status Message	Specifies whether the Status Message is sent to the network.	No Transmission: Status Message is not sent. When Mandatory error detection: Send the Status Message when an error (Mandatory) is detected. When Option / Mandatory error detection: Send the Status Message when an error (Option or Mandatory) is detected.	
Status Receive	Selects what happens to a call when the Status Message from the network does not match the actual status of the call.	Ignore: Ignore the Status Message from the network. Disconnect: Disconnect the call.	

## **ISDN CO**

Parameters for ISDN CO are not applicable for the BRI extension port.

The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select INS or OUS for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Subscriber Number	Specifies the number used as the CLIP number.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Ringback Tone to Outside Caller	Enables the PBX to send a ringback tone to an outside caller when the network cannot send the tone.	Disable, Enable	

Name	Description	Value Range	Links
ISDN Outgoing Call Type	Selects the method used to send dialled digits to the network.	En-bloc: The PBX sends all of the dialled digits at once after the extension user completes dialling. The PBX recognises the end of dialling when (1) # is dialled, if programmed, (2) a pre-programmed telephone number is dialled, or (3) the inter-digit timer expires.  Overlap: The PBX sends dialled digits one at a time.	PC Programming Manual References  9.1 PBX Configuration— [1-1] Configuration—Slot 10.3 PBX Configuration— [2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Extension Inter-digit 10.9 PBX Configuration— [2-9] System—System Options—Option 2— ISDN en Bloc Dial—[#] as End of Dial for en Bloc mode 11.1.4 PBX Configuration —[3-1-4] Group—Trunk Group—Dialling Plan  Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)—SUMMARY
ISDN Centrex	Enables the use of the telephone company's ISDN Centrex Service features.	Disable, Enable	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)—SUMMARY
BRI Data Link (P-MP) Mode	Assigns one or two TEIs (Terminal Endpoint Identifier) to the BRI CO port. To use the ISDN Hold supplementary service with point-to-multipoint configuration, this parameter should be set to <b>2-link</b> in some countries/areas.	1-link: One TEI is assigned to the BRI CO port. 2-link: Two TEIs are assigned to the BRI CO port. (Available when Access Mode on the Network tab is set to P-MP.)	
Networking Data Transfer	Enables transmission of extension status data to connected PBXs in a network. This setting is only available when <b>Port Type</b> on this screen has been set to <b>QSIG-Slave</b> or <b>QSIG-Master</b> . A maximum of two ports of each BRI card can be assigned to transmit extension status information.	Off, On	PC Programming Manual References 17 PBX Configuration— [9] Private Network Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)

#### **ISDN Extension**

Parameters for ISDN Extension are not applicable for BRI ports assigned as CO ports. The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	Feature Manual References 5.2.5.1 ISDN Extension
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	Feature Manual References 5.2.5.1 ISDN Extension
Ring Mode (ISDN MSN Last No. 0 or 00)	Selects the ring mode when receiving an incoming call with an MSN ending with "0" or "00". This setting is only available when <b>Port Type</b> on this screen is set to <b>Extension</b> .	Ring All Extension for MSN: Ring all ISDN extensions that are addressed with MSN. Ring an Extension for MSN: Ring only one of the ISDN extensions that are addressed with MSN.	Feature Manual References 5.2.5.1 ISDN Extension
ISDN Extension Progress Tone	Enables the PBX to send call progress tones to the ISDN extension. This setting is only available when <b>Port Type</b> on this screen is set to <b>Extension</b> .	Disable, Enable	Feature Manual References 5.2.5.1 ISDN Extension

#### **Network**

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Network Type	Selects the network type of the port.	0–56 (2 UK (Domestic), 5 Netherlands, 6 SwissNET2, 7 SwissNET3, 8 Euro ISDN (Standard), 14 France (Domestic), 19 Finland, 20 Norway, 27 Australia, 51 US National ISDN 2)	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
L1 Mode	Selects the active mode of L1 (Layer 1) on the BRI port.	Call, Permanent	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
L2 Mode	Selects the active mode of L2 (Layer 2) on the BRI port.	Call, Permanent	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
Access Mode	Selects the configuration of the BRI port.	P-P: Point-to-Point P-MP: Point-to-multipoint	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
TEI Mode	Specifies the TEI mode assigned to the BRI port.	Automatic, Fix 0–Fix 63	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY

#### **Network Numbering Plan**

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Trunk Property	Selects the trunk property of the port.	Public: Public network Private: Private Network VPN: Virtual Private Network	Feature Manual References 4.3.1 TIE Line Service 4.3.3 ISDN Virtual Private Network (ISDN-VPN)
Calling Party Number— Numbering Plan ID—Public, Private	Selects the numbering plan ID that applies to outgoing trunk calls routed through public and private networks.	Unknown, ISDN- Telephony, National Standard, Private	
Calling Party Number—Type of Number—Public, Private	Selects the type of number that applies to outgoing trunk calls routed through public or private networks.	Unknown, International, National, Network, Subscriber	
Called Party Number— Numbering Plan ID—Public, Private	Selects the numbering plan ID that applies to incoming trunk calls routed through public and private networks.	Unknown, ISDN- Telephony, National Standard, Private	
Called Party Number—Type of Number—Public, Private	Selects the type of number that applies to incoming trunk calls routed through public and private networks.	Unknown, International, National, Network, Subscriber	

#### **Supplementary Service**

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select INS or OUS for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC- E, 3PTY	Specifies whether each ISDN or QSIG supplementary service is used.	For COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E: No, Yes  For 3PTY: No, Yes-3Pty	Feature Manual References  4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP) 4.1.2.3 Advice of Charge (AOC) 4.1.2.5 Call Forwarding (CF)—by ISDN (P-P) 4.1.2.7 Call Transfer (CT)— by ISDN 4.1.2.8 Three-party Conference (3PTY)—by ISDN 4.1.2.10 Completion of Calls to Busy Subscriber (CCBS) 4.3.4.2 Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/Connected Name Identification Presentation (CNIP/CONP) —by QSIG 4.3.4.3 Call Forwarding (CF)—by QSIG 4.3.4.4 Call Transfer (CT)— by QSIG 4.3.4.5 Completion of Calls to Busy Subscriber (CCBS) —by QSIG

#### **CCBS Option**

Name	Description	Value Range	Links
Port Type	Selects the port type. Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX. ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
CCBS Type	Selects the type of the call from the network initiated by the CCBS (Completion of Calls to Busy Subscriber) feature, from which the specified number of digits are deleted.  CCBS Delete Digits on this screen specifies the number of digits to delete from the received number.	ALL, Unknown, International, National, Network specific, Subscriber, Abbreviated	Feature Manual References 4.1.2.10 Completion of Calls to Busy Subscriber (CCBS)
CCBS Delete Digits	Specifies the number of digits to delete from the received number when receiving a call of the specified type initiated by the CCBS feature from the network. <b>CCBS Type</b> on this screen specifies the applicable type of call.	0–15	Feature Manual References 4.1.2.10 Completion of Calls to Busy Subscriber (CCBS)

## 9.28 PBX Configuration—[1-1] Configuration—Slot —Port Property - PRI Port

Various settings can be programmed for each PRI port.

#### Main

Name	Description	Value Range	Links
Port Type	Note  Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX.  ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY 4.3.4.1 QSIG Standard Features— SUMMARY
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Status Message	Specifies whether the Status Message is sent to the network.	No Transmission: Status Message is not sent. When error detection (Mandatory): Send the Status Message when an error (Mandatory) is detected. When error detection (Option / Mandatory): Send the Status Message when an error (Option or Mandatory) is detected.	
Status Receive	Selects what happens to a call when the Status Message from the network does not match the actual status of the call.	Ignore: Ignore the Status Message from the network. Disconnect: Disconnect the call.	

Name	Description	Value Range	Links
CRC4 Mode	Enables the use of CRC4 for error checking. CRC (Cyclic Redundancy Check) is an error checking control technique that uses a specific binary prime divisor that results in a unique remainder. It is usually a 16- to 32-bit character. (Assignable only when using the PRI30 card.)	Disable, Enable	
Line Coding	Selects the line coding type of the PRI PCM (Pulse Code Modulation) for the port. This setting is only available when using the PRI23 card.	B8ZS, AMI	
Frame Sequence	Selects the type of frame sequence for the port. This setting is only available when using the PRI23 card.	Extended Multi frame (ESF), 4-Frame Multi frame (F4), 12-Frame Multi frame (F12)	

#### **CO Setting**

CO Setting parameters are not applicable to ports assigned as **Extension** in **Port Type**. The **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Name	Description	Value Range	Links
Port Type	Selects the port type.  Note      Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX.      ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Subscriber Number	Specifies the number used as the CLIP number.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)

Name	Description	Value Range	Links
Ringback Tone to Outside Caller	Enables the PBX to send a ringback tone to an outside caller when the network cannot send the tone.	Disable, Enable	
ISDN Outgoing Call Type	Selects the method used to send dialled digits to the network.	En-bloc: The PBX sends all of the dialled digits at once after the extension user completes dialling. The PBX recognises the end of dialling when (1) # is dialled, if programmed, (2) a preprogrammed telephone number is dialled, or (3) the inter-digit timer expires.  Overlap: The PBX sends dialled digits one at a time.	PC Programming Manual References  9.1 PBX Configuration— [1-1] Configuration—Slot 10.3 PBX Configuration— [2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Extension Inter-digit 10.9 PBX Configuration— [2-9] System—System Options—Option 2—ISDN en Bloc Dial—[#] as End of Dial for en Bloc mode 11.1.4 PBX Configuration —[3-1-4] Group—Trunk Group—Dialling Plan  Feature Manual
			References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
ISDN Centrex	Enables the use of the telephone company's ISDN Centrex Service features.	Disable, Enable	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
Networking Data Transfer	Enables transmission of extension status data to connected PBXs in a network. This setting is only available when <b>Port Type</b> on this screen has been set to <b>QSIG-Slave</b> or <b>QSIG-Master</b> .	Off, On	PC Programming Manual References 17 PBX Configuration—[9] Private Network Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Loopback Test started by Network	Enables a loopback test started from the network side, to be performed on the PRI23 card.	Disable, Enable	PC Programming Manual References Network Loopback Test

#### **Extension Setting**

Extension Setting parameters are applicable only for the PRI extension port.

Name	Description	Value Range	Links
Port Type	Selects the type of the port.  Note  Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX.  ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Ring Mode (ISDN MSN Last No. 0 or 00)	Selects the ring mode when receiving an incoming call with an MSN ending with "0" or "00".	Ring All Extension for MSN: Ring all ISDN extensions that are addressed with MSN. Ring AN Extension for MSN: Ring only one of the ISDN extensions that are addressed with MSN.	Feature Manual References 5.2.5.1 ISDN Extension

#### **Network Configuration**

Name	Description	Value Range	Links
Port Type	Selects the port type.  Note      Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX.      ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	

Name	Description	Value Range	Links
Network Type	Selects the network type of the port.	0–56 (2 UK (Domestic), 5 Netherlands, 6 SwissNET2, 7 SwissNET3, 8 Euro ISDN (Standard), 14 France (Domestic), 19 Finland, 20 Norway, 27 Australia, 51 US National ISDN 2)	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN) —SUMMARY

#### **Network Numbering Plan**

Name	Description	Value Range	Links
Port Type	Selects the port type.  Note  Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX.  ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Trunk Property	Selects the trunk property of the port.	Public: Public network Private: Private Network VPN: Virtual Private Network	Feature Manual References 4.3.1 TIE Line Service 4.3.3 ISDN Virtual Private Network (ISDN-VPN)
Calling Party Number— Numbering Plan ID—Public, Private	Selects the numbering plan ID that applies to outgoing trunk calls routed through public and private networks.	Unknown, ISDN- Telephony, National Standard, Private	

Name	Description	Value Range	Links
Calling Party Number—Type of Number— Public, Private	Selects the type of number that applies to outgoing trunk calls routed through public or private networks.	Unknown, International, National, Network, Subscriber	
Called Party Number— Numbering Plan ID—Public, Private	Selects the numbering plan ID that applies to incoming trunk calls routed through public and private networks.	Unknown, ISDN- Telephony, National Standard, Private	
Called Party Number—Type of Number— Public, Private	Selects the type of number that applies to incoming trunk calls routed through public and private networks.	Unknown, International, National, Network, Subscriber	

#### **Supplementary Service**

Name	Description	Value Range	Links
Port Type	Note  Each ISDN connection in a QSIG network must have a master port on one PBX and a slave port on another PBX.  ISDN extensions can belong to an incoming call distribution group or idle extension hunting group. In this case, an MSN can be assigned.	CO: For connecting to public network Extension: For connecting to extension QSIG-Slave: For connecting to private network (slave port) QSIG-Master: For connecting to private network (master port)	
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in Online mode.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	

Name	Description	Value Range	Links
COLP, CLIR, COLR, CNIP, CONP, CNIR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY	Specifies whether each ISDN or QSIG supplementary service is used. The available services depend on the setting of Port Type on this screen.	For COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911: No, Yes  For 3PTY: No, Yes-3Pty	Feature Manual References  4.1.2.2 Calling/ Connected Line Identification Presentation (CLIP/ COLP)  4.1.2.3 Advice of Charge (AOC)  4.1.2.5 Call Forwarding (CF)—by ISDN (P-P)  4.1.2.7 Call Transfer (CT)—by ISDN  4.1.2.8 Three-party Conference (3PTY)—by ISDN  4.1.2.10 Completion of Calls to Busy Subscriber (CCBS)  4.3.4.2 Calling/ Connected Line Identification Presentation (CLIP/ COLP) and Calling/ Connected Name Identification Presentation (CNIP/ COLP)—by QSIG  4.3.4.3 Call Forwarding (CF)—by QSIG  4.3.4.4 Call Transfer (CT)—by QSIG  4.3.4.5 Completion of Calls to Busy Subscriber (CCBS)—by QSIG
CCBS Type	Selects the type of call from the network initiated by the CCBS (Completion of Calls to Busy Subscriber) feature, from which the specified number of digits are deleted.  CCBS Delete Digits on this screen specifies the number of digits to delete from the received number.	ALL, Unknown, International, National, Network specific, Subscriber, Abbreviated	Feature Manual References 4.1.2.10 Completion of Calls to Busy Subscriber (CCBS)

Name	Description	Value Range	Links
CCBS Delete Digits	Specifies the number of digits to delete from the received number when receiving a call of the specified type initiated by the CCBS feature from the network.  CCBS Type on this screen specifies the applicable type of call.	0–15	Feature Manual References 4.1.2.10 Completion of Calls to Busy Subscriber (CCBS)

## 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2

Settings for PBXs connected to the KX-NS1000 over a stacking connection can be programmed. Click **Legacy-GW1** or **Legacy-GW2** on the **Slot** screen to view the physical card shelf of the legacy gateway.

#### **Note**

- Legacy gateways must first be pre-installed before they can be programmed. For details, see the KX-NS1000 PC Programming Manual.
- For information about hardware configuration restrictions and conditions for legacy gateways, refer to the KX-NS1000 Installation Manual.

#### To install a new physical card in a legacy gateway

- 1. Click on the name of the card to install in the list on the right. An image of the card will be displayed, and information about the card will be shown.
- 2. Click and drag the image of the card to the slot, and release it. The card will move into the slot space.
- 3. Click OK to confirm.

#### To change the status (INS/OUS) of a legacy gateway

- 1. Move the mouse pointer over the **Shelf Status** button. A menu will be shown under the mouse pointer.
- 2. Select the desired status:
  - · Click INS to set the shelf to in-service status.
  - · Click **OUS** to set the shelf to out-of-service status.

#### To remove a legacy gateway from the STACK-M card

- 1. Move the mouse pointer over the **Shelf Status** button. A menu will be shown under the mouse pointer.
- 2. Click **Delete**. The legacy gateway will be deleted from the system and the corresponding shelf button will become greved out.

#### Note

The legacy gateway must be set to OUS before it can be deleted.

#### Programming cards installed in a legacy gateway

You can access the card properties and port properties of the physical cards installed in a legacy gateway using the KX-NS1000 Web Maintenance Console Interface. The settings, setting values, and other information is similar to programming using the Unified PC Maintenance Console. Refer to the PC Programming Manual of the legacy gateway PBX for programming information.

#### Note

Unless noted otherwise, programming items and specifications for PBXs connected as legacy gateways correspond to the following PBX software versions. When referencing the manuals of other PBXs, refer to manuals matching these software versions.

- KX-TDE: PMMPR/PGMPR Software File Version 4.1xxx or later
- KX-NCP: PBMPR Software File Version 4.1xxx or later
- KX-TDA: PMPR/PLMPR Software File Version 5.0000 or later

#### Programming Card Properties for cards installed in legacy gateways

For your reference, the following information is included on each Card Property screen for cards installed in legacy gateways:

Site: The site number of the KX-NS1000 PBX to which the legacy gateway is connected.

**Shelf**: The shelf number of the STACK-M card Legacy Gateway connection:

- 2: Legacy-GW1
- 3: Legacy-GW2

**Slot**: The physical slot number within the legacy gateway where the card is installed.

#### Programming Port Properties for cards installed in legacy gateways

When programming KX-TDE/KX-NCP/KX-TDA PBXs using the Unified PC Maintenance Console, a **Command** button is available to change the status (INS/OUS) of ports being programmed. To change the status of a port when programming via Web Maintenance Console, click the desired cell in the **Connection** column, and then select **INS** or **OUS** for the port.

### 9.29.1 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2—Card Property - OPB3

The properties of the optional base card (OPB3) installed in a legacy gateway can be specified.

#### **OPB3 Option Card Setup**

OPB3 option card setup is available in Off-line mode only.

- 1. Add the OPB3 card to the legacy gateway. For details, see To install a new physical card in a legacy gateway in 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2.
- 2. Move the mouse pointer over the installed OPB3 card on the legacy gateway Slot screen. A menu will be shown under the mouse pointer. Select **Option Card**.
- 3. Select a slot number, and click the right and left arrow buttons (">", "<") to add or remove option cards from the currently selected slot. Click **OK** when finished. For details about the option cards that can be used with each legacy gateway PBX, refer to the documentation of the legacy gateway PBX.

#### **OPB3 Card Properties**

The properties of the Optional Base card can be specified.

Move the mouse pointer over the installed OPB3 card on the legacy gateway Slot screen. A menu will be shown under the mouse pointer. Select **Card Property**.

Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Slot—Card Property - OPB3** section in the PC Programming Manual of the legacy gateway PBX for more information.

The following programming items are specific to when programming legacy gateways using Web Maintenance Console:

Name	Description	Value Range	Links
Shelf	Indicates the shelf position of the KX-NS1000 for the legacy gateway in which the OPB3 card is installed (reference only).	2: Legacy-GW1 3: Legacy-GW2	
Port Status	Indicates the port status for installed option cards. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.  This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: There is a communication error.	

## 9.30 PBX Configuration—[1-1] Configuration—Slot—DOORPHONE Card—Card Property

The doorphone card's settings can be programmed.

Name	Description	Value Range	Links
Port Status	Specifies the port's status. This option is only available in On-line mode.	INS: The port is in service. OUS: The port is out of service. Fault: There is a communication error.	
For Output - Device Type	Selects the type of connected output device (for output ports only).	Ringer, Relay, Door Opener	
For Sensor - Input Signal Decision Time	Specifies the minimum duration of continuous input from the triggered sensor before the PBX recognises the input and makes a sensor call.	32 × n (n=2–255) ms	
For Sensor - Input Signal Detection Reopening Time	Specifies the length of time after the sensor has been triggered during which any further input from the sensor will be ignored.	10 × n (n=1–255) s	

## 9.31 PBX Configuration—[1-2] Configuration—Portable Station

Various portable station (PS) settings can be programmed.

#### **Forced De-registration**

A PS must be registered to the PBX by programming both the PBX and PS before it can be used. Programming instructions of the PBX are given below; programming instructions of the PS are found in the Installation Manual.

It is possible to de-register the PS later.

PS Registration, De-registration, and Forced De-registration can be performed only in On-line mode.

Name	Description	Value Range	Links
Registration	Follow the steps below to register the PS.		
	Click Registration.     A dialogue box will appear. Non-registered (available) extension numbers and names are displayed on the left.		
	<ol><li>Highlight numbers and names and click the right arrow to select them for registration. Click Next.</li></ol>		
	<ol><li>Highlight PBX sites and click the right arrow to select them for registration. Click Next.</li></ol>		
	4. If the registration is still in progress, the dialogue box will show "Registration Executing".  If the registration is successful, the dialogue box will show "Registration Completed". Click Close.  Once a PS is successfully registered, the status of the PS will update to show "Registered".		

Name	Description	Value Range	Links
De-	Follow the steps below to de-register the PS.		
registration	Click <b>De-registration</b> .     A dialogue box will appear. Registered extension numbers and names are displayed on the left.		
	Highlight numbers and names and click the right arrow to select them for de-registration. Click Next.     A dialogue box will appear.		
	3. Click Confirm.  If the de-registration is successful, the dialogue box will show "De-registration Succeed".		
	4. Click Close. Once the PS is successfully de-registered, the status of the PS will update to show "None".		
Forced De- registration	Follow the steps below to forcibly de-register the PS when normal de-registration has been unsuccessful or de-registration has been performed only on the PS.		
	Click Forced De-registration.     A dialogue box will appear. Registered extension numbers and names are displayed on the left.		
	2. Highlight numbers and names and click the right arrow to select them for forced deregistration. Click <b>Next</b> .  A dialogue box will appear.		
	3. Click OK. A dialogue box will appear.		
	4. Click Confirm.  If the de-registration is successful, the dialogue box will show "Forced Deregistration Succeed".		
	5. Click Close. Once the PS is successfully de-registered, the status of the PS will update to show "None".		
Personal Identification Number	Specifies the Personal Identification Number (PIN) of the PBX, used to avoid registering a PS to the wrong PBX.  Note that the same PIN should be entered at the PS, before the PS is registered to the PBX.	4 digits (consisting of 0–9)	Feature Manual References 5.2.4.1 Portable Station (PS) Connection

Name	Description	Value Range	Links
Index	Indicates the PS number (reference only).	1–512	Feature Manual References 5.2.4.1 Portable Station (PS) Connection
Extension No.	Specifies the extension number of the PS. In Wireless XDP Parallel Mode, the PS can be used as a sub telephone with a wired main telephone (PT/SLT), and two of them will share one extension number of the main telephone. However, note that the PS extension number specified here will not be altered by the extension number of the main telephone even if the PS is in Wireless XDP Parallel Mode.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.4.1 Portable Station (PS) Connection 5.2.4.5 Wireless XDP Parallel Mode
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 12.2.1 PBX Configuration— [4-2-1] Extension— Portable Station— Extension Settings— Main—Extension Name Feature Manual
			References 5.2.4.1 Portable Station (PS) Connection
Status	Indicates whether a certain PS is registered (reference only).	None, Registered	Feature Manual References 5.2.4.1 Portable Station (PS) Connection

## 9.32 PBX Configuration—[1-3] Configuration—Option

System options can be programmed.

Name	Description	Value Range	Links
System Wireless —System ID	Indicates the radio system ID used to register a PS (reference only).	Not applicable.	
	To clear the System ID		
	Click the Clear Master CS button.		
	2. A warning will be displayed. Confirm the contents of the warning, and then click <b>Yes</b> .		
System Wireless —CO Status Display in Standby	Selects whether to display the CO status on the LCD of the PS when in stand-by mode (KX-WT125 only).	Enable, Disable	
(KX-WT125 only) (Need System	Note		
Restart)	<ul> <li>For users in Canada, this setting is also available for the KX-WT126.</li> </ul>		
	<ul> <li>The KX-WT125 is available only in Canada.</li> </ul>		
New Card Installation—Card Status for any Card	Selects the initial status of cards after installation.	In Service, Out of Service	
New Card Installation— Automatic Extension Number Set for Extension Card	Selects whether extension numbers are assigned to extension ports automatically or manually.	Disable, Enable	

Name	Description	Value Range	Links
New Card Installation—ISDN Standard Mode for PRI23 Card	Specifies whether a PRI23 card is automatically set to ISDN Standard Mode or T1-LCOT mode when it is installed for the first time.	ISDN Standard Mode: The CCBS, CF, CT, and Unified Messaging features are supported. DIL and DID call distribution are available for the D channel. T1-LCOT mode: DIL and DID call distribution are available for all 23B channels. The CCBS, CF, CT, and Unified Messaging features are not available in this mode.	Feature Manual References 2.1.1.2 Direct In Line (DIL) 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI) 4.3.4.3 Call Forwarding (CF)— by QSIG 4.3.4.4 Call Transfer (CT)—by QSIG 4.3.4.5 Completion of Calls to Busy Subscriber (CCBS) —by QSIG

### 9.33 PBX Configuration—[1-4] Configuration— **Clock Priority**

Name	Description	Value Range	Links
Shelf- Slot Number	Selects and prioritises slot numbers for the BRI and PRI cards that are used to forward a clock pulse from an external source to the PBX.  Obtain the master clock time from the outside line that the telephone company provides.  To change Clock Priority, follow the steps below:  1. Assign a Clock Priority to each slot.  2. Set the status of the present clock source card to "OUS", then "INS".  Note	None, Shelf and Slot number Shelf and slot numbers are listed using the pattern "X-Y":  X: Shelf number (1–3 [2 and 3 correspond to Legacy Gateway 1 or 2])  Y: Slot number (1–11)	
	If multiple PBXs are used to establish a private network (TIE line service, QSIG network, etc.) without being connected through the telephone company, assign only one PBX as the clock source on the network. That PBX should have a card connected to a telephone company line selected as its clock source. All other PBXs should have cards connected to the network selected as the clock source. This enables all PBXs on the network to synchronise their timing.		

## 9.34 PBX Configuration—[1-5] Configuration—DSP Resource

IP communications that are handled by the PBX require DSP resources. DSP resources can be reserved for various functions of the PBX.

The DSP resource advisor is a tool that analyses the configuration and user requirements for the system in order to recommend which DSP card(s) should be used. Click **DSP Resource Advisor** to access this feature. (See **9.34.1.1 PBX Configuration—[1-5-1] Configuration—DSP Resource—Setting—DSP Resource Advisor**.)

### 9.34.1 PBX Configuration—[1-5-1] Configuration—DSP Resource—Setting

Set the amount of DSP resources to reserve for each PBX function that uses DSP resources.

Name	Description	Value Range	Links
Option DSP Power	Indicates the total amount of available DSP resources based on the installed DSP card(s) (reference only).  The number of resources provided by each type of DSP card is as follows:	Resource amount (3 digits)	Feature Manual References 5.5.4 DSP Resource Usage
	<ul><li>DSP S card: 63</li><li>DSP M card: 127</li></ul>		
	DSP L card: 254     Up to 2 DSP cards can be installed on the mother board.     Because the system reserves 2 resources for internal system functions, the total amount of available resources indicated will be 2 less than the total resources of the installed card(s).		
Option DSP #1, Option DSP #2	Indicates the type of the installed DSP card(s) (reference only).	DSP S, DSP M, DSP L	Feature Manual References 5.5.4 DSP Resource Usage
Services—VoIP (G.711)	Specifies the number of simultaneous VoIP calls to reserve DSP resources for.	0–506 VoIP calls	Feature Manual References 5.5.4 DSP Resource Usage
Services— Unified message	Specifies the number of UM ports (including a fax port) to reserve DSP resources for.	0–31 ports (UM: 30 ports, Fax: 1 port)	Feature Manual References 5.5.4 DSP Resource Usage

Name	Description	Value Range	Links
Services—Two- way Recording	Specifies the number of UM ports reserved in Services—Unified message to use for Two-way Recording.	0–30 ports (cannot exceed the value set in Services—Unified message)	Feature Manual References 5.5.4 DSP Resource Usage
Services— OGM	Specifies the number of OGM ports to reserve DSP resources for.	0–64 ports	Feature Manual References 5.5.4 DSP Resource Usage
Services— Conference trunk	Specifies the number of conference rooms to reserve DSP resources for.	0–24 conference rooms	Feature Manual References 5.5.4 DSP Resource Usage
Services—Free resources (G. 711)	Indicates the amount of free DSP resources available to allocate (reference only).	0–506 DSP resources	Feature Manual References 5.5.4 DSP Resource Usage
Select a time to apply the set values	Specifies when the settings made on this screen are applied.  Note  Any calls being made that use DSP resources will be disconnected when setting values are changed and applied.	<ul> <li>Set: Specify a date and time to apply the changes, and click</li> <li>OK. The changes will be applied at the specified date and time.</li> <li>Apply now: The changes are applied immediately. Click</li> <li>OK to apply the settings immediately.</li> </ul>	

### 9.34.1.1 PBX Configuration—[1-5-1] Configuration—DSP Resource—Setting—DSP Resource Advisor

The DSP Resource Advisor assists programmers in the allocation of DSP resources to various PBX functions.

- **1.** Note the value of **Total Power**. This is the total capacity for allocating DSP resources, depending on the DSP cards installed in the PBX.
- 2. In the Ports column, enter the number of ports to allocate to each PBX function.
- **3.** For voice calls, it is useful to estimate how often each call function is used, as every extension or trunk is not in use all the time. In the **Busy Ratio** (%) column, specify the anticipated ratio of time the type of voice call function will be used.
- **4.** As values are entered, the values in the **Power** column will increase to reflect the resource required for the input amounts. Likewise, the value for **Free resources (G.711)** will decrease.

#### **Note**

Click Clear to reset the input values and start again.

- 5. When all items are allocated, confirm that the amount of resources input does not exceed the value indicated in **Total Power**.
  - Click **Apply** to insert the specified allocation settings into the **DSP Resource—Setting** screen.
- Click **Cancel** to return to the **DSP Resource—Setting** screen without making any changes. For details, refer to "5.5.4.2 DSP Resource Advisor" in the Feature Manual.

### 9.34.2 PBX Configuration—[1-5-2] Configuration—DSP Resource—Usage

The Usage screen is a graphical display of DSP resource usage. This information is useful to analyse usage patterns over time to determine DSP resource needs and optimal configuration settings. This screen can be accessed only in On-line mode.

- The graph displays DSP resource usage over time. The time frame displayed can be displayed in increments of 1 hour, 4 hours, or 24 hours. Up to 30 days of usage data can be stored.
- · Each site of a One-look network can be viewed.
- · The DSP report feature is only accessible from the Master unit.
- Only DSP resources that have been reserved in 9.34.1 PBX Configuration—[1-5-1] Configuration— DSP Resource—Setting are displayed.

# Section 10 PBX Configuration—[2] System

This section serves as reference operating instructions for the System menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

## 10.1 PBX Configuration—[2-1] System—Date & Time

### 10.1.1 PBX Configuration—[2-1-1] System—Date & Time—Date & Time Setting

The date and time of the PBX can be programmed. The date and time will be shown on the display of extensions (e.g., PT, PS).

This screen can be accessed only in On-line mode.

Name	Description	Value Range	Links
Date & Time	Indicates the current date and time. Values can be entered by clicking the parameter you want to change and typing the new value, or by clicking the up/down arrows beside the date and time.  Note  • When this setting is changed and applied, it may take between 1 minute and several hours (depending on the configuration of the PBX network) for all connected IP-PTs to reflect this change on their displays.  • At default settings, KX-UT series SIP phones synchronise to the PBX's date and time once every hour.	Year: 2000–2035 Month: 01–12 Day: 01–31 Hour: 00–23 Minute: 00–59 Second: 00–59	

### 10.1.2 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving

Automatic clock adjustment and Summer time (daylight saving time) settings of the PBX can be programmed. Automatic clock adjustment can be performed using one of two methods, ISDN & Caller ID or SNTP (Simple Network Time Protocol).

To set Summer time, click 10.1.2.1 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—Daylight Saving.

#### Note

The NTP server function of the PBX must be enabled for connected KX-UT series SIP phones to receive automatic time adjustment information from the PBX. See **28.2.4 Network Service—[2-5] Server Feature—NTP**.

Name	Description	Value Range	Links
Automatic Time Adjustment— Synchronisation mode	Specifies the synchronisation of the time between the Master unit and Slave units of a One-look network. For the Master unit, only "Disable" can be selected.	Disable: Synchronisation is not enabled (for the Master unit and Standalone units) Enable: Synchronisation is enabled (for Slave units)	Feature Manual References 5.5.5 Automatic Setup

Name	Description	Value Range	Links
Automatic Time Adjustment— Automatic Time Correction on Stand- alone mode	Enables the PBX to automatically adjust its clock every day according to the time information provided by the network.	Disable, ISDN & Caller ID (FSK), SNTP	Feature Manual References 5.5.5 Automatic Setup
SNTP—SNTP Server —IP Address	Specifies the IP address or host name of the SNTP server.	1.0.0.0– 223.255.255.255 (IP address), Max. 253 characters (host name)	Feature Manual References 5.5.5 Automatic Setup
SNTP—SNTP Server —Port Number	Indicates the port number used for communication with an SNTP server (reference only).	1–65535	Feature Manual References 5.5.5 Automatic Setup
SNTP—Time Zone— Time Zone	Specifies your local UTC (Coordinated Universal Time) time zone using the up and down arrows.  Note  If KX-UT series SIP phones are connected to the PBX, and this setting is changed, they must be restarted for the new time zone setting to take effect.	-14:00-+14:00	Feature Manual References 5.5.5 Automatic Setup
SNTP—Time Zone— Time Zone for PC	Indicates the UTC (Coordinated Universal Time) time zone of the PC (reference only).	-14:00-+14:00	Feature Manual References 5.5.5 Automatic Setup

### 10.1.2.1 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—Daylight Saving

Summer time can be programmed. Summer time sets the clock one hour forward at 2:00 AM on the start date, and one hour back at 2:00 AM on the end date. The start and end dates of a maximum of 20 different summer times can be programmed.

Name	Description	Value Range	Links
Setting	Enables Summer	Disable, Enable	PC Programming Manual References
	time.		10.1.2 PBX Configuration—[2-1-2] System— Date & Time—SNTP / Daylight Saving
			Feature Manual References
			5.5.5 Automatic Setup

Name	Description	Value Range	Links
Start Date —Year, Month, Day	Specifies the start date of daylight savings time.	Year: 2000– 2035 Month: 1–12 Day: 1–31	PC Programming Manual References  10.1.2 PBX Configuration—[2-1-2] System— Date & Time—SNTP / Daylight Saving
		Day. 1–31	Feature Manual References
			5.5.5 Automatic Setup
End Date—	Specifies the end	Year: 2000-	PC Programming Manual References
Year, Month, Day	date of daylight savings time.	2035 Month: 1–12 Day: 1–31	10.1.2 PBX Configuration—[2-1-2] System— Date & Time—SNTP / Daylight Saving
		Day. 1-51	Feature Manual References
			5.5.5 Automatic Setup

## 10.2 PBX Configuration—[2-2] System—Operator & BGM

Settings related to the PBX operator and audio sources can be specified.

Name	Description	Value Range	Links
PBX Operator —Day, Lunch, Break, Night	Specifies the extension number or floating extension number of incoming call distribution group to be designated as the PBX operator in each time mode (day/lunch/break/night). To select an extension number, click Destination Setting (see 2.1.7 Extension Number Setting). If Automatic copy to UM Operator (No.1) is checked here, the PBX Operator extension number(s) set for Day/Lunch/Break/Night will be copied to the Unified Messaging service's Operator Extension for Operator Service No. 1 (see 23.2 UM Configuration—[4-2] Service Settings—Parameters—Automated Attendant—Operator Service).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  10.4 PBX Configuration—[2-4] System—Week Table 10.6.1 PBX Configuration— [2-6-1] System—Numbering Plan—Main 11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings 23.2 UM Configuration—[4-2] Service Settings—Parameters —Automated Attendant— Operator Service Feature Manual References 5.1.5 Operator Features
BGM and Music on Hold —Music Source of BGM	Selects the audio source of BGM.	External BGM, Internal BGM	Feature Manual References 2.13.4 Music on Hold 2.28.1 Background Music (BGM)
BGM and Music on Hold —Music on Hold	Selects the audio source for Music on Hold.	Tone, BGM1, BGM2, BGM3, BGM4, BGM5, BGM6, BGM7, BGM8	References 2.13.4 Music on Hold
BGM and Music on Hold —Sound on Transfer	Selects the audio source for Music for Transfer (either the same music source chosen for the Music on Hold, or ringback tone).	Same as Music on Hold, Ringback Tone	Feature Manual References 2.12.1 Call Transfer

#### 10.3 PBX Configuration—[2-3] System—Timers & **Counters**

Various system timers and counters can be programmed.

#### Dial / IRNA / Recall / Tone

Name	Description	Value Range	Links
Automatic Redial—Repeat Counter	Specifies the number of times Automatic Redial is attempted before being cancelled.	0–10	Feature Manual References 2.6.3 Last Number Redial
Automatic Redial—Repeat Interval	Specifies the length of time between repeated Automatic Redial attempts.	10 × n (n=1–120) s	Feature Manual References 2.6.3 Last Number Redial
Automatic Redial—Redial Call Ring Duration	Specifies the length of time that the PBX waits for the called party to answer an Automatic Redial attempt. This is the length of time that the called party's extension will ring for each attempt.	10 × n (n=1–30) s	Feature Manual References 2.6.3 Last Number Redial
Automatic Redial— Analogue CO Mute / Busy Detection Timer	Specifies the length of time before the PBX stops muting the caller's voice and cancels busy tone detection when Automatic Redial to analogue trunk is performed.	0–15 s	Feature Manual References 2.6.3 Last Number Redial
Dial—Hot Line (Pickup Dial) Start	Specifies the length of time between going off-hook and the start of automatic dialling when the Hot Line feature is set.	0–180 s	Feature Manual References 2.6.6 Hot Line
Dial—Extension First Digit	Specifies the length of time after going off-hook within which the first digit of a feature number or destination must be dialled before a reorder tone is heard.	1–250 s	Feature Manual References 2.5.2 Automatic Extension Release
Dial—Extension Inter-digit	Specifies the length of time within which subsequent digits must be dialled before the PBX sends a reorder tone.	1–250 s	Feature Manual References 2.5.2 Automatic Extension Release
Dial—Analogue CO First Digit	Specifies the length of time within which the first digit of a telephone number must be sent to an analogue trunk. If no digit is sent before this time expires, the PBX recognises end of dialling and stops muting the caller's voice over the analogue trunk.	1–15 s	

Name	Description	Value Range	Links
Dial—Analogue CO Inter-digit	Specifies the length of time within which subsequent digits of a telephone number must be sent to an analogue trunk. If no digit is sent before this time expires, the PBX recognises end of dialling and stops muting the caller's voice over the analogue trunk.	1–15 s	
Dial—Analogue CO Call Duration Start	Specifies the length of time between the end of dialling and the start of the SMDR timer for outgoing analogue trunk calls.	0–60 s	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Intercept Routing No Answer (IRNA) —Day, Lunch, Break, Night	Specifies the length of time until an unanswered trunk call is redirected to the intercept routing destination in each time mode.  Note that this setting is only valid for extensions whose Intercept No Answer Time—Day, Lunch, Break, Night is set to "0".	1–240 s	PC Programming Manual References  12.1.1 PBX Configuration —[4-1-1] Extension—Wired Extension—Extension Settings—Intercept No Answer Time—Intercept No Answer Time—Day, Lunch, Break, Night Feature Manual References
Recall—Hold Recall	Specifies the length of time until the holding extension receives a Hold Recall ring or alarm tone when a held call remains unretrieved.	0 (disable the Hold Recall)– 240 s	2.1.1.6 Intercept Routing  Feature Manual References 2.13.1 Call Hold
Recall—Transfer Recall	Specifies the length of time that a transferred call waits to be answered, before being redirected to the Transfer Recall destination assigned to the original transferring extension.	1–240 s	PC Programming Manual References  12.1.1 PBX Configuration —[4-1-1] Extension—Wired Extension—Extension Settings  12.2.1 PBX Configuration —[4-2-1] Extension— Portable Station—Extension Settings  Feature Manual References  2.12.1 Call Transfer

Name	Description	Value Range	Links
Recall—Call Park Recall	Specifies the length of time that a parked call waits to be retrieved, before	1–240 s	PC Programming Manual References
	the Transfer Recall destination assigned to the extension that parked the call hears a Call Park Recall ring.		12.1.1 PBX Configuration —[4-1-1] Extension—Wired Extension—Extension Settings 12.2.1 PBX Configuration —[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 2.13.2 Call Park
Recall—	Specifies the length of time after an	60 × n (n =	Feature Manual
Disconnect after	extension with a trunk call on hold receives a Hold Recall tone that the held call is disconnected.	1–30) s	References
Recall			2.13.1 Call Hold
Tone Length— Busy Tone /	Specifies the length of time that a busy/DND tone is heard when a call is	1–15 s	Feature Manual References
DND Tone	made to an extension in busy status or DND mode. A reorder tone will be sent when this timer expires. (For a call through DISA, the call will be disconnected when this timer expires.)		2.3.3 Do Not Disturb (DND) 2.10 Busy Line/Busy Party Features
Tone Length— Reorder Tone for PT Handset	Specifies the length of time that a reorder tone is heard when using a PT handset. The PT will return to idle status when this timer expires.	1–15 s	Feature Manual
			References 2.5.2 Automatic Extension Release
Tone Length— Reorder Tone for PT Hands- free	Specifies the length of time that a reorder tone is heard from the built-in speaker of a PT in hands-free mode. The PT will return to idle status when this timer expires. This setting is applied to PSs as well as PTs.	1–15 s	Feature Manual References
			2.5.2 Automatic Extension Release 2.11.1 Hands-free Operation

#### DISA / Door / Reminder / U. Conf

Name	Description	Value Range	Links
DISA—Delayed Answer Timer	Specifies the length of time that the caller hears a ringback tone before hearing an OGM.	0–30 s	PC Programming Manual References  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message  Feature Manual References  2.16.1 Direct Inward System Access
DISA—Mute & OGM Start Timer after answering	Specifies the length of time until the caller hears an OGM after reaching the DISA line.	0.0–12.0 s	(DISA)  PC Programming Manual References  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message
			Feature Manual References 2.16.1 Direct Inward System Access (DISA)
DISA—No Dial Intercept Timer	Specifies the length of time after the OGM finishes playing in which the caller must begin dialling before the call is redirected to the operator.	0–120 s	PC Programming Manual References  10.2 PBX Configuration—[2-2] System—Operator & BGM 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message 14.6 PBX Configuration—[6-6] Feature—Tenant—Operator (Extension Number)  Feature Manual References 2.16.1 Direct Inward System Access (DISA)
DISA—2nd Dial Timer for AA	Specifies the length of time in which the caller must dial the second digit before the DISA AA Service activates.	0–5 s	PC Programming Manual References  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message Feature Manual References 2.16.1 Direct Inward System Access (DISA)

Name	Description	Value Range	Links
DISA—Intercept Timer—Day, Lunch, Break, Night	Specifies the length of time until an unanswered DISA call is intercepted and redirected to the intercept routing destination after the original destination receives the call in each time mode.	0-60 s	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Intercept Destination—Intercept Destination— When called party does not answer— Day, Lunch, Break, Night 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings—Intercept Destination—Intercept Destination— When called party does not answer— Day, Lunch, Break, Night 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message  Feature Manual References
			2.1.1.6 Intercept Routing 2.16.1 Direct Inward System Access (DISA)
DISA— Disconnect Timer after Intercept	Specifies the length of time that an intercepted DISA call rings at the intercept routing destination before being disconnected.	0–60 s	PC Programming Manual References  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message  Feature Manual References
			2.16.1 Direct Inward System Access (DISA)
DISA—CO-to-CO Call Prolong Counter	Specifies the number of times that the caller can prolong a trunk-to-trunk call on a DISA line. (Selecting "0" enables the caller to prolong the trunk-to-trunk call without restriction.)	0–15	PC Programming Manual References  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message  Feature Manual References  2.16.1 Direct Inward System Access (DISA)
DISA—CO-to-CO Call Prolong Time (x60s)	Specifies the length of time that a trunk-to-trunk call on a DISA line is prolonged each time that the caller prolongs the call. (Selecting "0" prevents the caller from prolonging the trunk-to-trunk call.)	60 × n (n = 0-7) s	PC Programming Manual References  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message  Feature Manual References  2.16.1 Direct Inward System Access (DISA)

Name	Description	Value Range	Links
DISA—Progress Tone Continuation Time before	Specifies the length of time that a progress tone is sent to the manager extension before recording an OGM.	0-60 s	PC Programming Manual References 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—
Recording Message			DISA Message  Feature Manual References  2.28.2 Outgoing Message (OGM)
DISA—Reorder Tone Duration	Specifies the length of time that a reorder tone is sent to	0–15 s	PC Programming Manual References
	the caller before the call is disconnected. If "0" is specified, no reorder tone is sent and the call is		13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message
	disconnected immediately.		Feature Manual References 2.16.1 Direct Inward System Access (DISA)
Doorphone—Call Ring Duration	Specifies the length of time that a call from a doorphone	10 × n (n=1–15)	PC Programming Manual References
	rings until the call is cancelled when there is no answer.	S	13.1 PBX Configuration—[5-1] Optional Device—Doorphone
			Feature Manual References 2.18.1 Doorphone Call
Doorphone—Call Duration	Specifies the length of time until an answered doorphone	10 × n (n=0–30)	PC Programming Manual References
	call is disconnected.	S	13.1 PBX Configuration—[5-1] Optional Device—Doorphone
			Feature Manual References 2.18.1 Doorphone Call
Doorphone— Open Duration	Specifies the length of time that a door stays unlocked	2–7 s	PC Programming Manual References
	after being opened from an extension.		13.1 PBX Configuration—[5-1] Optional Device—Doorphone
			Feature Manual References 2.18.2 Door Open
Timed Reminder —Repeat Counter	Specifies the number of times that an alarm is repeated.	1–15	Feature Manual References 2.24.4 Timed Reminder
Timed Reminder —Interval Time	Specifies the length of time between the repeated alarms.	10 × n (n=1– 120) s	Feature Manual References 2.24.4 Timed Reminder
Timed Reminder —Alarm Ringing Duration	Specifies the length of time that an alarm rings.	10 × n (n=1–30) s	Feature Manual References 2.24.4 Timed Reminder

Name	Description	Value Range	Links
Unattended Conference— Recall Start Timer	Specifies the length of time until the conference originator receives an Unattended Conference Recall tone.	60 × n (n = 0–60) s	Feature Manual References 2.14.2 Conference
Unattended Conference— Warning Tone Start Timer	Specifies the length of time until the parties involved in an Unattended Conference receive a warning tone after the conference originator receives the Unattended Conference Recall tone but does not return to the conference.	0–240 s	Feature Manual References 2.14.2 Conference
Unattended Conference— Disconnect Timer	Specifies the length of time until an Unattended Conference is disconnected after the parties involved in the conference receive a warning tone but the conference originator does not return to the conference.	0–240 s	Feature Manual References 2.14.2 Conference

### **Miscellaneous**

Name	Description	Value Range	Links
Caller ID—Waiting to receive	Specifies the length of time that the PBX waits to receive Caller ID from an analogue trunk. If the Caller ID is received through an analogue trunk card on which no Caller ID card is mounted or through a port to which Caller ID Detection is disabled, this timer is not applicable.	0–15 s	PC Programming Manual References  11.1.3 PBX Configuration— [3-1-3] Group—Trunk Group —Caller ID Modification 14.1 PBX Configuration— [6-1] Feature—System Speed Dial Feature Manual References 2.19.1 Caller ID
Caller ID—Visual Caller ID Display	Specifies the length of time that a Caller ID number, with the Call Waiting tone offered by an analogue line from the telephone company, is shown on the display. The Caller ID number flashes on the display for five seconds, followed by a 10-second pause, then flashes again for five seconds.	0–250 s	Feature Manual References 2.1.3.3 Call Waiting 2.10.4.2 Call Waiting Tone 2.19.1 Caller ID

Name	Description	Value Range	Links
Extension PIN— Lock Counter	Specifies the number of successive incorrect PIN entries allowed before the extension PIN is locked. A locked extension PIN cannot be used until reset from the extension assigned as manager. (Specifying "None" disables this counter.)	None, 1– 15	Feature Manual References 2.7.5 Walking COS 2.7.6 Verification Code Entry 2.24.1 Extension Personal Identification Number (PIN)
External Sensor— Ring Duration	Specifies the length of time that the PBX waits for the called party to answer before cancelling a sensor call.	10 × n (n=1–15) s	Feature Manual References 2.18.3 External Sensor
Incoming Call Interdigit Timer—DDI /	Specifies the length of time between digits when receiving a DDI/DID number from a public network. The call will be redirected to a PBX operator when this timer expires.	0–30 s	PC Programming Manual References  18.3 PBX Configuration— [10-3] CO & Incoming Call— DDI / DID Table  Feature Manual References  2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
Incoming Call Interdigit Timer—TIE	Specifies the length of time between digits when receiving a dialled number from a TIE line. The call will be redirected to a PBX operator when this timer expires.	3–30 s	PC Programming Manual References 17.1 PBX Configuration— [9-1] Private Network—TIE Table Feature Manual References 4.3.1 TIE Line Service
PT Display—PT Last Display Duration in Idle Mode	Specifies the length of time that the current information remains on the display after the extension returns to idle status.	1–15 s	
Air Synchronisation —Watching Degeneracy (x60s)	Specifies the length of time that a Slave CS can maintain an ongoing call after air synchronisation is lost.	60 × n (n=0– 300) s	PC Programming Manual References  19.2.1 PBX Configuration— [11-2-1] Maintenance—CS Synchronisation—Air Synchronisation
Voice Mail (Caller from VM to CO)— On-hook Wait Time	Specifies the length of time from when the voice mail seizes a trunk (for example, to transfer a call) until the voice mail goes on hook. If the time specified here is too short, the voice mail will be unable to dial the number and make a connection.	1–30 s	Feature Manual References 3.1.1 Unified Messaging System Overview

Name	Description	Value Range	Links
During Conversation —DTMF Signal Length	Specifies the length of time that a DTMF signal is sent when a number is dialled from a PT or PS during a conversation.	80 ms, 160 ms, 240 ms, 320 ms	
During Conversation —DTMF Inter-digit Pause	Specifies the length of time between DTMF signals when numbers are dialled in succession from a PT or PS during a conversation.	64 + 16 × n (n=0– 15) ms	
During Conversation —Pause Signal Time	Specifies the length of the pause inserted when the PAUSE button is pressed during a conversation.	1.5 s, 2.5 s, 3.5 s, 4.5 s	Feature Manual References 2.5.4.7 Pause Insertion
System Wireless— PS Out of Range Timer	When the destination of an incoming call is a PS, specifies the length of time the PBX searches for the PS before setting its status to Out of Range.  If "0" is assigned, the timer is controlled by the cell station.	0–30 s	PC Programming Manual References  10.9 PBX Configuration— [2-9] System—System Options—Option 4—System Wireless—Out of Range Registration
			Feature Manual References 4.3.6.1 PS Roaming by Network ICD Group
Conference Group Call—Ring Duration	Specifies the length of time that a conference group call will ring. The conference group call will be established with members who answer within this time. If no members answer the call before this timer expires, the call is cancelled.	0–120 s	PC Programming Manual References  10.6.1 PBX Configuration— [2-6-1] System—Numbering Plan—Main—Features— Conference Group Call Operation 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Miscellaneous—Conference Group Call Operation 11.9 PBX Configuration— [3-9] Group—Conference Group Feature Manual References 2.15.1 Conference Group Call
Call Pickup Group Monitor—LCD Display Duration (s)	Specifies how long the indication of an incoming call that can be answered by an extension in a call pickup group is shown on PTs' displays.	5, 10, 15 s	Feature Manual References 2.4.3 Call Pickup

### 10.4 PBX Configuration—[2-4] System—Week Table

A specific time mode (day, night, lunch, or break) can be selected for operation depending on the time of day. The time mode can be switched either automatically or manually. Select the desired switching mode from the **Time Service Switching Mode** option.

Time Table numbers correspond to tenant numbers (for example, Tenant 1 uses Time Table 1). Select the desired Time Table from the **Time Table No.** list.

When in Automatic Switching mode, the time modes of the tenant are switched as programmed in the corresponding Time Table. Manual switching is possible only from an authorised extension (determined by COS).

- To adjust the currently displayed Time Table, click and drag the divisions between two time periods.
- To programme the time blocks of the currently displayed Time Table, including adding or deleting time blocks, click **Time Setting**.

## 10.4.1 PBX Configuration—[2-4] System—Week Table—Time Setting

The start times of 4 different time blocks can be programmed for each day of the week, for the selected Time Table, as well as the start and end times of up to 3 break periods.

Name	Description	Value Range	Links
1. Day/Lunch/Night —Day1 Start, Lunch	Enables the setting of the start time for each time block.	Disable, Enable	Feature Manual References
Start, Day2 Start, Night Start—Setting			5.1.3 Tenant Service 5.1.4 Time Service
1. Day/Lunch/Night —Day1 Start, Lunch	Specifies the start time for each time block. Times can only be set when <b>1</b> .	00:00– 23:59	Feature Manual References
Start, Day2 Start, Night Start—Hour, Minute	Day/Lunch/Night—Day1 Start, Lunch Start, Day2 Start, Night Start —Setting is set to Enable.		5.1.3 Tenant Service 5.1.4 Time Service
2. Break—Break 1–3 Start—Setting	Enables the setting of the start time for each break period.	Disable, Enable	Feature Manual References
			5.1.3 Tenant Service 5.1.4 Time Service
2. Break—Break 1–3 Start—Hour, Minute	Specifies the start time for each break period. Times can only be set when <b>2</b> .	00:00– 23:59	Feature Manual References
	Break—Break 1–3 Start—Setting is set to Enable.		5.1.3 Tenant Service 5.1.4 Time Service
2. Break—Break 1–3 End—Hour, Minute	Specifies the end time for each break period. Times can only be set when 2.  Break—Break 1–3 Start—Setting is set to Enable.	00:00– 23:59	Feature Manual References 5.1.3 Tenant Service 5.1.4 Time Service

# 10.5 PBX Configuration—[2-5] System—Holiday Table

A specific time mode (day, night, lunch, or break) can be selected for operation during holidays. Select the desired time mode from the **Holiday Mode** list.

The start and end dates of a maximum of 24 different holidays can be programmed.

You can click the **UM Parameter** tab to open the Holiday Table used for features of the Unified Messaging system. These settings are synchronised with Unified Messaging system Holiday settings.

Name	Description	Value Range	Links
Holiday Table —Setting	Enables the setting of the holiday.	Disable, Enable	PC Programming Manual References
			23.4 UM Configuration—[4-4] Service Settings—Holiday Table
			Feature Manual References 5.1.4 Time Service
Holiday Table —Start Date —Month	Specifies the month of the holiday start date.	1–12	PC Programming Manual References 23.4 UM Configuration—[4-4] Service Settings—Holiday Table
			Feature Manual References
			5.1.4 Time Service
Holiday Table —Start Date —Day	Specifies the day of the holiday start date.	1–31	PC Programming Manual References 23.4 UM Configuration—[4-4] Service Settings—Holiday Table
			Feature Manual References 5.1.4 Time Service
Holiday Table—Start Time	Specifies the time of day on the specified date at which to begin the holiday service. Click the cell to display an array of hours and minutes. Select an hour of the day and a minute of the hour to set the time.	Hour and Minute	PC Programming Manual References 23.4 UM Configuration—[4-4] Service Settings—Holiday Table Feature Manual References
Holiday Table —End Date— Month	Specifies the month of the holiday end date.	1–12	5.1.4 Time Service  PC Programming Manual References  23.4 UM Configuration—[4-4] Service Settings—Holiday Table  Feature Manual References  5.1.4 Time Service

Name	Description	Value Range	Links
Holiday Table —End Date—	Specifies the day of the holiday end date.	1–31	PC Programming Manual References
Day			23.4 UM Configuration—[4-4] Service Settings—Holiday Table
			Feature Manual References
			5.1.4 Time Service
Holiday Table—End	Specifies the time of day on the specified date at which to end	Hour and Minute	PC Programming Manual References
Time	the holiday service. Click the cell to display an array of hours and minutes. Select an hour of the day and a minute of the hour to set the time.		23.4 UM Configuration—[4-4] Service Settings—Holiday Table
			Feature Manual References
			5.1.4 Time Service
Holiday Table—	If "Yes" is selected, the holiday will not end regardless of the	Yes, No	PC Programming Manual References
Retain Holiday	end time setting. To end the holiday setting when Yes is selected and the end time has		23.4 UM Configuration—[4-4] Service Settings—Holiday Table
	already passed, set <b>Setting</b> to		Feature Manual References
	"Disable" or re-programme the settings for the holiday.		5.1.4 Time Service

# 10.6 PBX Configuration—[2-6] System—Numbering Plan

## 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main

Details of the extension numbering schemes, feature access numbers, and numbers to access other PBXs in a network can be programmed here.

For more information on flexible numbering, see "5.5.7 Flexible Numbering/Fixed Numbering" in the Feature Manual.

#### **Note**

- Numbering does not necessarily have to be uniform; varying numbers of digits can be used for each setting.
- To programme these settings, all installed V-SIPEXT32 and V-UTEXT32 cards must first be set to OUS. For details, see **9.1 PBX Configuration—[1-1] Configuration—Slot**.

#### **Extension**

The leading numbers and the number of additional digits of the extension numbers for a maximum of 64 different extension numbering schemes can be programmed.

Name	Description	Value Range	Links
Leading Number	Specifies the leading number of extension numbers and floating extension numbers.  Note  Changing this value will also affect the following settings.  • Extension Number as set in User Profiles and UM Configuration  • Mailbox Number when set to synchronise with Extension Number settings (However, Mailbox Number synchronisation depends on the setting 10.9 PBX Configuration—[2-9] System—System Options—Option 9—Extension / Mailbox Setting—Mailbox Number Synchronization with Extension Number.)	Max. 3 digits (consisting of 0–9)	PC Programming Manual References  10.9 PBX Configuration—[2-9] System—System Options— Option 9—Extension / Mailbox Setting—Mailbox Number Synchronization with Extension Number  11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings  11.7.2 PBX Configuration— [3-7-2] Group—UM Group—Unit Settings  12.1.1 PBX Configuration— [4-1-1] Extension—Wired Extension—Extension Settings  12.2.1 PBX Configuration— [4-2-1] Extension—Portable Station—Extension Settings  13.3.2 PBX Configuration— [5-3-2] Optional Device—Voice Message—DISA Message  19.1 PBX Configuration—[11-1] Maintenance—Main  20.1.1 UM Configuration—[1-1] Mailbox Settings—Quick Setting —Mailbox Number

Name	Description	Value Range	Links
No. of Additional Digits	Specifies the number of additional digits following the leading number.	None: 0 digit X: 1 digit X: 2 digits	

### **Features**

Feature numbers to access various PBX features can be programmed. The following features are available while hearing a dial tone.

Name	Description	Value Range	Links
Operator Call	Specifies the feature number used to call the operator.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 10.2 PBX Configuration—[2-2] System—Operator & BGM 14.6 PBX Configuration—[6-6] Feature—Tenant
			Feature Manual References 5.1.5 Operator Features
Idle Line Access (Local Access)	Specifies the feature number used to make a trunk call by Idle Line Access (selects an idle trunk automatically).	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.1.2 PBX Configuration— [3-1-2] Group—Trunk Group— Local Access Priority
			Feature Manual References 2.5.5.3 Trunk Access
Trunk Group Access	Specifies the feature number used to make a trunk call using an idle trunk from a certain trunk group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
TIE Line Access	Specifies the feature number used to make a TIE line call.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 17.1 PBX Configuration—[9-1] Private Network—TIE Table Feature Manual References 4.3.1 TIE Line Service
Redial	Specifies the feature number used to redial the last number dialled.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.6.3 Last Number Redial

Name	Description	Value Range	Links
System Speed Dialling / Personal Speed Dialling	Specifies the feature number used to make a call using a System/Personal Speed Dialling number.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 12.1.3 PBX Configuration— [4-1-3] Extension—Wired Extension—Speed Dial 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
			Feature Manual References  2.6.4 Speed Dialling—Personal/ System
Personal Speed Dialling - Programming	Specifies the feature number used to programme Personal Speed Dialling numbers at an extension.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.6.4 Speed Dialling—Personal/ System
DOORPHONE Call	Specifies the feature number used to make a call to a doorphone.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  13.1 PBX Configuration—[5-1] Optional Device—Doorphone  Feature Manual References  2.18.1 Doorphone Call
Group Paging	Specifies the feature number used to page a certain paging group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  11.4 PBX Configuration—[3-4] Group—Paging Group  Feature Manual References 2.17.1 Paging
External BGM On / Off	Specifies the feature number, available for manager extensions, used to turn on or off the external BGM.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.2 PBX Configuration—[2-2] System—Operator & BGM 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Manager—Manager
			Feature Manual References 2.28.1 Background Music (BGM)

Name	Description	Value Range	Links
OGM Record / Clear / Playback	Specifies the feature number, available for manager extensions, used to record, clear, or play back a certain OGM.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  13.3.2 PBX Configuration— [5-3-2] Optional Device—Voice Message—DISA Message 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Manager—Manager  Feature Manual References 2.28.2 Outgoing Message (OGM)
Single CO Line Access	Specifies the feature number used to make a trunk call using a certain trunk.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings  Feature Manual References 2.5.5.3 Trunk Access
Parallel Telephone (Ring) Mode Set / Cancel	Specifies the feature number used to set or cancel an SLT connected in parallel with a DPT to ring when receiving an incoming call.  Note  This feature is restricted to extensions connected to legacy gateway PBXs. For information about connecting SLTs and DPTs in parallel, refer to the documentation of the connected legacy gateway PBX.	Max. 4 digits (consisting of 0– 9, *, and #)	
Group Call Pickup	Specifies the feature number used to answer a call ringing at a certain call pickup group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.3 PBX Configuration—[3-3] Group—Call Pickup Group Feature Manual References 2.4.3 Call Pickup

Name	Description	Value Range	Links
Directed Call Pickup	Specifies the feature number used to answer a call ringing at a certain extension.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  12.1.1 PBX Configuration— [4-1-1] Extension—Wired Extension—Extension Settings —Option 3—Call Pickup Deny 12.2.1 PBX Configuration— [4-2-1] Extension—Portable Station—Extension Settings— Option 3—Call Pickup Deny  Feature Manual References
TAFAS Answer	Specifies the feature number used to answer a trunk call notified through an external pager.	Max. 4 digits (consisting of 0–9, *, and #)	2.4.3 Call Pickup  PC Programming Manual References  13.2 PBX Configuration—[5-2] Optional Device—External Pager  Feature Manual References  2.17.2 Trunk Answer From Any Station (TAFAS)
Group Paging Answer	Specifies the feature number used to answer a page to a paging group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.4 PBX Configuration—[3-4] Group—Paging Group Feature Manual References 2.17.1 Paging
Automatic Callback Busy Cancel	Specifies the feature number used to cancel Automatic Callback Busy.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.10.1 Automatic Callback Busy (Camp-on)
User Remote Operation / Walking COS / Verification Code	Specifies the feature number used to change the COS of an extension temporarily, and also change the feature settings (for example, FWD, DND) of an extension from another extension or through DISA.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Optional Device & Other Extensions—Remote Operation by Other Extension  Feature Manual References 2.7.5 Walking COS 2.7.6 Verification Code Entry

Name	Description	Value Range	Links
Wireless XDP Parallel Mode Set / Cancel	Specifies the feature number used to set or cancel Wireless XDP Parallel mode.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Optional Device & Other Extensions—Accept Wireless XDP Parallel Mode Set by PS  Feature Manual References 5.2.4.5 Wireless XDP Parallel Mode
Account Code Entry	Specifies the feature number used to enter an Account Code.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.5.4.3 Account Code Entry
Call Hold / Call Hold Retrieve	Specifies the feature number used to hold a call or retrieve a call on hold from the holding extension.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.13.1 Call Hold
Call Hold Retrieve: Specified with a Holding Extension Number	Specifies the feature number used to retrieve a held call from a different extension by specifying a holding extension number.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.13.1 Call Hold
Call Park / Call Park Retrieve	Specifies the feature number used to hold a call in a parking zone or retrieve a call held in a parking zone.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.13.2 Call Park
Hold Retrieve: Specified with a Held CO Line Number	Specifies the feature number used to retrieve a held trunk call from a different extension by specifying the held trunk number.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.13.1 Call Hold
Door Open	Specifies the feature number used to open a door.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 13.1 PBX Configuration—[5-1] Optional Device—Doorphone Feature Manual References 2.18.2 Door Open
External Relay Access	Specifies the feature number used to activate a relay.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 13.4 PBX Configuration—[5-4] Optional Device—External Relay Feature Manual References 2.18.4 External Relay Control

Name	Description	Value Range	Links
External Feature Access	Specifies the feature number used to access the features of a host PBX or the telephone company.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.11.7 External Feature Access (EFA)
SIP Refer(Blind)	Specifies the feature number used to perform a blind transfer from the PBX to the SIP trunk.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 5.2.2 SIP (Session Initiation Protocol) Extension
	Note		
	This feature is not available from an ISDN extension or a SIP extension.		
ISDN Hold	Specifies the feature number used to hold a call using the ISDN service of the telephone company, instead of the PBX feature.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 4.1.2.6 Call Hold (HOLD)—by ISDN
COLR Set / Cancel	Specifies the feature number used to set or cancel COLR, which suppresses the presentation of the called party's number to the caller.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port— Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port— Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY
			Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP) 4.3.4.2 Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/ Connected Name Identification Presentation (CNIP/CONP)—by QSIG

Name	Description	Value Range	Links
CLIR Set / Cancel	Specifies the feature number used to set or cancel CLIR, which suppresses the presentation of the caller's number to the called party.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port— Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port— Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY  Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP) 4.3.4.2 Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/Connected Name Identification Presentation (CNIP/CONP)—by QSIG
Switch CLIP of CO Line / Extension	Specifies the feature number used to send either the CLIP number of the trunk in use (subscriber's number) or the extension to the network.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port—ISDN CO —Subscriber Number  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—CO Setting —Subscriber Number  12.1.1 PBX Configuration— [4-1-1] Extension—Wired Extension—Extension Settings —CLIP—CLIP ID  12.2.1 PBX Configuration— [4-2-1] Extension—Portable Station—Extension Settings— CLIP—CLIP ID  Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)

Name	Description	Value Range	Links
MCID	Specifies the feature number used to ask the telephone company to trace a malicious call. This feature can be used during a call or while hearing a reorder tone after the caller hangs up.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 4.1.2.9 Malicious Call Identification (MCID)
ISDN-FWD (MSN) Set / Cancel / Confirm	Specifies the feature number used to set or cancel the FWD of incoming ISDN calls to an outside party using the ISDN service of the telephone company (instead of the PBX), or confirm the FWD setting.  Extension users can set the FWD destination to the network on an MSN basis.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 4.1.2.4 Call Forwarding (CF)— by ISDN (P-MP) 4.1.2.5 Call Forwarding (CF)— by ISDN (P-P)
Message Waiting Set / Cancel / Call Back	Specifies the feature number used to set or cancel Message Waiting, or call back the caller.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.20.1 Message Waiting
FWD/DND Set / Cancel: Call from CO & Extension	Specifies the feature number used to set or cancel FWD/DND for incoming trunk and intercom calls.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References  2.3 Call Forwarding (FWD)/Do Not Disturb (DND) Features
FWD/DND Set / Cancel: Call from CO	Specifies the feature number used to set or cancel FWD/DND for incoming trunk calls.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References  2.3 Call Forwarding (FWD)/Do Not Disturb (DND) Features

Name	Description	Value Range	Links
FWD/DND Set / Cancel: Call from Extension	Specifies the feature number used to set or cancel FWD/DND for incoming intercom calls.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References  2.3 Call Forwarding (FWD)/Do
FWD No Answer Timer Set	Specifies the feature number used to set the length of time before a call is forwarded.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND 12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References 2.3.2 Call Forwarding (FWD)
Group FWD Set / Cancel: Call from CO & Extension	Specifies the feature number used to set or cancel FWD for incoming trunk and intercom calls to an incoming call distribution group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings  Feature Manual References  2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY
Group FWD Set / Cancel: Call from CO	Specifies the feature number used to set or cancel FWD for incoming trunk calls to an incoming call distribution group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY

Name	Description	Value Range	Links
Group FWD Set / Cancel: Call from Extension	Specifies the feature number used to set or cancel FWD for incoming intercom calls to an incoming call distribution group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY
Call Pickup Deny Set / Cancel	Specifies the feature number used to set or cancel Call Pickup Deny (i.e., preventing other extensions from picking up calls to your extension).	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.4.3 Call Pickup
Paging Deny Set / Cancel	Specifies the feature number used to set or cancel Paging Deny (i.e., preventing other extensions from paging your extension).	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.4 PBX Configuration—[3-4] Group—Paging Group Feature Manual References 2.17.1 Paging
Walking Extension	Specifies the feature number used to use the same extension settings at a new extension.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.24.3 Walking Extension Features
Data Line Security Set / Cancel	Specifies the feature number used to set or cancel Data Line Security (i.e., preventing signals from other extensions during data transmission).	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.11.5 Data Line Security
Manual Call Waiting for Extension Call	Specifies the feature number used to set or change the method of receiving a Call Waiting notification from an extension.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.1.3.3 Call Waiting
Automatic Call Waiting	Specifies the feature number used to set or cancel a Call Waiting notification from a trunk, doorphone, or a call via an incoming call distribution group.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.1.3.3 Call Waiting

Name	Description	Value Range	Links
Executive Override Deny Set / Cancel	Specifies the feature number used to set or cancel Executive Busy Override (i.e., preventing other extensions from joining your conversation).	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Executive—Executive Busy Override 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Executive—Executive Busy Override Deny  Feature Manual References 2.10.2 Executive Busy Override
Not Ready (Manual Wrap- up) Mode On / Off	Specifies the feature number used to enter or leave Not Ready mode.	Max. 4 digits (consisting of 0–9, *, and #)	PC Programming Manual References 11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings Feature Manual References
			2.2.2.8 Log-in/Log-out
Log-in / Log-out	Specifies the feature number used to join or leave an incoming call distribution group.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings Feature Manual References 2.2.2.8 Log-in/Log-out
Incoming Call Queue Monitor	Specifies the feature number, available only for extensions assigned as a supervisor, used to monitor the status of an incoming call distribution group with the extension display.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  11.5.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings—Miscellaneous— Supervisor Extension Number Feature Manual References 2.2.2.9 Supervisory Feature

Name	Description	Value Range	Links
Hot Line (Pickup Dial) Program Set / Cancel	Specifies the feature number used to set/cancel the Hot Line feature, or programme the number to be automatically dialled.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.3 PBX Configuration—[2-3] System—Timers & Counters— Dial / IRNA / Recall / Tone—Dial —Hot Line (Pickup Dial) Start
			Feature Manual References 2.6.6 Hot Line
Absent Message Set / Cancel	Specifies the feature number used to set or cancel the display of an Absent Message.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.20.2 Absent Message
BGM Set / Cancel	Specifies the feature number used to set or cancel the BGM heard through the telephone speaker while onhook.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 10.2 PBX Configuration—[2-2] System—Operator & BGM Feature Manual References 2.28.1 Background Music (BGM)
Remote Timed Reminder (Remote Wakeup Call)	Specifies the feature number used to set or cancel a Timed Reminder remotely (Wake-up Call).	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.24.4 Timed Reminder
Timed Reminder Set / Cancel	Specifies the feature number used to set or cancel a Timed Reminder.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.24.4 Timed Reminder
Printing Message	Specifies the feature number used to select a Printing Message to be output on SMDR.	Max. 4 digits (consisting of 0–9, *, and #)	PC Programming Manual References  14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Main —SMDR for External Hotel Application 2—Printing Message 1–8  Feature Manual References 2.22.2 Printing Message
Extension Dial Lock Set / Cancel	Specifies the feature number used to lock or unlock an extension to make certain trunk calls and change the forwarding destination, using the Extension Dial Lock feature.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.7.3 Extension Dial Lock

Name	Description	Value Range	Links
Time Service (Day / Lunch / Break / Night) Switch	Specifies the feature number, available for manager extensions, used to change the time mode manually.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Manager—Time Service Switch 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Manager—Manager  Feature Manual References 5.1.4 Time Service
Remote Extension Dial Lock Off	Specifies the feature number, available for manager extensions, used to unlock other extensions using the Extension Dial Lock feature.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Manager—Manager
			Feature Manual References 2.7.3 Extension Dial Lock
Remote Extension Dial Lock On	Specifies the feature number, available for manager extensions, used to lock other extensions using the Extension Dial Lock feature.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Manager—Manager  Feature Manual References
			2.7.3 Extension Dial Lock
Extension Feature Clear	Specifies the feature number used to reset certain features of an extension to the default values.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.24.2 Extension Feature Clear
Extension PIN Set / Cancel	Specifies the feature number used to set a PIN for an extension.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.24.1 Extension Personal Identification Number (PIN)
Dial Information (CTI)	Specifies the feature number used to send dial information to the CTI feature instead of the PBX.	Max. 4 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)

Name	Description	Value Range	Links
Conference Group Call Operation	Specifies the feature number used to make a conference group call.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  10.3 PBX Configuration—[2-3] System—Timers & Counters— Miscellaneous—Conference Group Call—Ring Duration 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings— Miscellaneous—Conference Group Call Operation 11.9 PBX Configuration—[3-9] Group—Conference Group  Feature Manual References
			2.15.1 Conference Group Call
Centralised BLF Monitor Cancel	Specifies the feature number used to cancel monitoring of an extension using an NDSS button.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 17.1 PBX Configuration—[9-1] Private Network—TIE Table
			Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Busy Out Cancel	Specifies the feature number used to cancel the Busy Out status of an analogue trunk.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 10.9 PBX Configuration—[2-9] System—System Options— Option 5—Busy Out—Busy Out for Analogue CO Feature Manual References 2.5.4.6 Trunk Busy Out

### **Other PBX Extension**

Other PBX extension numbers can be used to easily call extensions connected to PBXs at different locations in a TIE line network. The leading numbers of all PBXs in the network that will be called should be entered in this table. A maximum of 16 leading numbers can be programmed.

Name	Description	Value Range	Links
Dial	Specifies the leading extension number of the other PBX.	Max. 3 digits (consisting of 0–9, *, and #)	PC Programming Manual References 17.1 PBX Configuration—[9-1] Private Network—TIE Table—Enhanced QSIG— Leading Number
			Feature Manual References 4.3.1 TIE Line Service

### **KX-T7710**

The settings of the MESSAGE key and One-touch keys on the KX-T7710 can be programmed.

#### Note

- This tab is for programming extensions connected to legacy gateway PBXs. For information about setting up a legacy gateway PBX, see 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2.
- For further information about programming for KX-T7710 phones, refer to the documentation of the connected legacy gateway PBX.

Name	Description	Value Range	Links
Dial	Indicates the DTMF tone dial required by the PBX to recognise it and dial the pre-programmed number for each key (reference only).	B: For MESSAGE Key A1: For One-touch Dial 01 Key A2: For One-touch Dial 02 Key A3: For One-touch Dial 03 Key A4: For One-touch Dial 04 Key A5: For One-touch Dial 05 Key A6: For One-touch Dial 06 Key A7: For One-touch Dial 07 Key A8: For One-touch Dial 08 Key	
Message Key— Phone Number	Specifies the feature number or telephone number dialled when the MESSAGE key on the KX-T7710 is pressed. By default, this is set to the feature number used to call back a caller who left a message waiting indication, Message Waiting Set / Cancel / Call Back. This is available only when the position of the Mode switch lever on the KX-T7710 is set to "PBX".	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	PC Programming Manual References 10.6.1 PBX Configuration— [2-6-1] System— Numbering Plan— Main—Features— Message Waiting Set / Cancel / Call Back
One-touch Dial 01–08 —Phone Number	Specifies the number dialled when a one-touch key on the KX-T7710 is pressed.  This is available only when the position of the Mode switch lever on the KX-T7710 is set to "PBX".	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	

## 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial

Quick Dialling numbers are used to call extensions or outside parties, or access certain features without having to dial their full numbers. It is possible to register Quick Dialling numbers that overlap with other registered numbers (refer to "Automatic Rerouting of VoIP Calls to Public Trunks" in the Feature Manual). For more information on flexible numbering, see "5.5.7 Flexible Numbering/Fixed Numbering" in the Feature Manual.

Name	Description	Value Range	Links
Use Quick Dial for CO rerouting during Break Mode.	Specifies whether Quick Dialling can be used to make a trunk call via an extension registered at another site in a One-look network, when the Time Service mode is Break mode.	On, Off	PC Programming Manual References  9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property —Main—Main—Switch Time Service to "Break" in Isolated Mode  Feature Manual References
			2.6.5 Quick Dialling 5.1.4 Time Service
Use quick dial for rerouting to public CO when TIE line does not work.	Specifies whether Quick Dialling can be used for rerouting to a public trunk when a TIE line is not operating.	On, Off	Feature Manual References 2.6.5 Quick Dialling
Dial	Specifies the Quick Dialling number.	1–4000: Max. 8 digits (consisting of 0–9, *, and #)	Feature Manual References 2.6.5 Quick Dialling 4.3.2 Voice over Internet Protocol (VoIP) Network 5.5.7 Flexible Numbering/Fixed Numbering
Phone Number	Specifies the number to be dialled when the corresponding Quick Dialling number is used.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.6.5 Quick Dialling 4.3.2 Voice over Internet Protocol (VoIP) Network 5.5.7 Flexible Numbering/Fixed Numbering

## 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature

Feature numbers used to access various PBX features can be programmed. The following features are available while hearing a busy, DND, or ringback tone. Each feature must have a unique feature number. For more information on flexible numbering, see "5.5.7 Flexible Numbering/Fixed Numbering" in the Feature Manual.

Name	Description	Value Range	Links
BSS / OHCA / Whisper OHCA / DND Override	Specifies the feature number used to notify a busy extension of a second call by Call Waiting, or call an extension in DND mode.	1 digit (0– 9, *, or #)	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 2—Manual C. Waiting for Extension Call  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 2—Manual C. Waiting for Extension Call
			Feature Manual References
			2.1.3.3 Call Waiting 2.3.3 Do Not Disturb (DND) 2.10.4.2 Call Waiting Tone 2.10.4.4 Whisper OHCA
Executive Busy Override	Specifies the feature number used to interrupt an existing call to establish a three-party conference call.	1 digit (0– 9, *, or #)	PC Programming Manual References  10.7.1 PBX Configuration—[2-7-1] System —Class of Service—COS Settings— Executive—Executive Busy Override  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Executive Override Deny  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Executive Override Deny
			Feature Manual References
			2.10.2 Executive Busy Override
Alternate Calling - Ring / Voice	Specifies the feature number used to allow a caller to change the called extension's preset call receiving method to ring tone or voice.	1 digit (0– 9, *, or #)	Feature Manual References 2.5.3 Intercom Call
Message Waiting Set	Specifies the feature number used to leave a Message Waiting notification.	1 digit (0– 9, *, or #)	Feature Manual References 2.20.1 Message Waiting

Name	Description	Value Range	Links
Call Monitor	Specifies the feature number used to listen to a busy extension's conversation.	1 digit (0– 9, *, or #)	PC Programming Manual References  10.7.1 PBX Configuration—[2-7-1] System —Class of Service—COS Settings— Executive—Call Monitor  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Executive Override Deny  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Executive Override Deny
			Feature Manual References 2.10.3 Call Monitor
Automatic Callback Busy	Specifies the feature number used to reserve a busy line and receive callback ringing when the line becomes idle.	1 digit (0– 9, *, or #)	Feature Manual References 2.10.1 Automatic Callback Busy (Camp-on)
BSS / OHCA / Whisper OHCA / DND Override-2	Specifies the feature number used to notify a busy extension of a second call by Call Waiting, or call an extension in DND mode. This is the same setting as BSS / OHCA / Whisper OHCA / DND Override on this screen, and can be used to provide two methods of activating the specified features. This can be useful, for example, if users prefer to use a separate feature number to activate DND	1 digit (0– 9, *, or #)	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 2—Manual C. Waiting for Extension Call  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 2—Manual C. Waiting for Extension Call  Feature Manual References  2.1.3.3 Call Waiting  2.3.3 Do Not Disturb (DND)  2.10.4.2 Call Waiting Tone  2.10.4.4 Whisper OHCA

# 10.7 PBX Configuration—[2-7] System—Class of Service

# 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings

Each extension, doorphone port, incoming call distribution group, and trunk group is assigned a Class of Service (COS). Certain features can be programmed to behave differently depending on the COS. A maximum of 512 COS levels can be programmed.

### **TRS**

Restrictions to features related to making trunk calls can be programmed for each COS.

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)
TRS Level —Day, Lunch, Break, Night	Specifies the Toll Restriction (TRS)/ Call Barring (Barring) level for making trunk calls in each time mode.	1: Allows all trunk calls 2–6: Restricts trunk calls according to the combination of the Denied and Exception Code Tables 7: Restricts all trunk calls	PC Programming Manual References  10.4 PBX Configuration—[2-4] System— Week Table  11.1.1 PBX Configuration—[3-1-1] Group— Trunk Group—TRG Settings—Main—COS  11.5.1 PBX Configuration—[3-5-1] Group— Incoming Call Distribution Group—Group Settings—Main—COS  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS  13.1 PBX Configuration—[5-1] Optional Device—Doorphone—COS  15.1 PBX Configuration—[7-1] TRS— Denied Code  15.2 PBX Configuration—[7-2] TRS— Exception Code  Feature Manual References  2.7.1 Toll Restriction (TRS)/Call Barring (Barring)

Name	Description	Value Range	Links
TRS Level on Extension Lock	Specifies the TRS/ Barring level for making trunk calls when an extension is locked using the Extension Dial Lock feature.	1: Allows all trunk calls 2–6: Restricts trunk calls according to the combination of the Denied and Exception Code Tables 7: Restricts all trunk calls	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS  15.1 PBX Configuration—[7-1] TRS— Denied Code  15.2 PBX Configuration—[7-2] TRS— Exception Code
			Feature Manual References 2.7.3 Extension Dial Lock
TRS Level for System Speed Dialling	Specifies the TRS/ Barring level for making a trunk call using System Speed Dialling numbers, which overrides the TRS/ Barring set for the current time mode.	1: Allows all trunk calls 2–6: Restricts trunk calls according to the combination of the Denied and Exception Code Tables 7: Restricts all trunk calls	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS  14.1 PBX Configuration—[6-1] Feature— System Speed Dial  15.5 PBX Configuration—[7-5] TRS— Miscellaneous—TRS Override by System Speed Dialling
			Feature Manual References  2.6.4 Speed Dialling—Personal/System  2.7.1 Toll Restriction (TRS)/Call Barring (Barring)

### CO & SMDR

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)

Name	Description	Value Range	Links
Extension- CO Line Call Duration Limit	Enables the extension-to-trunk call duration feature. The maximum call duration can be set using Extension-CO Duration Time (*60s) on 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings.	Disable, Enable	PC Programming Manual References  10.9 PBX Configuration—[2-9] System— System Options—Option 2—Extension - CO Call Limitation—For Incoming Call 11.1.1 PBX Configuration—[3-1-1] Group— Trunk Group—TRG Settings—Main—COS 12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS 12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  Feature Manual References 2.11.8 Trunk Call Limitation
Transfer to CO	Enables the transferring of calls to trunks.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  Feature Manual References  2.12.1 Call Transfer
Call Forward to CO	Enables the forwarding of calls to trunks.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.1.2 PBX Configuration—[4-1-2] Extension— Wired Extension—FWD/DND  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  12.2.2 PBX Configuration—[4-2-2] Extension— Portable Station—FWD/DND  Feature Manual References  2.3.2 Call Forwarding (FWD)
Account Code Mode	Specifies whether the entry of an account code is optional or mandatory when making a trunk call.	Option, Forced	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  Feature Manual References  2.5.4.3 Account Code Entry

Name	Description	Value Range	Links
CF (MSN)	Enables forwarding of ISDN calls to an outside party using the ISDN service of the telephone company, instead of the PBX, on an MSN basis.	Disable, Enable	Feature Manual References 4.1.2.4 Call Forwarding (CF)—by ISDN (P-MP) 4.1.2.5 Call Forwarding (CF)—by ISDN (P-P)
Outgoing CO Call Printout (SMDR)	Enables the automatic recording of information about outgoing trunk calls on SMDR.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  19.1 PBX Configuration—[11-1] Maintenance— Main  Feature Manual References
			2.22.1.1 Station Message Detail Recording (SMDR)

### **Assistant**

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)
Call Pickup by DSS	Enables using a DSS button to pick up a call to a	Disable, Enable	PC Programming Manual References
	specified extension.		12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Main—COS 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
			Feature Manual References
			2.4.3 Call Pickup

Name	Description	Value Range	Links
DND Override	Enables making a call to an extension	Disable, Enable	PC Programming Manual References
	in DND mode by entering the feature number.		12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Main—COS 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND
			Feature Manual References
OHCA /	Enables using	Disable, Enable	2.3.3 Do Not Disturb (DND)  PC Programming Manual
Whisper OHCA	OHCA/Whisper OHCA as a method of second call notification by entering the feature number.		References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Main—COS  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS
			Feature Manual References 2.10.4 Second Call Notification to Busy Extension 2.10.4.4 Whisper OHCA
Transfer to busy Extension w/o BSS Operation	Enables a transferred call to be queued when the transfer destination is busy.	Disable: The call is not transferred. (If the transfer destination has enabled the call waiting notification feature, it is possible to inform the destination about the call transfer.) Enable: The transferred call is queued for the time period specified in Recall—Transfer Recall in 10.3 PBX Configuration—[2-3] System—Timers & Counters.	PC Programming Manual References  10.3 PBX Configuration—[2-3] System —Timers & Counters—Dial / IRNA / Recall / Tone—Recall—Transfer Recall Feature Manual References 2.12.1 Call Transfer

Name	Description	Value Range	Links
Automatic Answer (Caller)	Enables a caller to have calls automatically answered when the destination has set Hands-free Answerback.	Disable: Even if the destination has set Hands-free Answerback, the call will not be automatically answered. Enable: The call will be automatically answered.	Feature Manual References 2.4.4 Hands-free Answerback

### **Executive**

		Value	
Name	Description	Range	Links
COS Name	Specifies the name	Max. 20	Feature Manual References
	of the COS.	characters	5.1.1 Class of Service (COS)
Call Monitor	Enables listening to a busy extension's conversation.	Disable, Enable	PC Programming Manual References 12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS 12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS
			Feature Manual References 2.10.3 Call Monitor
Executive Busy Override	Enables interrupting an existing call to establish a three- party conference call.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS
			Feature Manual References
			2.10.2 Executive Busy Override
Executive Busy Override Deny	Enables preventing other extensions from interrupting calls.	Disable, Enable	PC Programming Manual References 12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS 12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS
			Feature Manual References 5.1.1 Class of Service (COS)

### Manager

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)
Group Forward Set	Enables setting call forwarding for calls to an incoming call distribution group.	Disable: An extension cannot set call forwarding for any group. Enable-All: An extension can set call forwarding for all groups. Enable-Group: An extension can only set call forwarding for the group to which the extension belongs.	PC Programming Manual References  11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group —Group Settings—Member List 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS Feature Manual References 2.3.2 Call Forwarding (FWD)
PT Programming Mode	Specifies the level of authorisation for performing PT programming.	Disable: A PT user cannot perform any programming. Enable: A PT user can perform only personal programming.	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS Feature Manual References 5.5.3 PT Programming
Manager	Specifies the authorisation to use manager features.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS  Feature Manual References
			5.1.6 Manager Features

Name	Description	Value Range	Links
Time Service Switch	Enables manual switching of time	Disable, Enable	PC Programming Manual References
	modes.		10.4 PBX Configuration—[2-4] System— Week Table 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS
			Feature Manual References
			5.1.4 Time Service

### PDN/SDN

An SDN button allows a PT user to see the current status of the corresponding PDN extension, and to pick up or transfer calls to that extension easily. The settings here control how SDN buttons operate for extensions at each COS level.

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)
SDN Key Mode	Selects what happens when an extension user presses an SDN button while on hook.	Enhanced DSS: The registered (owner) extension is called. Standard SDN: A dial tone is heard.	Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension
Making call by COS of SDN key's owner	Selects whether an extension that uses an SDN button to make calls is given the COS of the SDN button's registered (owner) extension. This setting is only available when <b>SDN Key Mode</b> above is set to "Standard SDN".	Disable, Enable	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service —COS Settings—PDN/SDN— COS Name  Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension
SDN Key Assignment by PT Program	Selects whether PT users can create SDN buttons on their own extensions using PT programming.	Disable, Enable	Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension

## **Optional Device & Other Extensions**

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)
Door Unlock	Enables using the door opener feature.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS
			Feature Manual References 2.18.2 Door Open
External Relay Access	Enables access to external relays.	Disable, Enable	PC Programming Manual References  13.4 PBX Configuration—[5-4] Optional Device— External Relay
			Feature Manual References 2.18.4 External Relay Control
Accept the Call from DISA	Enables reception of calls from DISA.	Disable, Enable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message
			Feature Manual References 2.16.1 Direct Inward System Access (DISA)
Remote Operation by Other Extension	Allows the Walking COS feature to be used from a remote location (inside the PBX, or outside the PBX using DISA).	Allow, Deny	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS
			Feature Manual References 2.7.5 Walking COS
Accept Wireless XDP Parallel Mode Set by PS	Allows Wireless XDP Parallel Mode to be set by a PS.	Allow, Deny	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS
1 0			Feature Manual References 5.2.4.5 Wireless XDP Parallel Mode

### CA

Name	Description	Value Range	Links
COS	Specifies the name of the	Max. 20 characters	Feature Manual References
Name	COS.		5.1.1 Class of Service (COS)
CA Chat	Enables the chat feature	Disable,	PC Programming Manual References
	when using Communication Assistant (CA) Client.	Enable	10.7.1 PBX Configuration—[2-7-1] System— Class of Service—COS Settings—CA—CA ICD Group Log Out
			Feature Manual References
			2.26.2 CA (Communication Assistant)
CA ICD	Enables logging out of ICD	Disable,	PC Programming Manual References
Group Log Out	groups when using Communication Assistant (CA) Client.	Enable	10.7.1 PBX Configuration—[2-7-1] System— Class of Service—COS Settings—CA—CA Chat
			Feature Manual References
			2.26.2 CA (Communication Assistant)

### **Miscellaneous**

Name	Description	Value Range	Links
COS Name	Specifies the name of the COS.	Max. 20 characters	Feature Manual References 5.1.1 Class of Service (COS)
Conference Group Call Operation	Enables making conference group calls.	Disable, Enable	PC Programming Manual References  10.3 PBX Configuration—[2-3] System— Timers & Counters—Miscellaneous— Conference Group Call—Ring Duration 10.6.1 PBX Configuration—[2-6-1] System— Numbering Plan—Main—Features— Conference Group Call Operation 11.9 PBX Configuration—[3-9] Group— Conference Group
			Feature Manual References 2.15.1 Conference Group Call
Accept a collect call (for Brazil)	Enables accepting collect calls.	Disable, Enable	

## 10.7.2 PBX Configuration—[2-7-2] System—Class of Service—External Call Block

Each COS can have different trunk groups available for making trunk calls, depending on the time mode (day/lunch/break/night). Select the desired time mode from the list.

Name	Description	Value Range	Links
Outgoing Trunk Group 1–96	Specifies the available trunk groups.	Block (blue), Non Block	PC Programming Manual References  10.4 PBX Configuration—[2-4] System—Week Table 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings 18.1 PBX Configuration—[10-1] CO & Incoming Call— CO Line Settings  Feature Manual References 2.5.5.3 Trunk Access

## 10.7.3 PBX Configuration—[2-7-3] System—Class of Service—Internal Call Block

Internal Call Block determines the restrictions placed on making intercom calls. The extensions, incoming call distribution groups, and doorphones belonging to a certain COS can be programmed to not receive intercom calls from those belonging to a certain COS.

Name	Description	Value Range	Links
COS Number of the Extension Which Receive the Call from Other Extension 1–512	Specifies the combinations of COS levels for which intercom calls are blocked.	Block (blue), Non Block	PC Programming Manual References  11.5.1 PBX Configuration—[3-5-1] Group— Incoming Call Distribution Group—Group Settings —Main—COS  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings—Main— COS  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Main— COS  13.1 PBX Configuration—[5-1] Optional Device— Doorphone—COS  Feature Manual References  2.1.2.2 Internal Call Block

# 10.8 PBX Configuration—[2-8] System—Ring Tone Patterns

### 10.8.1 PBX Configuration—[2-8-1] System—Ring Tone Patterns—Call from CO

Different ring tone patterns can be selected for incoming trunk calls depending on the trunk group that the calls are received on. A maximum of 8 Ring Tone Pattern Tables can be programmed, and any pattern table can be selected for use by an extension.

Name	Description	Value Range	Links
Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for incoming trunk calls.	Single, Double, Triple, Option1, Option2	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call— CO Line Settings—Trunk Group Number  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Option 1—Ring Pattern Table  Feature Manual References  2.1.3.2 Ring Tone Pattern Selection

### 10.8.2 PBX Configuration—[2-8-2] System—Ring Tone Patterns—Call from DOORPHONE

Different ring tone patterns can be selected for incoming doorphone calls depending on the doorphone port that the calls originate from. A maximum of 8 Ring Tone Pattern Tables can be programmed, and any pattern table can be selected for use by an extension.

Name	Description	Value Range	Links
Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for incoming doorphone calls.	Single, Double, Triple, S- Double, Option 1, Option 2	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings—Option 1—Ring Pattern Table  13.1 PBX Configuration—[5-1] Optional Device—Doorphone
		Feature Manual References	
			2.1.3.2 Ring Tone Pattern Selection 2.18.1 Doorphone Call

### 10.8.3 PBX Configuration—[2-8-3] System—Ring Tone Patterns—Call from Others

Different ring tone patterns can be selected for incoming intercom calls and ringing triggered by certain PBX features (Timed Reminder, Call Back, and Live Call Screening). A maximum of 8 Ring Tone Pattern Tables can be programmed, and any pattern table can be selected for use by an extension.

For more information on ring tone patterns, see "2.1.3.2 Ring Tone Pattern Selection" in the Feature Manual.

Name	Description	Value Range	Links
Extension—Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for incoming intercom calls.	Single, Double, Triple, Option 1, Option 2	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension —Wired Extension—Extension Settings— Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension —Portable Station—Extension Settings— Option 1—Ring Pattern Table
Timed Reminder —Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for Timed Reminder alarms.	Single, Double, Triple, Option 1, Option 2	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension —Wired Extension—Extension Settings— Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension —Portable Station—Extension Settings— Option 1—Ring Pattern Table
Call Back—Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for callback ringing by Automatic Callback Busy.	Single, Double, Triple, S- Double, Option 1, Option 2	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension —Wired Extension—Extension Settings— Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension —Portable Station—Extension Settings— Option 1—Ring Pattern Table
Live Call Screening—Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for LCS warning tones.	Single, Double, Triple, Option 1, Option 2	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension —Wired Extension—Extension Settings— Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension —Portable Station—Extension Settings— Option 1—Ring Pattern Table
External Sensor —Ring Tone Pattern Plan 1–8	Specifies the ring tone pattern for calls from an external sensor.	Single, Double, Triple, Option 1, Option 2	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension —Wired Extension—Extension Settings— Option 1—Ring Pattern Table  12.2.1 PBX Configuration—[4-2-1] Extension —Portable Station—Extension Settings— Option 1—Ring Pattern Table

# 10.9 PBX Configuration—[2-9] System—System Options

Various system settings can be programmed.

Name	Description	Value Range	Links
PT LCD—Date Display	Selects the order that the month and date are shown on the displays of extensions.	Date-Month, Month- Date	
PT LCD—Time Display	Selects the time format shown on the displays of extensions. The time display format assigned here applies when setting the Timed Reminder feature.	12H, 24H	Feature Manual References 2.24.4 Timed Reminder
PT LCD— Password / PIN Display	Selects whether passwords and PINs (Personal Identification Number) are hidden or shown on the displays of extensions while being entered.	Hide, Display	Feature Manual References 2.24.1 Extension Personal Identification Number (PIN)
PT Fwd / DND —Fwd LED	Selects the light pattern of the FWD/DND button while the FWD feature is activated.	On (Solid): Red on Flash: Slow red flashing	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References
			2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND) —SUMMARY 2.21.3 LED Indication

Name	Description	Value Range	Links
PT Fwd / DND —DND LED	Selects the light pattern of the FWD/DND button while the DND feature is activated.	On (Solid): Red on Flash: Slow red flashing	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References  2.3.1 Call Forwarding
			(FWD)/Do Not Disturb (DND) —SUMMARY 2.21.3 LED Indication
PT Fwd / DND —Fwd/DND key mode when Idle	Selects the function of the FWD/DND button (fixed button) when it is pressed in idle status. (A FWD/DND button customised on a flexible button is always in FWD/DND Cycle Switch mode, and the mode cannot be changed.)	FWD/DND Setting Mode: Enter programming mode for the FWD/DND setting. FWD/DND Cycle Switch: Switch the FWD on/DND on/Off mode instead of entering the programming mode for the FWD/DND setting. (When there are separate FWD/DND settings for calls from trunks and calls from extensions, mode switching cannot be performed.)	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References  2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND) —SUMMARY
PT Fwd / DND —Paging to DND Extension	Specifies whether extensions can receive paging when in DND mode.	Do Not Page, Page	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  11.4 PBX Configuration—[3-4] Group—Paging Group  Feature Manual References  2.17.1 Paging

Name	Description	Value Range	Links
PT Fwd / DND —Extension Status of Mobile Integration (FWD NA to CO)	Specifies whether an extension is shown as idle or busy when it forwards a call to a trunk on no answer.	Idle, Busy	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND
			Feature Manual References 2.3.2 Call Forwarding (FWD)
PT Operation— Off Hook Monitor	Enables the use of Off-Hook Monitor with D-PTs and IP-PTs.	Disable: The PT user's voice is sent through the handsfree microphone. The other party's voice is heard through the hands-free speaker. Enable: The PT user's voice is sent through the handset microphone. The other party's voice is heard through both the hands-free speaker and the handset.	Feature Manual References 2.11.2 Off-hook Monitor
PT Operation— Privacy Release by SCO key	Selects the function of the S-CO button during a trunk call.	Enable: Pressing the S-CO button activates the Privacy Release feature Disable: Pressing the S-CO button switches the information shown on the PT display.	Feature Manual References 2.14.3 Privacy Release
PT Operation— One-touch Busy Override by SCO key	Specifies whether calls in progress can be joined (Executive Busy Override) simply by pressing the S-CO button.	Enable, Disable	Feature Manual References 2.10.2 Executive Busy Override
PT Operation— JOG Dial Speed	Selects the speed at which items scroll on the display when the Jog Dial is used.	Normal, High Speed	

Name	Description	Value Range	Links
PT Operation— PT Ring Off Setting	Specifies whether incoming call ringing can be turned off at individual extensions. If disabled, users cannot prevent incoming calls from ringing.	Disable, Enable	Feature Manual References 2.1.3.2 Ring Tone Pattern Selection
PT Operation— Automatic Answer for Call from CO after	Specifies the number of times a PT in Hands-free Answerback mode will ring before a conversation is established automatically when it receives a call from a trunk.	No Ring, 1 Ring, 2 Rings, 3 Rings	Feature Manual References 2.4.4 Hands-free Answerback
PT Operation— Automatic Hold by ICM / CO / ICD Group Key	Selects whether calls are disconnected or held when an INTERCOM, PDN, CO, or ICD Group button is pressed while having a conversation.	Disable (Disconnect), Enable	PC Programming Manual References  12.1.4 PBX Configuration— [4-1-4] Extension—Wired Extension—Flexible Button 12.2.3 PBX Configuration— [4-2-3] Extension—Portable Station—Flexible Button
			Feature Manual References 2.13.1 Call Hold
PT Operation— Hold key mode	Selects which extensions can retrieve a held call or a call that is transferred by Call Transfer without Announcement feature.	Hold: Any extension can retrieve a held call. Exclusive Hold: Only the holding extension can retrieve a held call.	Feature Manual References 2.13.1 Call Hold

Name	Description	Value Range	Links
Extension Clear —Call Waiting	Specifies whether the Call Waiting setting is cleared when Extension Feature Clear is performed.	Clear, Do not clear	Feature Manual References 2.24.2 Extension Feature Clear
Extension Clear —Fwd/DND	Specifies whether the FWD/DND setting is cleared when Extension Feature Clear is performed.	Clear, Do not clear	Feature Manual References 2.24.2 Extension Feature Clear
Extension Clear —Hot Line (Pick- up Dial)	Specifies whether the Hot Line setting is cleared when Extension Feature Clear is performed.	Clear, Do not clear	Feature Manual References 2.24.2 Extension Feature Clear

Name	Description	Value Range	Links
CODEC— System CODEC	Selects the codec type for PSs.	A-Law, Mu-Law	
CODEC— Network CODEC	Selects the codec type for ISDN lines.	A-Law, Mu-Law	
CODEC—Priority Notification from SIP Network (for Incoming Call)	Specifies whether the priority notification from the SIP network is used in place of the PBX's codec priority for SIP trunks.	Enable, Disable	
ISDN en Bloc Dial—[#] as End of Dial for en Bloc mode	Specifies whether to automatically send "#" as an end code when dialling to an ISDN line; if used as the end code, "#" will not be dialled out as part of a number even when the "#" key is pressed.	Enable, Disable	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port—ISDN CO —ISDN Outgoing Call Type  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—CO Setting—ISDN Outgoing Call Type  Feature Manual References  4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY
Redial— Automatic Redial when No Answer (ISDN)	Selects whether Automatic Redial to an ISDN line is performed when the called party does not answer within a pre-programmed time period.	Disable, Enable	PC Programming Manual References 10.3 PBX Configuration—[2-3] System—Timers & Counters— Automatic Redial—Redial Call Ring Duration Feature Manual References 2.6.3 Last Number Redial
Redial— Automatic Redial for Analogue CO	Selects whether Automatic Redial to an analogue trunk is performed when the called party does not answer within a pre-programmed time period.	Enable, Disable	PC Programming Manual References 10.3 PBX Configuration—[2-3] System—Timers & Counters— Automatic Redial—Redial Call Ring Duration Feature Manual References 2.6.3 Last Number Redial

Name	Description	Value Range	Links
Redial—Save Dial After Connection to Redial Memory	Specifies whether any digits dialled after the called party answers (for example, to access a specific extension within another company) are also saved as part of the redial number.	Enable, Disable	Feature Manual References 2.6.3 Last Number Redial
Redial—Call Log by Redial key	Enables display of the Outgoing Call Log on a display PT by pressing the REDIAL button while on hook.	Enable, Disable	Feature Manual References 2.6.3 Last Number Redial
Extension - CO Call Limitation— For Incoming Call	Selects whether the time limit for extension-to-trunk calls applies to outgoing calls only or for both outgoing and incoming calls. COS determines the use of this feature, and the length of the time limit can be assigned on a trunk group basis.	Enable, Disable	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings—CO & SMDR—Extension-CO Line Call Duration Limit 11.1.1 PBX Configuration— [3-1-1] Group—Trunk Group— TRG Settings—Main— Extension-CO Duration Time (*60s)  Feature Manual References 2.11.8 Trunk Call Limitation
CO - CO Call Limitation—After Conference	Selects whether to allow a call between 2 outside destinations to continue after the originator of the conference has left the conference.	Enable: The call will be disconnected. Disable: The call will continue.	Feature Manual References 2.14.2 Conference 4.3.5 QSIG Enhanced Features
Applying logical partitioning	Selects whether to use the logical partitioning feature.	Enable, Disable	PC Programming Manual References 7.3.5 Utility—Log—Call Control Log 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Area ID for logical partition

Name	Description	Value Range	Links
Confirmation Tone— Tone 1: Called by Voice	Enables the PBX to send Confirmation Tone 1. Confirmation Tone 1 is heard from a PT when it receives a call in voice-calling mode.	Disable, Enable	Feature Manual References 2.18.1 Doorphone Call 2.25.2 Confirmation Tone
Confirmation Tone— Tone 2: Paged / Automatic Answer	Enables the PBX to send Confirmation Tone 2. Confirmation Tone 2 is heard from a PT when it receives a call in Hands-free Answerback mode, or paging.	Disable, Enable	Feature Manual References 2.4.4 Hands-free Answerback 2.17.1 Paging 2.25.2 Confirmation Tone
Confirmation Tone— Tone 3-1: Start Talking after Making Call / Call from DOORPHONE	Enables the PBX to send Confirmation Tone 3-1. Confirmation Tone 3-1 is heard from an extension when, for example, it pages another extension, or from a doorphone when the doorphone button is pressed.	Disable, Enable	Feature Manual References 2.25.2 Confirmation Tone
Confirmation Tone— Tone 3-2: Start Talking after Answering Call	Enables the PBX to send Confirmation Tone 3-2. Confirmation Tone 3-2 is heard from an extension when answering a call by, for example, the Call Pickup feature.	Disable, Enable	Feature Manual References 2.25.2 Confirmation Tone
Confirmation Tone— Tone 4-1: Start Conference	Enables the PBX to send Confirmation Tone 4-1. Confirmation Tone 4-1 is heard from an extension when a new party joins a conference call.	Disable, Enable	Feature Manual References 2.14.2 Conference 2.25.2 Confirmation Tone
Confirmation Tone— Tone 4-2: Finish Conference	Enables the PBX to send Confirmation Tone 4-2. Confirmation Tone 4-2 is heard from an extension when a party leaves a conference call.	Disable, Enable	Feature Manual References 2.14.2 Conference 2.25.2 Confirmation Tone
Confirmation Tone— Tone 5: Hold	Enables the PBX to send Confirmation Tone 5. Confirmation Tone 5 is heard from an extension when it holds a call.	Disable, Enable	Feature Manual References 2.25.2 Confirmation Tone
Dial Tone—Distinctive Dial Tone	Enables the PBX to send dial tones at different frequencies depending on the setting of the extension.	Disable, Enable	Feature Manual References 2.25.1 Dial Tone
Dial Tone—Dial Tone for Extension	Selects the dial tone the PBX sends to extensions to inform about the features activated on them.	Type A, Type B	Feature Manual References 2.25.1 Dial Tone

Name	Description	Value Range	Links
Dial Tone—Dial Tone for ARS	Selects the dial tone the PBX (instead of the network) sends to the caller when a call is made using the ARS feature, or ISDN En Bloc dialling.	Type A, Type B	PC Programming Manual References  9.27 PBX Configuration— [1-1] Configuration—Slot— Port Property - BRI Port  9.28 PBX Configuration— [1-1] Configuration—Slot— Port Property - PRI Port  16.1 PBX Configuration— [8-1] ARS—System Setting
			Feature Manual References 2.8.1 Automatic Route Selection (ARS) 2.25.1 Dial Tone
Echo Cancel— Conference	Enables the use of echo cancelling for conference calls.	Disable, Enable	Feature Manual References 2.14.2 Conference
Echo Cancel—CO-to-	Enables the use of echo cancelling for trunk-to-trunk calls.	Disable, Enable	
Echo Cancel— Extension to Analogue Line	Enables the use of echo cancelling for extension-to-analogue trunk calls.	Disable, Enable	
Echo Cancel— Extension to Digital Line	Enables the use of echo cancelling for extension-to-ISDN line calls. If set to "Enable", echo cancelling is used for extension-to-ISDN line calls. If set to "Disable", echo cancelling is not used for extension-to-ISDN line calls.	Disable, Enable	

Name	Description	Value Range	Links
DSS Key—DSS key mode for Incoming Call	Enables the use of a DSS button to pick up an incoming call to another extension or an ICD group.	On or Flash, Off	Feature Manual References 2.4.3 Call Pickup 2.21.3 LED Indication

Name	Description	Value Range	Links
DSS Key—Call Pick-up by DSS key for Direct Incoming Call	Specifies whether a DSS button will light up or flash when a call rings at the specified extension. To enable this setting, DSS Key —DSS key mode for Incoming Call on this screen must be set to "ON or Flash".	Disable: The DSS button will light up when a call arrives, but pressing it will not pick up the call. Enable: The DSS button will flash when a call arrives, and pressing it will pick up the call.	Feature Manual References 2.4.3 Call Pickup
DSS Key—Call Pick-up by DSS key for ICD Group Call	Specifies whether a DSS button will light up or flash when a call rings at the specified incoming call distribution group. To enable this setting, DSS Key—DSS key mode for Incoming Call on this screen must be set to "ON or Flash".	Disable: The DSS button will light up when a call arrives, but pressing it will not pick up the call. Enable: The DSS button will flash when a call arrives, and pressing it will pick up the call.	Feature Manual References 2.4.3 Call Pickup
DSS Key— Automatic Transfer for Extension Call	Specifies whether pressing a DSS or SDN button during an extension-to-extension call disconnects the current call or places the call on consultation hold.	Disable: The PBX disconnects the current call, and calls the extension assigned to the DSS or SDN button. Enable: The PBX places the current call on consultation hold.	Feature Manual References 2.12.1 Call Transfer
DSS Key—Caller Information Display before Call Pick-up	Specifies whether incoming caller information is displayed after pressing the DSS button when a call is ringing at the designated extension, instead of answering the call.	Enable: Pressing the DSS button displays the caller's information. Disable: Pressing the DSS button answers the call.	Feature Manual References 2.4.3 Call Pickup
Private Network— Public Call through Private Network— Minimum Public Caller ID Digits	Specifies the minimum length of Caller ID required for a call from a private network to be considered as a call from a public network.	0–15	Feature Manual References 2.19.1 Caller ID

Name	Description	Value Range	Links
Private Network— TIE Call by Extension Numbering	Enables extensions at two PBXs connected in a network to have the same leading number. For example, extension 101 is registered at PBX 1, and extension 102 is registered at PBX 2. Only the Extension Number Method is supported. If disabled, different leading numbers need to be assigned for extensions at each PBX.	Disable, Enable	PC Programming Manual References  17.1 PBX Configuration —[9-1] Private Network— TIE Table—Priority 1— Priority 8—Leading Number  Feature Manual References  4.3.1 TIE Line Service
Send CLIP of CO Caller—when call is transferred to CO (CLIP of Held Party)	Enables the transfer of related CLIP information when a party on hold is transferred. When set to "Enable", the transfer destination will receive the original caller's CLIP information, not the information of the extension that performed the transfer.	Disable, Enable	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Send CLIP of CO Caller—when call is forwarded to CO	Selects whether the CLIP number of the calling party or the CLIP number of the forwarding extension or virtual PS is sent to the forwarding destination to identify the origin of a trunk call.	Disable: The CLIP number assigned to the forwarding extension or virtual PS is sent. Enable: The CLIP number of the calling party is sent.	Feature Manual References 2.2.2.3 Outside Destinations in Incoming Call Distribution Group 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP) 4.3.6 Network ICD Group
Send CLIP of Extension Caller —when call is forwarded to CO	Selects whether the CLIP number of the calling extension or the CLIP number of the forwarding extension or virtual PS is sent to the forwarding destination to identify the origin of a call.	Disable: The CLIP number assigned to the forwarding extension or virtual PS is sent. Enable: The CLIP number of the calling extension is sent.	Feature Manual References 2.2.2.3 Outside Destinations in Incoming Call Distribution Group 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP) 4.3.6 Network ICD Group

Name	Description	Value Range	Links
System Wireless —Out of Range Registration	Selects whether the PBX can set the status of a PS to Out of Range if no signal is received from the PS for a preset length of time. This feature must be enabled to allow PS roaming.	Disable, Enable	PC Programming Manual References  10.3 PBX Configuration— [2-3] System—Timers & Counters—Miscellaneous —System Wireless—PS Out of Range Timer
			Feature Manual References 4.3.6.1 PS Roaming by Network ICD Group
System Wireless —SDN Delayed Ringing with LCD	Selects whether call information (such as Caller ID) is shown on the display of a PDN extension PS (i.e., a PS with one or more PDN buttons) when a call is received while delayed ringing is set.	Disable, Enable	PC Programming Manual References  12.2.3 PBX Configuration —[4-2-3] Extension— Portable Station—Flexible Button—Parameter Selection (for SDN)  Feature Manual References  2.9.1 Primary Directory Number (PDN)/ Secondary Directory Number (SDN) Extension
Transfer— Automatic Answer for Transferred Call	Enables transferred calls (including direct extension calls) to be automatically answered, when using the Hands-free Answerback feature.	Disable, Enable	Feature Manual References 2.4.4 Hands-free Answerback
Display Information from Mobile Extension (MEX)—when using Automatic Walking COS	If Automatic Walking COS is being used, this selects whether to show the CLI destination's extension number as the CLIP information (Extension Number), or the MEX CLIP information (MEX CLIP) when the incoming call is recognised as coming from a MEX terminal.	Extension Number, MEX CLIP	Feature Manual References 2.16.1 Direct Inward System Access (DISA)

Name	Description	Value Range	Links
SLT—SLT Hold Mode	Selects how to hold a line and transfer a call with an SLT. For details of each mode, see "2.13.1 Call Hold" in the Feature Manual.	Mode 1, Mode 2, Mode 3, Mode 4	Feature Manual References 2.13.1 Call Hold

Name	Description	Value Range	Links
SLT—Message Waiting Lamp Pattern	Specifies the Message Waiting Lamp light pattern of SLTs.  Note  This setting is not applied to message waiting by FSK.	1–12	Feature Manual References 2.20.1 Message Waiting
Whisper OHCA—for SLT	Enables the use of Whisper OHCA to SLTs and IP-PTs	Disable, Enable	Feature Manual References 2.10.4.4 Whisper OHCA
Call Waiting— Automatic Call Waiting for Extension Call	Selects whether Busy Station Signalling (BSS) is automatically performed when an extension user calls a busy extension.	Disable, Enable	Feature Manual References 2.1.3.3 Call Waiting
Busy Out—Busy Out for Analogue CO	Enables the PBX to automatically set a trunk to Busy Out status when a loop current is not detected, preventing that trunk from being used.	Disable, Enable	Feature Manual References 2.5.4.6 Trunk Busy Out
ISDN Voice Path Connection—Connect when "Alert" is sent from ISDN	Enables the voice path of an ISDN line to connect even when an "Alert" signal is received from the telephone company.	Disable, Enable	
PT Feature Access— No. 1–8	Specifies the System Feature Access Menu (1–8) shown on the display of an extension.	None, Call Back Cancel, Call Pickup Direct, Call Pickup Group, DOORPHONE Call, Door Open, Relay On, External BGM, Paging	
ISDN Option—Fwd from ISDN to ISDN	Specifies whether alert messages are sent to the ISDN network. This setting should be enabled for networks that disconnect a call if an alert message is not received.	Mode1: Disable Mode2: Enable	
ISDN Option—Calling Party Name Presentation to PRI23	Specifies whether the name of the calling party is displayed when making a call to the ISDN network.	Enable, Disable	
ISDN Option—Calling Party Name Sending Format	Specifies the sending format of the calling party name when making a call to the ISDN network.	Display, Facility	

#### Option 6 (CTI)

Name	Description	Value Range	Links
Built-in Communication Assistant—System status retry interval timer	Specifies the length of time until the alive check is retried when no response is received, for First Party Call Control CTI such as Communication Assistant (CA).	0–60 s	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)
Built-in Communication Assistant—System status retry counter	Specifies the number of times that the alive check is repeated for First Party Call Control CTI such as Communication Assistant (CA). When the alive check has been attempted the programmed number times without success, the PBX assumes that the logical connection with the CTI application software has been lost.	0–10	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)
3rd Party CTI—System status retry interval timer	Specifies the length of time until the alive check is retried when no response is received, for Third Party Call Control CTI.	0–60 s	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)
3rd Party CTI—System status retry counter	Specifies the number of times that the alive check is repeated for Third Party Call Control CTI. When the alive check has been attempted the programmed number of times without success, the PBX assumes that the logical connection with the CTI application software has been lost.	0–10	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)
3rd Party CTI—CDR retry interval timer	Specifies the length of time until the alive check of CDR is retried when no response is received, for Third Party Call Control CTI.	0–60 s	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)
3rd Party CTI—CDR retry counter	Specifies the number of times that the alive check of CDR is repeated for Third Party Call Control CTI. When the alive check has been attempted the programmed number times, the association is released automatically.	0–10	Feature Manual References 2.26.1 Computer Telephony Integration (CTI)
CTI Make Call—SLT Ring	Specifies whether to ring an SLT when a call is made from CTI, instead of the SLT.	Enable, Disable	

Name	Description	Value Range	Links
CTI Hold—Forced Idle when Hold by	Selects whether to force an extension to become idle while having a call held on a	Enable, Disable	Feature Manual References
PDN/SDN Key	PDN/SDN button.		2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension

Name	Description	Value Range	Links
Incoming Call Log —Busy/Intercept (when Called Party	Intercept calls are recorded in the incoming call called Party log of the original destination.	Enable (Not Answered), Disable	Feature Manual References 2.19.2 Incoming Call
is Busy)	Calls received when the extension is busy.		Log
	Calls rerouted via the Intercept Routing—Busy feature.  If this setting is enabled, calls are recorded as "Not Answered".		
Incoming Call Log —Fwd All/Fwd Busy	Specifies whether the following types of calls are recorded in the incoming call log of the original destination.	Enable (Not Answered), Disable	Feature Manual References 2.19.2 Incoming Call
	Calls rerouted via the FWD—All Calls feature.		Log
	Calls rerouted via the FWD—Busy feature.  If this setting is enabled, calls are recorded as "Not Answered".		
Incoming Call Log —Call Pickup	Specifies how calls answered using the Call Pickup feature are recorded in the incoming call log of the original destination.	Answered, Not Answered	Feature Manual References 2.19.2 Incoming Call Log
Incoming Call Log —Extension / TIE Call	Specifies whether extension/TIE calls are recorded in the answering extension's incoming call log.	Enable, Disable	Feature Manual References 2.19.2 Incoming Call Log
Outgoing Call Log —Extension Call	Specifies whether extension/TIE calls are recorded in the calling extension's outgoing call log.	Enable, Disable	Feature Manual References 2.6.3 Last Number
			Redial

Name	Description	Value Range	Links
P2P Group—Priority Voice 1/Priority Voice 2/ Priority Voice 3	Specifies the order of priority of the codecs to use for P2P groups.	Priority Voice 1: G.729, G.711, G. 722 Priority Voice 2/ Priority Voice 3: G.729, G.711, G. 722, None	Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection
P2P Group—Video Conference	Specifies the availability of video conferencing for capable extensions within P2P groups.	Disable, Enable	Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection
Extension - Trunk P2P— IP Extension - SIP Trunk P2P	Specifies whether P2P connections are enabled between SIP trunks and IP extensions.	Disable, Enable	Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection
Conference Group— Maximum Number of Speakers During a Conference Group Call	Specifies the maximum number of participants that can speak during a Conference Group Call.	8 Party, 32 Party	Feature Manual References 2.14.1 Conference Features—SUMMARY 2.14.2 Conference
Display extension name on key (KX-NT)	Specifies whether to enable the respective features.	Enable, Disable	
Use Message key as VM key			
LCD zoom display			

Name	Description	Value Range	Links
Extension / Mailbox Setting—Mailbox Number Synchronization with Extension Number	Enables the synchronisation of Mailbox Number and Extension Number settings.	Enable, Disable	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—Extension Number  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—Extension Number  20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters —Mailbox Number  Feature Manual References  3.1.1 Unified Messaging System Overview

Name	Description	Value Range	Links
Extension / Mailbox Setting—Mailbox COS Synchronization with Extension COS	Enables the synchronisation of a user's Ext. COS setting and Mailbox COS setting.	Enable, Disable	PC Programming Manual References 8.1 Users—User Profiles 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters —Class of Service (Mailbox)
			Feature Manual References 3.1.1 Unified Messaging System Overview
Walking Extension Option—Home position control	Selects whether to use the Home position control feature for Walking Extension or Enhanced Walking Extension.	Enable, Disable	PC Programming Manual References 10.6.1 PBX Configuration—[2-6-1] System— Numbering Plan—Main—Features—Walking Extension  Feature Manual References 2.24.3 Walking Extension Features 2.24.3.2 Enhanced Walking Extension 2.24.3.3 Walking Extension-Home position control

#### PBX Configuration—[2-10] System— 10.10 **Extension CID Settings**

Various settings for extension Caller ID can be programmed.

Name	Description	Value Range	Links
Extension Caller ID Modulation Type	Specifies the modulation frequency to be used when sending Caller ID information to an SLT.	V.23(ETSI), Bell202(Bellcore)	Feature Manual References 2.19.1 Caller ID
Channel Seizure Signal Bits	Specifies the number of seizure bits to send when sending Caller ID information to an SLT.	10 × n (n=3–40) bits	Feature Manual References 2.19.1 Caller ID
Mark Signal Bits	Specifies the number of mark bits to send when sending Caller ID information to an SLT.	10 × n (n=3–40) bits	Feature Manual References 2.19.1 Caller ID
Channel Seizure Wait Time	Specifies the length of time that the PBX waits before starting to send the seizure signal following the first ring when sending Caller ID information to an SLT.	64 × n (n=5–35) ms	Feature Manual References 2.19.1 Caller ID
Caller ID Signal Type	Specifies the type of signal modulation to be used when sending Caller ID information to an SLT (reference only).	FSK	Feature Manual References 2.19.1 Caller ID
Additional Local Trunk Access Code to Extension Caller ID	Enables the PBX to automatically add a Trunk Access number to the received telephone number when sending the Caller ID number of an incoming trunk call to an SLT.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
Send Caller ID Date & Time to Extension	Enables the PBX to send the date and time of an incoming call when sending Caller ID information to an SLT.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
Send Caller ID Name to Extension	Enables the PBX to send the caller's name when sending Caller ID information to an SLT.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
Send Caller ID Long Distance to Extension	Enables the PBX to send a call qualifier (Long Distance) (if received from the trunk) when sending Caller ID information to an SLT.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
FSK Transmission Level	Specifies the transmission level for FSK signal modulation.	-14 dB, -12 dB, -10 dB, -8 dB, -6 dB, -4 dB, -2 dB, 0 dB	Feature Manual References 2.19.1 Caller ID

Name	Description	Value Range	Links
FSK Transmission	Specifies the transmission level for FSK signal modulation for MCSLC cards.	-14 dB, -12 dB, -10 dB,	Feature Manual
Level (for MCSLC		-8 dB, -6 dB, -4 dB, -2	References
Card)		dB, 0 dB	2.19.1 Caller ID

# 10.11 PBX Configuration—[2-11] System—Audio Gain

# 10.11.1 PBX Configuration—[2-11-1] System—Audio Gain—Paging/MOH

Gain levels for the External Pager/External BGM ports can be programmed.

Name	Description	Value Range	Links
PBX Model	Selects the PBX model that performs paging/MOH gain settings. Settings that cannot be performed by the selected PBX model will be greyed out. The gain values of those settings will be the same for the whole system. Therefore, when operating in a One-look network, if different PBX models are registered as Slave units, the corresponding common values are used.	KX-NS1000, KX-NS700, KX-NS500, KX-NS300	PC Programming Manual References  11.4 PBX Configuration—[3-4] Group—Paging Group  Feature Manual References 2.17.1 Paging 4.2 One-look Networking
Paging—EPG 1–6 (External Pager 1–6)	Specifies the paging volume for External Pager port. EPG numbers that cannot be set according to the model selected in PBX Model will be greyed out.	-15.5–15.5 dB	PC Programming Manual References 11.4 PBX Configuration—[3-4] Group—Paging Group Feature Manual References 2.17.1 Paging
Paging— Paging Level from PT Speaker	Specifies the volume when paging is broadcast through the speaker of a PT.	-15 dB, -12 dB, -9 dB, -6 dB, -3 dB, 0 dB, 3 dB, 6 dB	PC Programming Manual References 11.4 PBX Configuration—[3-4] Group—Paging Group Feature Manual References 2.17.1 Paging
External MOH —MOH 1–8 (Music On Hold 1–8)	Specifies the music volume for External BGM port. MOH numbers that cannot be set according to the model selected in PBX Model will be greyed out.	-31.5–31.5 dB	PC Programming Manual References 10.2 PBX Configuration—[2-2] System—Operator & BGM Feature Manual References 2.13.4 Music on Hold 2.28.1 Background Music (BGM)

Name	Description	Value Range	Links
Internal MOH —MOH 1–8	Specifies the music volume for each internal BGM (MOH 1–8).	-31.5–31.5 dB	PC Programming Manual References
(Music on Hold 1–8)	MOH numbers that cannot be set according to the model selected in PBX Model will be greyed out.		10.2 PBX Configuration—[2-2] System—Operator & BGM
	3 ,		Feature Manual References
			2.13.4 Music on Hold 2.28.1 Background Music (BGM)

### 10.11.2 PBX Configuration—[2-11-2] System—Audio Gain—Card

Gain levels can be programmed for each type of card.

Name	Description	Value Range	Links
Up Gain (To PBX)	Specifies the volume for audio signals from the selected type of card to the PBX.	-31.5–31.5 dB	
Down Gain (From PBX)	Specifies the volume for audio signals from the PBX to the selected type of card.	-15.5–15.5 dB	

# Section 11 PBX Configuration—[3] Group

This section serves as reference operating instructions for the Group menu of the PBX Configuration Menu of the Setup screen of Web Maintenance Console.

### 11.1 PBX Configuration—[3-1] Group—Trunk Group

# 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings

Trunks can be organised into trunk groups. The settings of a trunk group are applied to all trunks in the group. A maximum of 96 trunk groups can be programmed.

For more information on trunk groups, see "5.1.2 Group" in the Feature Manual.

#### Main

Name	Description	Value Range	Links
Group Name	Specifies the name of the trunk group for programming reference.	Max. 20 characters	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
COS	Specifies the COS of the trunk group, applied when making a call from a trunk to another trunk with TIE Line Service. If you wish to prevent such calls from being made, ensure that the COS specified here has a TRS level of "7" assigned for all relevant time modes in 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings.	1–512	PC Programming Manual References 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings  Feature Manual References 4.3.1 TIE Line Service
Line Hunting Order	Specifies the trunk hunting sequence for the trunk group. The hunting sequence can be programmed to start from the lowest or highest numbered trunks, or to rotate uniformly among all trunks.	High -> Low, Low -> High, Rotation	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings  Feature Manual References  2.5.5.3 Trunk Access
CO-CO Duration Time (*60s)	Specifies the length of time that a trunk-to-trunk call can be maintained before being disconnected.	None, 1–60 (× 60 s)	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings  Feature Manual References  2.11.8 Trunk Call Limitation

Name	Description	Value Range	Links
Extension-CO Duration Time (*60s)	Specifies the length of time that an extension-to-trunk call can be maintained before being disconnected.	None, 1–60 (× 60 s)	PC Programming Manual References  10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings 10.9 PBX Configuration—[2-9] System—System Options 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.11.8 Trunk Call Limitation
Caller ID Modification Table	Specifies the table to be used for modifying caller information (telephone number).	1–4	PC Programming Manual References  11.1.3 PBX Configuration—[3-1-3] Group—Trunk Group—Caller ID Modification  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.19.1 Caller ID
Dialling Plan Table	Specifies the table to be used for en-bloc dialling.	1–4	PC Programming Manual References  11.1.4 PBX Configuration—[3-1-4] Group—Trunk Group—Dialling Plan

#### **Tone Detection**

Name	Description	Value Range	Links
Group Name	Specifies the name of the trunk group for programming reference.	Max. 20 characters	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
DISA Tone Detection— Silence	Enables the disconnection of a DISA-originated trunk-to-trunk call by silence detection.	Disable, Enable	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message—DISA System 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.16.1 Direct Inward System Access (DISA)

Name	Description	Value Range	Links
DISA Tone Detection— Continuous	Enables the disconnection of a DISA-originated trunk-to-trunk call by continuous signal detection.	Disable, Enable	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message—DISA System 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.16.1 Direct Inward System Access (DISA)
DISA Tone Detection— Cyclic	Enables the disconnection of a DISA-originated trunk-to-trunk call by cyclic signal detection.	Disable, Enable	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message—DISA System 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.16.1 Direct Inward System Access (DISA)

#### **Host PBX Access Code**

Name	Description	Value Range	Links
Group Name	Specifies the name of the trunk group for programming reference.	Max. 20 characters	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
Host PBX Access Code 1–10	Specifies the feature number used to access a trunk from the host PBX.	Max. 10 digits (consisting of 0–9, *, and #)	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.5.4.8 Host PBX Access Code (Access Code to the Telephone Company from a Host PBX)

#### **Collect Call Reject (for Brazil)**

Name	Description	Value Range	Links
Group Name	Specifies the name of the trunk group for programming reference.	Max. 20 characters	PC Programming Manual References
			18.1 PBX Configuration—[10-1] CO & Incoming Call— CO Line Settings
Collect Call Reject (for Brazil)—Mode	Enables the PBX to automatically reject collect calls. This setting is only for users in Brazil.	Disable, Enable	

Name	Description	Value Range	Links
Collect Call Reject (for Brazil)—Wait Time	Selects the length of time that the PBX waits before sending a flash signal to reject a collect call. This setting is only for users in Brazil.	500 ms, 1000 ms, 1500 ms, 2000 ms	
Collect Call Reject (for Brazil)—Flashing Time	Selects the length of the flash signal that the PBX sends to reject a collect call. This setting is only for users in Brazil.	1000 ms, 1500 ms, 2000 ms, 2500 ms	

### 11.1.2 PBX Configuration—[3-1-2] Group—Trunk Group—Local Access Priority

Trunk groups can be assigned a priority for Idle Line Access. When making a trunk call by Idle Line Access, the PBX will search trunk groups for an idle trunk according to the priority assigned here.

Name	Description	Value Range	Links
Trunk Group No. & Name	Specifies the trunk group assigned to the corresponding priority level. Select the blank option to not assign a trunk group to the priority.	Trunk Group No. 1–96	PC Programming Manual References  18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings
			Feature Manual References 2.5.5.3 Trunk Access

### 11.1.3 PBX Configuration—[3-1-3] Group—Trunk Group—Caller ID Modification

The telephone numbers of incoming callers can be modified automatically according to pre-programmed modification tables, and then recorded for calling back.

#### **Leading Digits**

After the caller's number is modified by the Length of Digits Modification Tables or CLIP Modification Tables, the PBX checks the leading digits of the modified number for an area code programmed in the Caller ID Modification Table assigned to that trunk group. If it finds such a code, it removes digits and adds a number to the modified number. If this number is stored as a System Speed Dialling number, the caller's name can be shown on a PT display and the call can be routed to a certain extension (CLI destination). A maximum of 4 Caller ID Modification Tables, each containing 10 local/international call data and 1 long distance code, can be programmed. Each trunk group can select a table for use. Select the desired table from the **Modification Table** list.

If the modified number does not contain an area code programmed here, the PBX applies the Long Distance Code settings to the modified number.

Name	Description	Value Range	Links
Area Code (for Local / International Call Data 1–10)	Specifies the leading number (area code) to look for in the incoming caller's number.	Max. 6 digits (consisting of 0–9, *, and #)	Feature Manual References 2.19.1 Caller ID

Name	Description	Value Range	Links
Removed Number of Digits	Specifies the number of digits to be removed from the beginning of the incoming caller's number.	0–9	PC Programming Manual References  11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings —Caller ID Modification Table 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
			Feature Manual References 2.19.1 Caller ID
Added Number	Specifies the number to be added to the incoming caller's number in the place of the removed digits.	Max. 4 digits (consisting of 0– 9, *, and #)	PC Programming Manual References  11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings —Caller ID Modification Table 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
			Feature Manual References 2.19.1 Caller ID

#### **Length of Digits**

The PBX adds a certain number of digits to the caller's number depending on the length of digits, as programmed in the Length of Digits Modification Tables assigned to the trunk group. This modification is applied to incoming trunk calls routed through public networks when the type of network numbering plan is Unknown or not specified.

A maximum of 4 Length of Digits Modification Tables can be programmed. Select the desired table from the **Modification Table** list.

If the length of digits of an incoming trunk call is less than the **Minimum Caller ID Digits (for National)**, the caller's number is not modified.

Name	Description	Value Range	Links
Minimum Caller ID Digits (for International)	Specifies the minimum number of digits required in the caller's number for it to be recognised as an international call. The value specified here must be larger than Minimum Caller ID Digits (for National).	1–31	PC Programming Manual References  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Calling Party Number—Type of Number—Public, Private  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI
			Port—Called Party Number—Type of Number—Public, Private  Feature Manual References 2.19.1 Caller ID

Name	Description	Value Range	Links
Minimum Caller ID Digits (for National)	Specifies the minimum number of digits required in the caller's number for it to be recognised as a national call. The value specified here must be smaller than Minimum Caller ID Digits (for International).	0–30	PC Programming Manual References  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Calling Party Number—Type of Number—Public, Private  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Called Party Number—Type of Number—Public, Private  Feature Manual References  2.19.1 Caller ID
Added Number (for International)	Specifies the number to be added to the incoming telephone number when the total number of digits exceeds Minimum Caller ID Digits (for International).	Max. 8 digits (0– 9, *, and #)	PC Programming Manual References  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Calling Party Number—Type of Number—Public, Private  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Called Party Number—Type of Number—Public, Private  Feature Manual References  2.19.1 Caller ID
Added Number (for National)	Specifies the number to be added to the incoming telephone number when the total number of digits exceeds Minimum Caller ID Digits (for National) but does not exceed Minimum Caller ID Digits (for International).	Max. 8 digits (0– 9, *, and #)	PC Programming Manual References  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Calling Party Number—Type of Number—Public, Private  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—Called Party Number—Type of Number—Public, Private  Feature Manual References  2.19.1 Caller ID

#### **CLIP**

When incoming caller information is sent through an ISDN line and the type of the network numbering plan is International, National, or Subscriber, the caller's number can be modified as programmed in the Modification Tables assigned to the trunk group. The modified number will then be recorded, and it is used for sending to the network as a CLIP number.

A maximum of 4 CLIP Modification Tables can be programmed. Select the desired table from the **Modification Table** list.

Name	Description	Value Range	Links
Removed Number of Digits	Specifies the number of leading digits to be removed from the incoming caller's number for each type of network numbering plan.	0–9	PC Programming Manual References  9.28 PBX Configuration—[1-1] Configuration— Slot—Port Property - PRI Port—Calling Party Number—Type of Number—Public, Private  9.28 PBX Configuration—[1-1] Configuration— Slot—Port Property - PRI Port—Called Party Number—Type of Number—Public, Private
			Feature Manual References 2.19.1 Caller ID
Added Number	Specifies the number to be added to the incoming caller's number in the place of the removed digits for each type of network numbering plan.	Max. 4 digits (consisting of 0–9, *, and #)	PC Programming Manual References 9.28 PBX Configuration—[1-1] Configuration— Slot—Port Property - PRI Port—Calling Party Number—Type of Number—Public, Private 9.28 PBX Configuration—[1-1] Configuration— Slot—Port Property - PRI Port—Called Party Number—Type of Number—Public, Private
			Feature Manual References 2.19.1 Caller ID

## 11.1.4 PBX Configuration—[3-1-4] Group—Trunk Group—Dialling Plan

The PBX sends all of the dialled digits at once after an extension user completes dialling. The PBX can recognise the end of dialling when the dialled telephone number starts with the programmed dial (32 digits) and contains the programmed total number of digits.

When the PBX recognises the end of dialling to an analogue trunk, the PBX cancels the muting of the caller's voice sent to the analogue trunk immediately. If the PBX cannot recognise the end of dialling, the PBX mutes the caller's voice sent to an analogue trunk from the time at which the last digit is dialled until the analogue trunk inter-digit timer expires.

4 tables can be programmed, each with a maximum of 50 dials (32 digits). Select the table to programme from the **Dialling Plan Table** list.

To assign a set of dials (32 digits) automatically, click Auto Assign.

### Dialling plan

Name	Description	Value Range	Links
Dial (32 digits)	Specifies the dial (32 digits) to be regarded as the beginning of dialling.	Max. 32 digits (consisting of 0–9, *, #, N [2,3,4,5,6,7,8,9], P [0, 1], and X [0–9, *, and #])	PC Programming Manual References  10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Analogue CO First Digit 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Analogue CO Inter-digit 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings —Main—Dialling Plan Table  Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)—SUMMARY
Removed Number of Digits	Specifies the number of leading digits to be removed from the number dialled by enbloc dialling.	0–15	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)—SUMMARY
Added Number	Specifies the number to be added to the number dialled by enbloc dialling in the place of the removed digits.	Max. 32 digits (consisting of 0–9, *, and #)	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)—SUMMARY

#### Charge

Name	Description	Value Range	Links
Apply charge calculation for	Specifies whether to apply the call charge calculation to incoming calls for trunk (incoming		Feature Manual References
incoming calls	calls from external numbers). If you want to apply, check the checkbox.		2.2.2.11 Automatic Call Charge Calculation
Leading Digits	Displays the contents of Dial (32 digits) settings before the first occurrence of "X" on the Dialling plan tab screen.		Feature Manual References 2.2.2.11 Automatic Call Charge Calculation

Name	Description	Value Range	Links
Flat Charge	Specifies the fixed rate that is charged first when a call starts.  The number of decimal places that can be specified here depends on the value specified in Charge Options—Digits After Decimal Point in 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge.	0- 9999999	Feature Manual References 2.2.2.11 Automatic Call Charge Calculation
Flat Charge Duration (s)	Specifies the number of seconds that you can call with the flat rate charged first that is specified in Flat Charge setting.	1-9999	Feature Manual References 2.2.2.11 Automatic Call Charge Calculation
Unit Charge	Specifies the rate of call charge that is charged when the Flat Charge Duration (s) passes after a call is started.  The number of decimal places that can be specified here depends on the value specified in Charge Options—Digits After Decimal Point in 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge.	0- 9999999	Feature Manual References 2.2.2.11 Automatic Call Charge Calculation
Unit Charge Duration (s)	Specifies the number of seconds that you can call with the rate specified in Unit Charge setting.	1-9999	Feature Manual References 2.2.2.11 Automatic Call Charge Calculation

# 11.1.4.1 PBX Configuration—[3-1-4] Group—Trunk Group—Dialling Plan—Auto Assign

It is possible to assign a set of dials (32 digits) automatically.

Name	Description	Value Range	Links
Select Auto	Selects the set of preset dial (32	Type A:	PC Programming
Assigning Table	digits) values to assign to the active dialling plan table. When Type D is selected, you will be	• 1: N11	Manual References
Table		• 2: NXX XXXX	11.1.4 PBX Configuration—[3-1-4]
	prompted to enter a 3-digit area	• 3: 1NXX NXX XXXX	Group—Trunk Group—
	code, and 7 "X"s, in cells 1 through 47 of the dialling plan table.	4–50: Not stored Type B:	Dialling Plan
		• 1: N11	
		• 2: NNX XXXX	
		• 3: 1NPX NXX XXXX	
		4–50: Not stored Type C:	
		• 1: N11	
		• 2: NXX XXXX	
		• 3: 1NNX XXXX	
		4: 1NPX NXX XXXX	
		5–50: Not stored Type D:	
		• 1–47: Not stored	
		• 48: N11	
		• 49: NXX XXXX	
		• 50: 1NXX NXX XXXX Type E:	
		• 1: N11	
		• 2: NXX NXX XXXX	
		• 3: 1NXX NXX XXXX	
		• 4–50: Not stored	

# 11.1.5 PBX Configuration—[3-1-5] Group—Trunk Group—Charge Rate

The rate charged per pay tone signal (sent from the telephone company) can be assigned for each trunk group.

Name	Description	Value Range	Links
Trunk Group Name	Indicates the name of the trunk group (reference only).	Max. 20 characters	

#### 11.1.5 PBX Configuration—[3-1-5] Group—Trunk Group—Charge Rate

Name	Description	Value Range	Links
Rate	Specifies the call charge rate. The number of decimal places that can be specified here depends on the value set in Charge Options—Digits After Decimal Point in 14.2 PBX Configuration—[6-2]	0-9999999	PC Programming Manual References 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge
	Feature—Hotel & Charge.		Feature Manual References 2.22.3 Call Charge Services

### 11.2 PBX Configuration—[3-2] Group—User Group

Extensions can be assigned to a tenant according to their extension user groups. An extension user group can belong to only one tenant. However, one extension user group can belong to several call pickup groups and several paging groups. A maximum of 32 or 128 tenants can be programmed.

#### **Note**

The maximum number of tenants depends on the **System Capacity Selection** setting made when the Easy Setup Wizard was run for the PBX. If the **System Resource Type** was selected, the maximum number of tenants is 128. If the **Standard Type** or **IP-Extension Type** was selected, the maximum number of tenants is 32. For details, see "5.4.1 Easy Setup Wizard" in the Installation Manual.

Name	Description	Value Range	Links
User Group	Specifies the name of the	Max. 20 characters	PC Programming Manual References
Name	extension user group.		11.3 PBX Configuration—[3-3] Group— Call Pickup Group 11.4 PBX Configuration—[3-4] Group— Paging Group 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Main—User Group 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings—Main—User Group
			Feature Manual References
			5.1.2 Group
Tenant Number	Specifies the tenant to which the extension user group belongs.	Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings  Feature Manual References 5.1.2 Group 5.1.3 Tenant Service

# 11.3 PBX Configuration—[3-3] Group—Call Pickup Group

Extensions can be assigned to a call pickup group according to their extension user groups. One extension user group can belong to up to 8 call pickup groups. A maximum of 96 call pickup groups can be programmed.

To assign extension user groups to call pickup groups easily, click All Setting.

Name	Description	Value Range	Links
User Group Name	Indicates the name of the extension user group (reference only).	Max. 20 characters	PC Programming Manual References 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
			Feature Manual References 2.4.3 Call Pickup 5.1.2 Group
Pickup Group— 1st–8th	Selects the call pickup groups that the extension user group belongs to. One extension user group can be assigned to a maximum of 8 call pickup groups on this screen. To assign an extension user group to more than 8 call pickup groups, click All Setting.	None, 01:– 256:	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings  Feature Manual References  2.4.3 Call Pickup  5.1.2 Group

## 11.3.1 PBX Configuration—[3-3] Group—Call Pickup Group—All Setting

Extensions can be assigned to a call pickup group according to their extension user groups. One extension user group can belong to multiple call pickup groups.

Name	Description	Value Range	Links
Call Pickup Group	Specifies the name of the call pickup group.	Max. 20 characters	PC Programming Manual References
Name			12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
			Feature Manual References
			2.4.3 Call Pickup 5.1.2 Group
Main—Call Pickup Group Monitor Feature	For a pickup group, specifies whether display indications and tones are enabled to notify extension users when a call that can be answered by an extension in the pickup group arrives.	Enable, Disable	Feature Manual References 2.4.3 Call Pickup
User Group 1–256	Specifies whether the extension user group belongs to the corresponding pickup group.	ON (blue), OFF	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
			12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
			Feature Manual References 2.4.3 Call Pickup 5.1.2 Group

# 11.4 PBX Configuration—[3-4] Group—Paging Group

Extensions can be assigned to a paging group according to their extension user groups. External pagers can also be assigned to a paging group. One extension user group or external pager can belong to multiple paging groups. A maximum of 96 paging groups can be programmed.

To assign external pagers to paging groups, click **External Pager**. To assign extension user groups to paging groups easily, click **All Setting**.

Name	Description	Value Range	Links
User Group Name	Indicates the name of the extension user group (reference only).	Max. 20 characters	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
			Feature Manual References 2.17.1 Paging 5.1.2 Group
Paging Group— 1st–8th	Selects the paging groups that the extension user group belongs to. One extension user group can be assigned to a maximum of 8 paging groups on this screen. To assign an extension user group to more than 8 paging	None, 01– 256	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
	groups, click All Setting.		Feature Manual References 2.17.1 Paging 5.1.2 Group

## 11.4.1 PBX Configuration—[3-4] Group—Paging Group—All Setting

Extensions can be assigned to a paging group according to their extension user groups. One extension user group or external pager can belong to multiple paging groups.

Name	Description	Value Range	Links
Paging Group Name	Specifies the name of the paging group.	Max. 20 characters	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 2.17.1 Paging 5.1.2 Group

Name	Description	Value Range	Links
User Group 1– 256	Specifies whether the extension user group belongs to the corresponding paging group.	ON (blue), OFF (white)	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 2.17.1 Paging 5.1.2 Group

## 11.4.2 PBX Configuration—[3-4] Group—Paging Group—External Pager

External pagers can be assigned to a paging group. One external pager can belong to multiple paging groups.

Name	Description	Value Range	Links
Paging Group Name	Indicates the name of the paging group (reference only).	Max. 20 characters	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 2.17.1 Paging 5.1.2 Group
External Pager 1– 16	Specifies whether the external pager belongs to the corresponding paging group.	ON (blue), OFF	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension— Wired Extension—Extension Settings  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 2.17.1 Paging 5.1.2 Group

# 11.5 PBX Configuration—[3-5] Group—Incoming Call Distribution Group

## 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings

Extensions can be assigned as members of an incoming call distribution group. Calls to an incoming call distribution group are distributed to its member extensions as programmed. A maximum of 128 incoming call distribution groups can be programmed.

To set the Call Forwarding (FWD) settings of ICD groups easily, click **Group FWD**. To assign extensions to ICD groups and change extension settings, click **Member List**.

For more information on ICD Groups, see "2.2.2.1 Incoming Call Distribution Group Features—SUMMARY" in the Feature Manual.

#### Main

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the incoming call distribution group.	Max. 5 digits (consisting of 0–9)	
Group Name	Specifies the name of the incoming call distribution group.	Max. 20 characters	
Distribution Method	Selects the method for distributing calls to idle extensions of the incoming call distribution group.	Ring, UCD, Priority Hunting	Feature Manual References 2.2.2.2 Group Call Distribution
Call Waiting Distribution	Selects the call waiting distribution method for busy extensions of the incoming call distribution group.	All, Distribution	Feature Manual References 2.2.2.2 Group Call Distribution
FWD Mode	Specifies whether extensions in FWD mode ring when a call is received at the incoming call distribution group.	No Ring, Ring	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND
			Feature Manual References 2.2.2.2 Group Call Distribution

Name	Description	Value Range	Links
DND Mode	Specifies whether extensions in DND mode ring when a call is received at the incoming call distribution group.	No Ring, Ring	PC Programming Manual References  12.1.2 PBX Configuration— [4-1-2] Extension—Wired Extension—FWD/DND  12.2.2 PBX Configuration— [4-2-2] Extension—Portable Station—FWD/DND  Feature Manual References  2.2.2.2 Group Call Distribution
Tenant Number	Specifies the tenant to which the incoming call distribution group belongs, to determine the Time Table and the audio source for the group. (The tenant number corresponds to the Time Table number.)	Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References  10.2 PBX Configuration—[2-2] System—Operator & BGM 10.4 PBX Configuration—[2-4] System—Week Table 14.6 PBX Configuration—[6-6] Feature—Tenant—Music On Hold  Feature Manual References 2.13.4 Music on Hold 5.1.3 Tenant Service
COS	Specifies the COS of the incoming call distribution group. Depending on the COS, calls from certain extensions are restricted as determined by the Internal Call Block feature. Also, when calls are forwarded or overflowed to a trunk, the TRS/Barring assigned for the COS of the incoming call distribution group applies.	1–512	PC Programming Manual References  10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings 10.7.2 PBX Configuration— [2-7-2] System—Class of Service—External Call Block 10.7.3 PBX Configuration— [2-7-3] System—Class of Service—Internal Call Block Feature Manual References 2.1.2.2 Internal Call Block

Name	Description	Value Range	Links
CLIP on ICD Group Button	Specifies the CLIP number sent to the network when making calls using the ICD Group button.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)

### **Overflow Queuing Busy**

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the incoming call distribution group.	Max. 5 digits (consisting of 0–9)	
Group Name	Specifies the name of the incoming call distribution group.	Max. 20 characters	
Queuing Busy— Destination-Day, Lunch, Break, Night	Specifies the overflow destination of calls that cannot be queued in each time mode.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References 10.4 PBX Configuration— [2-4] System—Week Table
			Feature Manual References 2.2.2.7 Overflow Feature
Queuing Busy— Queue Call Capacity	Specifies the number of calls that can wait in a queue.	None, 1–100	Feature Manual References 2.2.2.4 Queuing Feature

#### **Overflow No Answer**

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the incoming call distribution group.	Max. 5 digits (consisting of 0– 9)	
Group Name	Specifies the name of the incoming call distribution group.	Max. 20 characters	
Time out & Manual Queue Redirection— Destination-Day, Lunch, Break,	Specifies the overflow destination of queued calls when they are not answered or are redirected by Manual Queue Redirection in each	Max. 32 digits (consisting of 0– 9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References 10.4 PBX Configuration—[2-4] System—Week Table
Night	time mode.		Feature Manual References
			2.2.2.4 Queuing Feature 2.2.2.7 Overflow Feature

Name	Description	Value Range	Links
Time out & Manual Queue	Specifies the length of time calls wait in a queue before	None, 10 × n (n=1–125) s	Feature Manual References
Redirection Overflow Time	they are redirected to the overflow destination.		2.2.2.4 Queuing Feature 2.2.2.7 Overflow Feature
Hurry-up Level	Specifies the number of calls to hold in the queue before	None, 1–30	PC Programming Manual References
	prompting Manual Queue Redirection by flashing the Hurry-up button.		12.1.4 PBX Configuration— [4-1-4] Extension—Wired Extension—Flexible Button 12.2.3 PBX Configuration— [4-2-3] Extension—Portable Station—Flexible Button
			Feature Manual References 2.2.2.4 Queuing Feature

### **Queuing Time Table**

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the incoming call distribution group.	Max. 5 digits (consisting of 0–9)	
Group Name	Specifies the name of the incoming call distribution group.	Max. 20 characters	
Queuing Time Table—Day, Lunch, Break, Night	Specifies the Queuing Time Table to be used in each time mode.	None, Table 1– Table 128	PC Programming Manual References 10.4 PBX Configuration —[2-4] System—Week Table Feature Manual References 2.2.2.4 Queuing Feature
Queuing Time Table When Extension Ringing	Enables the PBX to play messages/BGM to the caller according to the Queuing Time Table, when the call arrives at an extension without being queued or after being queued.	Disable (Ringback Tone), Enable	

#### **Miscellaneous**

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the incoming call distribution group.	Max. 5 digits (consisting of 0–9)	

Name	Description	Value Range	Links
Group Name	Specifies the name of the incoming call distribution group.	Max. 20 characters	
Extension No Answer Redirection Time	Specifies the length of time that a call queues at an extension before it is redirected to the next member extension of the incoming call distribution group, in UCD or Priority Hunting distribution method.	None, 10 × n (n=1–15) s	Feature Manual References 2.2.2.2 Group Call Distribution 2.2.2.4 Queuing Feature
No. of Unanswered Calls for Automatic Log- out	Specifies the number of consecutive unanswered calls before a member extension is automatically logged out from the incoming call distribution group.	None, 1–15	Feature Manual References 2.2.2.8 Log-in/Log- out
Maximum No. of Busy Extension	Specifies the number of extensions that can accept calls simultaneously in the incoming call distribution group.	Max.: Call arrives at an idle extension. 1–32: Call will not arrive at an idle extension when the number of busy extensions exceeds the assigned number.	Feature Manual References 2.2.2.2 Group Call Distribution
Status of FWD for Virtual PS	Specifies whether a virtual PS in an ICD group is shown as idle or busy when it forwards a call to a trunk on no answer.	Idle, Busy	Feature Manual References 2.3.2 Call Forwarding (FWD)
Last Extension Log-out	Specifies whether the last extension logged-in to the incoming call distribution group is allowed to log out.	Disable, Enable	Feature Manual References 2.2.2.8 Log-in/Log- out
VIP Call Mode	Enables VIP Call mode, to prioritise calls received from multiple incoming call distribution groups.	Disable, Enable	Feature Manual References 2.2.2.6 VIP Call
Supervisor Extension Number	Specifies the extension number of the incoming call distribution group's supervisor. The supervisor can monitor and control the status of each member of the group using a 6-line display PT. The supervisor extension need not belong to the group.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.2.2.9 Supervisory Feature
Programmed Mailbox No. (16 Digits)	Specifies the mailbox number of the incoming call distribution group's mailbox for Voice Processing Systems (VPS) with DTMF Integration.	Max. 16 digits (consisting of 0–9, *, and #)	

#### **Group Log / Group FWD**

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the incoming call distribution group.	Max. 5 digits (consisting of 0–9)	
Group Name	Specifies the name of the incoming call distribution group.	Max. 20 characters	
Incoming Call Log Memory	Specifies the number of unanswered calls to the incoming call distribution group that can be logged in the call log memory.	0–100	Feature Manual References 2.19.2 Incoming Call Log
Group FWD Call from CO—Setting	Indicates the current FWD status for incoming trunk calls (reference only).	Off, On	Feature Manual References 2.3.2 Call Forwarding (FWD)
Group FWD Call from CO— Destination	Specifies the forward destination of incoming trunk calls directed to the incoming call distribution group.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	Feature Manual References 2.3.2 Call Forwarding (FWD)
Group FWD Call from Extension— Setting	Indicates the current FWD status for incoming intercom calls (reference only).	Off, On	Feature Manual References 2.3.2 Call Forwarding (FWD)
Group FWD Call from Extension— Destination	Specifies the forward destination of incoming intercom calls directed to the incoming call distribution group.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret] and P [Pause])	Feature Manual References 2.3.2 Call Forwarding (FWD)

### 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Member List

Each incoming call distribution group can have a maximum of 128 members (extensions) assigned to it, and each member can have its own delayed ringing and Wrap-up time settings. An extension can be a member of multiple incoming call distribution groups. An ICD Group can also contain cellular phones, and network ICD groups (ICD groups at other PBXs in a network) using virtual PS (see "5.2.4.6 Virtual PS" in the Feature Manual). The forward destination assigned to a virtual PS (e.g., a cellular phone) can act as a member of an ICD group. Select the desired ICD group (1–128) from the **ICD Group No.** list.

To assign members to the group, enter directly or click **Extension No. Setting** (see **2.1.7 Extension Number Setting**). To copy the members to another group, click **Member list copy**, select the group, and click **OK**.

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of each member. In addition to the extension numbers of PT, SLT, and PS extensions, floating extension numbers of PS Ring groups can also be specified.	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  11.8 PBX Configuration—[3-8] Group —PS Ring Group  Feature Manual References  2.2.2.1 Incoming Call Distribution Group Features—SUMMARY
Extension Name	Indicates the name of the extension (reference only).	Max. 20 characters	PC Programming Manual References  11.8 PBX Configuration—[3-8] Group —PS Ring Group  Feature Manual References 2.2.2.1 Incoming Call Distribution Group Features—SUMMARY
Delayed Ring	Specifies the delayed ringing setting of each member. (Applicable when the call distribution method of the incoming call distribution group is set to <b>Ring</b> .)	Immediate, 1– 6 Rings, No Ring	Feature Manual References 2.2.2.2 Group Call Distribution
Wrap-up Timer	Specifies the length of time that must pass after completing a call before the member extension can accept another call. This timer is used when "Options—Wrap-up Timer based on" is set to "ICD Group Member" in 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous.	10 × n (n=0– 300) s	PC Programming Manual References  11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous—Options— Wrap-up Timer based on 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Option 8— Wrap-up Timer 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings—Option 8— Wrap-up Timer  Feature Manual References
			2.2.2.8 Log-in/Log-out

## 11.5.2 PBX Configuration—[3-5-2] Group—Incoming Call Distribution Group—Queuing Time Table

A Queuing Time Table can contain up to 16 sequences which control how calls waiting in a queue are handled. A maximum of 128 Queuing Time Tables can be programmed.

Name	Description	Value Range	Links
Queuing Sequence— Sequence 01–16	Specifies the command activated by the corresponding sequence.	None: Redirects the call to the next sequence. Overflow: Redirects the call to the overflow destination when there is no answer. Disconnect: Disconnects the line. Sequence 01–16: Redirects the call to a different sequence. Wait 5 × n (n=1–16) s: If preceded by an OGM, plays the Music on Hold for the specified period of time; if not preceded by an OGM, sends a ringback tone for the specified period of time. OGM 01–64: Sends a certain OGM. Queue No.: Announces how many calls precede the caller in the waiting queue. Queue No. and Time: Announces how many calls precede the caller in the waiting queue and the estimated wait time.	Feature Manual References 2.2.2.4 Queuing Feature 2.2.2.7 Overflow Feature 2.13.4 Music on Hold 2.28.2 Outgoing Message (OGM)

## 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous

Optional settings related to Incoming Call Distribution Groups can be programmed.

Name	Description	Value Range	Links
Options—Call Log to ICD Group when	CD Group when to an ICD Group are also logged	Feature Manual References	
ICD Member Answered	in the Incoming Call Log for the group, in addition to the log of the extension that answered the call.	extension that answered the	2.2.2.1 Incoming Call Distribution Group Features—SUMMARY
Options—Call Log to ICD Group when	Selects whether the calls to an ICD Group that are redirected	Disable, Enable	Feature Manual References
Overflow Destination Answered	and are answered by the overflow destination are also logged in the Incoming Call Log for the group, in addition to the log of the extension that answered the call.		2.2.2.1 Incoming Call Distribution Group Features—SUMMARY

Name	Description	Value Range	Links
Options—ICD Group Key Mode	Selects whether ICD Group buttons at extensions operate as normal or in Enhanced Phantom button mode.  When set to Enhanced Phantom mode, creating an ICD Group button at an extension using PT personal programming automatically registers the extension as a member of the relevant ICD Group. The extension user can also specify the delayed ringing settings.	Group DN, Enhanced Phantom	PC Programming Manual References  11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group— Group Settings—Member List—Delayed Ring Feature Manual References 2.2.2.1 Incoming Call Distribution Group Features—SUMMARY
Options—Longest Idle Distribution	Selects whether incoming calls are distributed to idle extensions evenly in order (UCD), or to the extension that has been idle the longest (ACD).	Disable (UCD), Enable (ACD)	Feature Manual References 2.2.2.2 Group Call Distribution
Options—Wrap-up Timer based on	Selects whether the ICD Group member wrap-up timer or extension wrap-up timer is used. If Extension is selected here, Wrap-up Timer on 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Member List becomes unavailable. If ICD Group Member is selected, Wrap-up Timer on 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings and 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings become unavailable.	Extension: The timer is activated after all calls to or from the extension, including a retrieved call on hold. ICD Group Member: The timer is only activated after calls to the extension through an ICD Group.	PC Programming Manual References  11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group— Group Settings—Member List—Wrap-up Timer 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 8— Wrap-up Timer 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 8— Wrap-up Timer Feature Manual References 2.2.2.8 Log-in/Log-out
Options—Overflow immediately when All Logout	Specifies whether overflow redirection is processed when all members of an ICD group are logged out.	Enable (Queuing Busy Destination), Disable (Keep Queuing)	Feature Manual References 2.2.2.1 Incoming Call Distribution Group Features—SUMMARY

Name	Description	Value Range	Links
Options—Call Log for Built-in ACD Report	Specifies whether to log call information for the Built-in ACD Report. This feature requires an activation key.  Note  When this setting is enabled, certain hospitality features cannot be used. For details, refer to the relevant chapter in the Feature Manual.	Enable (all trunk calls), Enable (ICD group calls only), Disable	Feature Manual References 2.2.2.1 Incoming Call Distribution Group Features—SUMMARY 2.2.2.10 Supervisory Feature (ACD) 2.23.2 Room Status Control 2.23.3 Call Billing for Guest Room
Options—Call Log for Built-in ACD Report—ICD Group Unanswered Call Log	Specifies whether to log call information of unanswered calls when the ICD group distribution method is set to Uniform Call Distribution or Priority Hunting, for the Built-in ACD Report.	Enable, Disable	Feature Manual References 2.2.2.10 Supervisory Feature (ACD)
Options—ICD Group Call Monitor View— Screen Update Time (s)	Specifies the screen update interval time for the ICD Group Call Monitor View.	5–60	Feature Manual References 2.2.2.1 Incoming Call Distribution Group Features—SUMMARY
Options— Announcement of Estimated Waiting Time—Calculated based on (the following time x number of calls in queue)	Specifies the method to announce the estimated wait time to calls waiting in an ICD group queue. The amount of time announced is calculated using the time set here for each call in the queue.	Average waiting time: The average wait time is used for calculating the announced amount of wait time.  Predefined time: A set amount of time (10–3600 s) is used for calculating the announced amount of wait time.	Feature Manual References 2.2.2.4 Queuing Feature
Options— Announcement of Estimated Waiting Time—Threshold Time for Special Announce (10-60 min)	Specifies the threshold wait time for when calls waiting in an ICD group queue will hear the special announcement.	10–60 min	Feature Manual References 2.2.2.4 Queuing Feature

Name	Description	Value Range	Links
Options—UM System Guidance— UM System Guidance for Queue No. / Queue No. and Time	Specifies the announcement heard by callers in an ICD queue about the estimated wait time. Select an announcement from the specified Unified Messaging System Guidance messages.	Guidance No.1– 8	Feature Manual References 2.2.2.4 Queuing Feature
Options—ICD Group Distribution order	Select the distribution method for member extensions that belong to multiple ICD groups and become idle.	FIFO, Circular	Feature Manual References 2.2.2.4 Queuing Feature
Options—2nd line LCD display information for ICD Group redirected call	Select the information displayed on the second line of the PT's display when an incoming call is redirected to the ICD group that the extension belongs to.	Last destination, First destination	Feature Manual References 2.2.2.4 Queuing Feature

## 11.5.4 PBX Configuration–[3-5-4] Group—Incoming Call Distribution Group—ACD Supervisor

This screen is only available at Installer level.

#### **Description**

After specifying an ICD Group to be monitored, specify a User (User) or User (Administrator) as an ACD supervisor to begin monitoring. The ACD supervisor can monitor an ICD Group, manage and analyse statistical information, and create an ACD report.

For details about ICD Group management by the ACD supervisor, see "2.2.2.10 Supervisory Feature (ACD)" in Feature Manual.

#### To set the ACD Supervisor

- 1. Click the **j** button. The **Set ACD Supervisor** screen is displayed.
- 2. From the users listed in the Normal User window, click a user to select it as the ACD supervisor, and then click the right arrow button to move the selected user to the ACD Supervisor window. To remove a selected user, click a user on the ACD Supervisor window to select it, and then click the left arrow button.
- 3. Click OK.

The ACD supervisor selected above is displayed as follows.

Name	Description	Value Range	Links
First Name	The first name of the ACD supervisor (reference only).		
Last Name	The last name of the ACD supervisor (reference only).		

Name		Description	Value Range	Links
Ext. No.	Th	e extension number of the ACD supervisor (reference only).		Feature
	To assign the ICD Groups that are monitored by the ACD Supervisor.			Manual References
	1.	In the <b>ICD Group</b> column, click the <b>Edit</b> button for the ACD supervisor. The <b>Set ACD Supervisor ICD Group</b> screen is displayed.		2.2.2.10 Supervisory Feature (ACD)
	2.	From the ICD Groups listed in the <b>Available ICD Group</b> window, click an ICD Group to select it for assignment to the ACD supervisor, and then click the right arrow button to move the selected ICD Group to the <b>Selected ICD Group</b> list. To remove a selected ICD Group, click an ICD Group on the <b>Selected ICD Group</b> list to select it, and then click the left arrow button.		
	3.	Click <b>OK</b> .		

# 11.6 PBX Configuration—[3-6] Group—Extension Hunting Group

If an extension within an idle extension hunting group is called when it is busy or in DND mode, the call can be redirected to another extension in the same hunting group, according to a pre-programmed hunting type. If there is no idle extension in the group, the call can then be redirected to the overflow destination, which can be different depending on the time mode (day/lunch/break/night). A maximum of 128 hunting groups can be programmed, each containing up to 16 extensions.

To assign members to the group, click **Member List**. To assign extensions as overflow destinations easily, click **Destination Setting** (see **2.1.7 Extension Number Setting**).

	• `	<u> </u>	
Name	Description	Value Range	Links
Hunting Group Name	Specifies the name of the hunting group.	Max. 20 characters	Feature Manual References
			2.2.1 Idle Extension Hunting
Hunting Type	Specifies the hunting type for the hunting	Circular: Circulates until the call is answered or	Feature Manual References
	group.	overflowed Terminated: Terminates at the last extension	2.2.1 Idle Extension Hunting 5.1.2 Group
Overflow— Day, Lunch,	Specifies the overflow destination of an	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], []	Feature Manual References
Break, Night	unanswered call in each time mode.	[Secret], P [Pause], and F [Flash])	2.2.1 Idle Extension Hunting

## 11.6.1 PBX Configuration—[3-6] Group—Extension Hunting Group—Member List

Each hunting group can contain up to 16 extensions. Select the hunting group to programme from the **Hunting Group No.** list.

To assign members to the group, enter the extension numbers in **Extension Number** or click **Extension No. Setting** (see **2.1.7 Extension Number Setting**).

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the hunting group member.	Max. 5 digits (consisting of 0–9)	PC Programming Manual References
			11.6 PBX Configuration—[3-6] Group— Extension Hunting Group
			Feature Manual References
			2.2.1 Idle Extension Hunting
Extension Name	Indicates the name of the extension, when an	Max. 20 characters	PC Programming Manual References
	extension number is specified in <b>Extension Number</b> above (reference		11.6 PBX Configuration—[3-6] Group— Extension Hunting Group
	only).		Feature Manual References
			2.2.1 Idle Extension Hunting

### 11.7 PBX Configuration—[3-7] Group—UM Group

## 11.7.1 PBX Configuration—[3-7-1] Group—UM Group—System Settings

The Unified Messaging (UM) ports of a PBX make up a group, called a UM group. This group has a floating extension number, which can be the destination for incoming calls, redirected calls, transferred calls, etc. When a call is received at the UM group, the Unified Messaging system can direct the caller to leave a voice message or dial a number to reach the desired party.

Name	Description	Value Range	Links
Call Waiting on VM Group	Enables the queuing of calls when all extension ports of the UM group are busy. (Call Waiting tone is not sent to any UM port.)	Disable, Enable	PC Programming Manual References  9.7 PBX Configuration—[1-1] Configuration—Slot—UM Port Property  Feature Manual References
			2.2.2.4 Queuing Feature 3.1.1 Unified Messaging System Overview—UM Ports and the UM Group
Intercept to Mailbox for Call to Extension	Enables the PBX to send the mailbox number of the called extension to the Unified Messaging system when a call is redirected to the UM group by Intercept Routing. When the Unified Messaging system receives the mailbox number, the Unified Messaging system answers the call with the appropriate mailbox.	Disable, Enable	PC Programming Manual References  9.7 PBX Configuration—[1-1] Configuration—Slot—UM Port Property  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings—Intercept Destination—Intercept Destination —When called party does not answer—Day, Lunch, Break, Night 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings—Intercept Destination—Intercept Destination —When called party does not answer—Day, Lunch, Break, Night  Feature Manual References  3.1.1 Unified Messaging System Overview—UM Ports and the UM Group

Name	Description	Value Range	Links
Overflow to Mailbox for Call to ICD Group	Enables the PBX to send the mailbox number of the called extension to the UM when a call is redirected from an incoming call distribution group to the UM group by Intercept Routing. When the Unified Messaging system receives the mailbox number, it answers the call with the appropriate mailbox.	Disable, Enable	Feature Manual References 2.2.2 Incoming Call Distribution Group Features
Transfer Recall to Mailbox	Enables the PBX to send the mailbox number of the transfer destination extension to the Unified Messaging system in these situations: (1) when a call is transferred to an extension by the Call Transfer without Announcement feature using the Automated Attendant (AA) service of the Unified Messaging system, and the call is not answered within a programmed time period; (2) when the Unified Messaging system is assigned as the Transfer Recall destination of a certain extension. When the Unified Messaging system receives the mailbox number, the Unified Messaging system answers the call with the appropriate mailbox.	Disable, Enable	PC Programming Manual References 9.7 PBX Configuration—[1-1] Configuration—Slot—UM Port Property Feature Manual References 3.1.1 Unified Messaging System Overview—UM Ports and the UM Group

## 11.7.2 PBX Configuration—[3-7-2] Group—UM Group—Unit Settings

A UM group has a floating extension number, which can be assigned as the destination for redirected calls and incoming calls. In a One-look network, each PBX has its own UM group, and each group has its own floating extension number.

To assign extension numbers to the group, click **Member List**. To view a list of all programmed extension numbers and types, click **Extension List View** (see **6.5 Tool—Extension List View**).

Name	Description	Value Range	Links
Floating Extension No.	Specifies the floating extension number of the UM group.	Max. 5 digits (consisting of 0– 9)	PC Programming Manual References 9.7 PBX Configuration—[1-1] Configuration—Slot—UM Port Property
			Feature Manual References 3.1.1 Unified Messaging System Overview—UM Ports and the UM Group

Name	Description	Value Range	Links
Group Name	Specifies the name of the UM group, which will be shown on	Max. 20 characters	PC Programming Manual References
	the display of extensions that call the UM group.		9.7 PBX Configuration—[1-1] Configuration—Slot—UM Port Property
			Feature Manual References
			3.1.1 Unified Messaging System Overview—UM Ports and the UM Group
Site name	Indicates the Site Name of the PBX that UM group belongs to (reference only).	Site Name	
Fail Over Site Name	Specifies the Site number and Site name of the PBX to be	Unassigned, Site number and	PC Programming Manual References
	used for UM Group Failover.  During a PBX operation failure, incoming calls routed to the UM group of the offline PBX will be	Site name	1.2.3.1 One-look Networking Survivability
			Feature Manual References
	automatically redirected to the specified PBX's UM group.		4.2.3.3 UM Group Failover

### 11.7.2.1 PBX Configuration—[3-7-2] Group—UM Group—Unit **Settings—Member List**

Displays information about all UM ports that belong to the selected UM group.

Name	Description	Value Range	Links
No.	Indicates the UM port number (reference only).	1–24	PC Programming Manual References 11.7.2 PBX Configuration—[3-7-2] Group— UM Group—Unit Settings
Extension No.	Indicates the extension number assigned to the UM port (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References 11.7.2 PBX Configuration—[3-7-2] Group— UM Group—Unit Settings
	port (reference only).		Feature Manual References
			3.1.1 Unified Messaging System Overview— UM Ports and the UM Group
UM Group No.	Indicates the UM group number and name (reference only).	UM Group number and name	PC Programming Manual References 11.7.2 PBX Configuration—[3-7-2] Group— UM Group—Unit Settings
	Offig).		Feature Manual References
			3.1.1 Unified Messaging System Overview— UM Ports and the UM Group

# 11.8 PBX Configuration—[3-8] Group—PS Ring Group

A PS ring group is a group of PS extensions that receives incoming calls. Each group has a floating extension number and name. One PS can belong to multiple PS ring groups. A maximum of 32 PS ring groups can be programmed, each containing up to 512 PS extensions.

To add PSs to the PS Ring Group, click **Member List**.

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the PS ring group.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.2.4.2 PS Ring Group
Group Name	Specifies the name of the PS ring group, which will be shown on the display of extensions that call the PS ring group when Incoming Trunk Call Information Display on this screen is set to Called Number.	Max. 20 characters	Feature Manual References 5.2.4.2 PS Ring Group
Incoming Trunk Call Information Display	Specifies the information of the incoming trunk call to be shown on the displays of the PSs that belong to the PS ring group. If the caller's name or called party's name is not recognised, the telephone number will be shown.	Caller ID, Called Number	Feature Manual References 5.2.4.2 PS Ring Group

### 11.8.1 PBX Configuration—[3-8] Group—PS Ring Group—Member List

Each PS Ring Group can have up to 512 PS extensions assigned. Select the group to programme from the **PS Ring Group Number** list.

To assign members to the PS Ring Group, enter directly or click **Extension No. Setting** (see **2.1.7 Extension Number Setting**). To copy members to another group, click **Member list copy**, select the group, and click **OK**.

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the PS assigned to the PS Ring Group.	Max. 5 digits	PC Programming Manual References  11.8 PBX Configuration—[3-8] Group—PS Ring Group  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 5.2.4.2 PS Ring Group

Name	Description	Value Range	Links
Extension Name	Indicates the name of the PS (reference only).	Max. 20 characters	PC Programming Manual References  11.8 PBX Configuration—[3-8] Group—PS Ring Group  12.2.1 PBX Configuration—[4-2-1] Extension— Portable Station—Extension Settings
			Feature Manual References 5.2.4.2 PS Ring Group

# 11.9 PBX Configuration—[3-9] Group—Conference Group

A conference group is a group of telephones (extensions or outside destinations) that ring when a conference group call is made. One destination number can be assigned to multiple conference groups. Up to 31 members can be assigned to each of 8 conference groups. To assign members to a group, click **Member List**.

When **Broadcast Mode** is set to "Disable", only up to 7 members can be assigned to a group. All of these members are automatically allowed to speak when the call starts.

Name	Description	Value Range	Links
Conference Group Name	Specifies the name of the conference group.	Max. 20 characters	Feature Manual References 2.15.1 Conference Group Call
Broadcast Mode	Specifies whether only the original caller can speak or up to 8 people can speak at the start of a conference group call.	Disable: The original caller and up to 7 participants can speak at the start of a conference group call. Enable: Only the original caller can speak at the start of a conference group call.	Feature Manual References 2.15.1 Conference Group Call
Ability to Talk	Enables PT, SLT and PS users to use the push-to-talk feature during a conference group call, when <b>Broadcast Mode</b> is set to "Enable". The push-to-talk feature allows PT, SLT and PS users to speak during the call by pressing any of their dial keys.	Disable, Enable	PC Programming Manual References  11.9 PBX Configuration— [3-9] Group—Conference Group—Broadcast Mode Feature Manual References  2.15.1 Conference Group Call
Automatic Answer w/o Extension Setting	Specifies if the extensions of the conference will automatically answer a conference group call, even if Hands-free Answerback is not set for those extensions. This setting can be used with PTs and KX-WT125 (Canada only)/ KX-TCA175/KX-TCA275/ KX-TCA185/KX-TCA285/ KX-TCA385 PSs.	Disable, Enable	PC Programming Manual References  11.9 PBX Configuration— [3-9] Group—Conference Group—Broadcast Mode Feature Manual References  2.15.1 Conference Group Call

### 11.9.1 PBX Configuration—[3-9] Group—Conference Group—Member List

Up to 31 members can be assigned to each conference group. Select the group to programme from the **Conference Group No.** list.

When **Broadcast Mode** is set to "Disable", only up to 7 members can be assigned to a group. All of these members are automatically allowed to speak when the call starts.

To copy the numbers to another group, click **Member list copy**, select the group to copy to, and click **OK**. To assign destinations for conference groups easily, click **Extension No. Setting** (see **2.1.7 Extension Number Setting**).

Name	Description	Value Range	Links
Dial Number	Specifies the destination number of each member of the conference group.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret],	PC Programming Manual References
	or the comprehence group.	and P [Pause])	11.9 PBX Configuration—[3-9] Group —Conference Group
			Feature Manual References
			2.15.1 Conference Group Call
Extension Name			PC Programming Manual References
			12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
			Feature Manual References 2.15.1 Conference Group Call

#### PBX Configuration—[3-10] Group—P2P 11.10 Group

Settings for peer-to-peer (P2P) groups can be programmed.

Name	Description	Value Range	Links
P2P Group Name	Specifies the name of the P2P group.	Max. 20 characters	Feature Manual References
			5.2.3 Peer-to-Peer (P2P) Connection
Bandwidth Control	Specifies whether to use the bandwidth precedence setting of the P2P group for calling among different P2P groups.	Disable, Enable	Feature Manual References 5.2.3 Peer-to-Peer (P2P) Connection

# 11.11 PBX Configuration—[3-11] Group—VM(DPT) Group

### 11.11.1 PBX Configuration—[3-11-1] Group—VM(DPT) Group—System Settings

A Panasonic Voice Processing System (VPS) with DPT Integration can be connected to DPT ports of KX-TDE/KX-NCP/KX-TDA PBXs. The DPT ports that are connected to the VPS are called a VM (DPT) Group. Settings for these groups can be programmed.

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Group—VM(DPT) Group—System Settings** section in the PC Programming Manual of the legacy gateway PBX for more information.

### 11.11.2 PBX Configuration—[3-11-2] Group—VM(DPT) Group—Unit Settings

A VM (DPT) group has a floating extension number, which can be assigned as the destination for redirected calls and incoming calls.

To assign members to the group, click **Member List**. To view a list of all programmed extension numbers and types, click **Extension List View** (see **6.5 Tool—Extension List View**).

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Group—VM(DPT) Group—Unit Settings** section in the PC Programming Manual of the legacy gateway PBX for more information.

### 11.11.2.1 PBX Configuration—[3-11-2] Group—VM(DPT) Group—Unit Settings—Member List

Displays information on the settings of all relevant ports.

Only ports set to **VM(DPT)** for **DPT Type**—**Type** in the extension's Port Property screen will be displayed. For details, see **To access port properties** in **9.1 PBX Configuration**—**[1-1] Configuration**—**Slot**.

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Group—VM(DPT) Group—Unit Settings—Member List** section in the PC Programming Manual of the legacy gateway PBX for more information

The **Site**, **Shelf**, and **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

# 11.12 PBX Configuration—[3-12] Group—VM(DTMF) Group

### 11.12.1 PBX Configuration—[3-12-1] Group—VM(DTMF) Group—System Settings

A Panasonic Voice Processing System (VPS) with DTMF Integration can be connected to SLT ports of KX-TDE/KX-NCP/KX-TDA PBXs. The SLT ports that are connected to the VPS are called a VM (DTMF) Group. Settings for these groups can be programmed.

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Group—VM(DTMF) Group—System Settings** section in the PC Programming Manual of the legacy gateway PBX for more information.

### 11.12.2 PBX Configuration—[3-12-2] Group—VM(DTMF) Group—Group Settings

A VM (DTMF) group has a floating extension number, and can be assigned as the destination for redirected calls and incoming calls. To assign members to the group, click **Member List**. To view a list of all programmed extension numbers and types, click **Extension List View** (see **6.5 Tool—Extension List View**).

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Group—VM(DTMF) Group—Group Settings** section in the PC Programming Manual of the legacy gateway PBX for more information.

### 11.12.2.1 PBX Configuration—[3-12-2] Group—VM(DTMF) Group—Group Settings—Member List

Select the group to programme from the VM(DTMF) Group Number list.

To assign members to the group, enter directly or click **Extension No. Setting** (see **2.1.7 Extension Number Setting**). To copy members to another group, click **Member list copy**, select the group, and then click **OK**.

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Group—VM(DTMF) Group—Group Settings—Member List** section in the PC Programming Manual of the legacy gateway PBX for more information.

Only ports set to VM(DPT) for DPT Type—Type in the extension's Port Property screen will be displayed. For details, see To access port properties in 9.1 PBX Configuration—[1-1] Configuration—Slot. The Site, Shelf, and Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

# Section 12 PBX Configuration—[4] Extension

This section serves as reference operating instructions for the Extension menu of the PBX Configuration Menu of the Setup screen of Web Maintenance Console.

# 12.1 PBX Configuration—[4-1] Extension—Wired Extension

## 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings

For each slot in which an extension card is installed, a certain number of extension ports are displayed. For each extension port, various extension settings can be assigned.

To search for a specific extension, enter the extension number or the extension name in the search box and click **Find Next**.

To copy the settings of an extension to another extension, click **Copy to**. The copied data includes FWD/DND, personal speed dialling, and flexible button settings.

To assign a set of CLIP numbers automatically, click CLIP Generate.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

#### Main

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Port Type	Indicates the extension port type (reference only).	DPT: DPT port (DLC) SLT: SLT port (SLC/MSLC/ CSLC/MCSLC/EMSLC) S-Hybrid: Super Hybrid port (DHLC) S-Hybrid(SLT): XDP port of Super Hybrid port (DHLC) S-Hybrid(S-DPT): Digital XDP port of Super Hybrid port (DHLC) DPT(S-DPT): Digital XDP port of DPT port (DLC) ISDN: ISDN port (BRI/PRI) OPX: T1-OPX port (T1) IP-EXT: IP-Extension port (V-IPEXT) SIP: General SIP Extension port (V-SIPEXT) SIP-MLT: KX-UT series SIP phone/S-PS/SIP-CS Extension port (V-UTEXT) UM: Unified Messaging System Extension port	

Name	Description	Value Range	Links
Telephone Type	Indicates the type of telephone connected to the extension port (reference only).	DPT (15V)/DPT (40V): DPT is connected. APT (15V): APT is connected. DSS: DSS Console is connected. VM: VPS is connected. ISDN-Extension: ISDN telephone is connected. OPX: T1-OPX port (T1) CS: CS is connected. IP-PT: IP-PT belonging to the V-IPEXT card is connected. P-SIP: Panasonic SIP Phone is connected. UT: KX-UT series SIP phone is connected. SIP: General SIP Extension is connected. SIP-CS: SIP Portable Station is connected. SIP-CS: SIP Cell Station is connected. CS-M: High-density CS is connected with its master port. CS-S1-3: High-density CS is connected with its slave port. FAX: Fax Extension No Connection: No telephone is connected. UNKNOWN: SLT is connected (or no telephone is connected to the Super Hybrid or SLT port).	
User Group	Specifies the extension user group to which the extension belongs. Extension user groups are used to compose tenants, call pickup groups and paging groups.	1–256	Feature Manual References 5.1.2 Group 5.1.3 Tenant Service

Name	Description	Value Range	Links
COS	Specifies the COS of the extension.	1–512	PC Programming Manual References 10.7.1 PBX Configuration— [2-7-1] System— Class of Service— COS Settings Feature Manual References 5.1.1 Class of
			Service (COS)
Extension PIN	Specifies the PIN of the extension.	Max. 10 digits (consisting of 0–9)	Feature Manual References
	CAUTION		2.24.1 Extension Personal
	There is a risk that fraudulent telephone calls will be made if a third party discovers a personal identification number (PIN) (verification code PIN or extension PIN) of the PBX. The cost of such calls will be billed to the owner/renter of the PBX. To protect the PBX from this kind of fraudulent use, we strongly recommend:  a. Keeping PINs secret.  b. Selecting complex,		Identification Number (PIN)
	random PINs that cannot be easily guessed.  c. Changing PINs		
	frequently. To change an Extension PIN:		
	Click Edit under Extension     PIN for the extension to change.		
	2. In the window that appears, enter the new extension PIN and then enter it again to confirm it.		
	3. Click OK.		

### **Intercept Destination**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Intercept Destination— When called party does not answer —Day, Lunch, Break, Night	Specifies the Intercept Routing destination of calls in each time mode for Intercept Routing–No Answer and Intercept Routing–DND. Note that Intercept Routing– Busy calls are routed using Intercept Destination— When Called Party is Busy below.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References  12.1.1 PBX Configuration —[4-1-1] Extension—Wired Extension—Extension Settings—Intercept Destination—Intercept Destination—When Called Party is Busy Feature Manual References  2.1.1.6 Intercept Routing
Intercept Destination— When Called Party is Busy	Specifies the Intercept Routing destination of calls when the extension is busy.	Max. 32 digits (consisting of 0–9, *, #, [ ] [Secret], and P [Pause])	Feature Manual References 2.1.1.6 Intercept Routing

#### **Intercept No Answer Time**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Intercept No Answer Time— Day, Lunch, Break, Night	Specifies the length of time until an unanswered call is redirected to the intercept routing destination in each time mode.  When this setting is set to "0", the system timer is used.	0–240 s	PC Programming Manual References  10.3 PBX Configuration—[2-3] System—Timers & Counters— Dial / IRNA / Recall / Tone— Intercept Routing No Answer (IRNA)—Day, Lunch, Break, Night
			Feature Manual References 2.1.1.6 Intercept Routing

#### **CLIP**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	

Name	Description	Value Range	Links
Extension Name	Specifies the name of the extension.	Max. 20 characters	
CLIP ID	Specifies the CLIP number sent to the public network to show on the called party's telephone display when making a trunk call.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)
CLIP on Extension/C O	Selects the CLIP number to show on the called party's telephone.	Extension: Show the CLIP number specified in CLIP ID. CO: Show the CLIP number specified in Subscriber Number in 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port or 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port.	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port—ISDN CO— Subscriber Number  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—CO Setting —Subscriber Number  12.1.1 PBX Configuration— [4-1-1] Extension—Wired Extension—Extension Settings —CLIP—CLIP ID
			Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)
CLIR	Specifies whether to restrict the display of the CLIP number on the called party's telephone when making a public network trunk call.	Disable, Enable	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)
COLR	Specifies whether to restrict the display of the CLIP number of the extension on the caller's telephone display when answering a call.	Disable, Enable	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)

#### **UM**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	

Name	Description	Value Range	Links
Two-way Recording	Specifies whether to enable the two-way recording feature for the extension using the Unified Messaging system.	Enable, Disable	Feature Manual References 3.2.2.34 Two-way Record/Two-way Transfer

### Option 1

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Wireless XDP / Shared Extension	Specifies the extension number of the PS with which Wireless XDP Parallel Mode is established. To enable Wireless XDP Parallel Mode, the PS must be turned off once and then turned on after assigning this setting.  This setting also specifies the sub extension for the main extension of a one-numbered extension.  Note  When Wireless XDP, S-PSs cannot be used with this setting.	Max. 5 digits (consisting of 0– 9)	Feature Manual References 2.11.10 One-numbered Extension 5.2.4.5 Wireless XDP Parallel Mode
Ring Pattern Table	Specifies the Ring Tone Pattern Table to be used by the extension.	1–8	PC Programming Manual References  10.8.1 PBX Configuration— [2-8-1] System—Ring Tone Patterns—Call from CO 10.8.2 PBX Configuration— [2-8-2] System—Ring Tone Patterns—Call from DOORPHONE 10.8.3 PBX Configuration— [2-8-3] System—Ring Tone Patterns—Call from Others  Feature Manual References 2.1.3.2 Ring Tone Pattern Selection

Name	Description	Value Range	Links
Programmed Mailbox No.	Specifies the mailbox number of the incoming call distribution group's mailbox for Voice Processing Systems (VPS) with DTMF Integration.	Max. 16 digits (consisting of 0–9, *, and #)	
Transfer Recall Destination	Specifies the transfer recall destination when an extension user transfers a call with the Call Transfer without Announcement feature and the transferred call is not answered within a certain time period.	Max. 5 digits (consisting of 0– 9)	Feature Manual References 2.12.1 Call Transfer
ARS Itemised Code	Specifies the itemised billing code used by the ARS feature for identifying calls made from the extension for accounting and billing purposes.	Max. 10 digits (consisting of 0– 9, *, and #)	PC Programming Manual References 16.5 PBX Configuration— [8-5] ARS—Carrier
			Feature Manual References
			2.7.6 Verification Code Entry 2.8.1 Automatic Route Selection (ARS)

### Option 2

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Manual C. Waiting for Extension Call	Selects the method of receiving call waiting notification from other extensions.	Off: No notification BSS: Tone from the handset or built-in speaker OHCA: Voice from the built-in speaker W-OHCA: Voice from the handset	Feature Manual References 2.1.3.3 Call Waiting 2.10.4.1 Second Call Notification to Busy Extension—SUMMARY
Automatic C. Waiting	Specifies whether to receive call waiting notifications for calls from a trunk, doorphone calls, and calls via an incoming call distribution group.	Off, On	Feature Manual References 2.1.3.3 Call Waiting

Name	Description	Value Range	Links
Pickup Dial Set	Sets or cancels the Hot Line feature. The number specified in <b>Pickup Dial No.</b> on this screen is dialled automatically after going off-hook when the Hot Line feature is active.	Off, On	PC Programming Manual References  10.3 PBX Configuration— [2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial—Hot Line (Pickup Dial) Start
			Feature Manual References 2.6.6 Hot Line
Pickup Dial No.	Specifies the number to be dialled automatically after going off-hook when the Hot Line feature is active.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.6.6 Hot Line
Data Mode	Sets or cancels the protection against tones or interruptions from other extensions during communication.	Off, On	Feature Manual References 2.11.5 Data Line Security

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Call Pickup Deny	Specifies whether calls can be picked up by other extensions.	Disable: Allows other extension users to pick up calls to your extension Enable: Prevents other extension users from picking up calls to your extension	Feature Manual References 2.4.3 Call Pickup
Call Pickup Group Monitoring	Specifies how incoming calls that can be answered by an extension in a pickup group are indicated on a PT (display, tone, etc.).	Display & Tone1, Display & Tone2, Display & Tone3, Display only, Disable  Note  Supported terminals are: DPT, DPT (S-DPT), S-Hybrid, S-Hybrid (S-DPT), IP-EXT  The number of terminals are limited to 256.	Feature Manual References 2.4.3 Call Pickup

Name	Description	Value Range	Links
Executive Override Deny	Specifies whether calls can be interrupted by other extensions.	Disable: Allows other extension users to interrupt an existing call Enable: Prevents other extension users from interrupting an existing call	Feature Manual References 2.10.2 Executive Busy Override
Absent Message	Specifies the Personal Absent Message which, unlike the System Absent Message, can be customised for each extension.	Max. 16 characters	Feature Manual References 2.20.2 Absent Message
Charge Limit	Specifies the maximum limit of call charges allowed for the extension. When this limit is reached, the extension cannot be used to make further trunk calls.  The number of decimal places that can be specified here depends on the value set in Charge Options—Digits After Decimal Point in 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge.	0-999999	PC Programming Manual References  14.2 PBX Configuration—[6-2] Feature—Hotel & Charge  Feature Manual References  2.7.2 Budget Management
Intercom Call by Voice	Selects the method of receiving intercom calls. When <b>Deny Voice Call</b> is selected, the extension will always ring when receiving calls, regardless of how the caller wants to make the call.	Tone Call, Voice Call, Deny Voice Call	Feature Manual References 2.5.3 Intercom Call

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	

Name	Description	Value Range	Links
Outgoing Preferred Line	Selects the line to be seized after going off-hook to make a call.	No Line: No line is seized. Idle: An idle trunk is seized automatically from the programmed trunk groups. ICM/PDN: An extension line is seized, or, for a PDN extension, an idle PDN button is selected. F-1–F-84: A trunk programmed for a flexible button (F-1–F-84) is seized. A flexible button customised as a Single-CO, Group-CO, Loop-CO, or ICD Group button must be selected.	PC Programming Manual References  12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button Feature Manual References  2.5.5.2 Line Preference— Outgoing
Incoming Preferred Line	Selects the line on which an incoming call is answered after going off-hook.  Note that even if a specific PDN button is selected here, a call ringing at any PDN button on the extension will be answered when going off-hook.	No Line: No line is selected. Select a line by pressing the desired Line Access button to answer a call. Ringing Line: The longest ringing call is selected. PDN: The call arriving at any PDN button is selected. F-1–F-84: The call arriving at a flexible button (F-1–F-84) is selected. A flexible button customised as a Single-CO, Group-CO, Loop-CO, or ICD Group button must be selected.	PC Programming Manual References  12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button Feature Manual References  2.4.2 Line Preference— Incoming
Call Waiting Tone Type	Selects the type of Call Waiting tone sent to the busy extension.	CW Tone 1, CW Tone 2	Feature Manual References 2.10.4.2 Call Waiting Tone
LCS Recording Mode	Specifies whether to continue or stop recording the message in the extension's mailbox when the extension user answers a call that was being monitored.	Stop Record, Keep Record	Feature Manual References 3.1.1 Unified Messaging System Overview
LCS Answer Mode	Specifies whether the extension's mailbox is monitored in Hands-free or Private mode.	Hands free: Monitor through the built-in speaker Private: Monitor through the handset or the built-in speaker after hearing a warning tone	Feature Manual References 2.11.1 Hands-free Operation 3.1.1 Unified Messaging System Overview

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Display Language	Selects the display language of the extension telephone.	Language1– Language5	Feature Manual References 2.21.4 Display Information
Incoming Call Display	Selects which caller information is shown on the first line of the extension's display.	Caller ID Name, CO Line Name, DDI/DID Name	Feature Manual References 2.21.4 Display Information
Automatic LCD Switch when Start Talking	Enables the first line of the display to show the call duration automatically after answering a trunk call.	Disable, Enable	Feature Manual References 2.21.4 Display Information
Key Pad Tone	Specifies whether key pad tones are heard when dialling.	Off, On	
Automatic Answer for CO Call	Enables the extension to answer an incoming trunk call automatically after a certain number of rings without going off-hook, when Hands-free Answerback has been set on the extension. This setting is only effective when Forced Automatic Answer on this screen has been set to Off.	Disable, Enable	Feature Manual References 2.4.4 Hands-free Answerback

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Forced Automatic Answer	Specifies whether the extension automatically answers all incoming calls (both intercom and trunk calls) without going off-hook, regardless of the Handsfree Answerback setting.	Off, On	
Flexible Button Programming Mode	Specifies whether the extension user can modify all flexible buttons without limitation, or only the One-touch Dialling buttons. When the mode is set to <b>One-touch Dial</b> , there is no need to enter "2" before the number when customising a One-touch Dialling button.	No Limitation, One- touch Dial	

Name	Description	Value Range	Links
ICM Tone	Selects the ring tone for incoming calls arriving at the INTERCOM button or PDN buttons. Note that the ring tone specified here is applied to all PDN buttons on an extension.	IP-PT (except KX-NT265/KX-NT321): 1–30 KX-NT265/KX-NT321: 1–8 (Even if ring tone 9–30 is selected, ring tone 1 is heard.) Other telephones: 1–8 (Even if ring tone 9–30 is selected, ring tone 2 is heard.)	
Display Lock	Locks or unlocks the Incoming Call Log display (i.e., specifies whether other extension users can see the Incoming Call Log information at the extension).	Unlock, Lock	Feature Manual References 2.19.2 Incoming Call Log
Paging Deny	Specifies whether paging of the extension from other extensions is enabled.	Disable, Enable	Feature Manual References 2.17.1 Paging

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Character Input Mode	Selects the character table to be used for entering characters.	Table 1: Standard mode Table 2: Option mode	
Flash Mode during CO	Selects the function of the FLASH/ RECALL button during a trunk	EFA, Terminate, Flash Recall	Feature Manual References
Conversation	conversation.		2.11.6 Flash/Recall/ Terminate 2.11.7 External Feature Access (EFA)
Incoming Call Log Memory	Specifies the number of incoming trunk calls that are retained in the	0–100	Feature Manual References
	extension's Incoming Call Log memory.		2.19.2 Incoming Call Log

Name	Description	Value Range	Links
Outgoing Call Log Memory	Specifies the number of telephone numbers dialled by the extension that are retained in the extension's	1–100	Feature Manual References 2.6.3 Last Number
	Outgoing Call Log memory.		Redial
ISDN Bearer	Selects the ISDN bearer mode. When <b>Automatic</b> is selected, the	Automatic, Speech, Audio	Feature Manual References
	bearer mode is set automatically depending on the extension's telephone type as follows: PT: Speech SLT: Audio		4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
Group CW w/o Tone (Ring after Call)	Enables an incoming call to an incoming call distribution group to arrive at a previously busy extension at the moment that the extension goes on-hook for the previous call.	Disable, Enable	
Extension Caller ID Sending	Enables the extension to send Caller ID information to an SLT.	Disable, Enable	Feature Manual References 2.19.1 Caller ID
Incoming Call Wait Timer for Extension Caller ID	Specifies the length of time that the ringing for a call is delayed when the call follows immediately after the previous unanswered call. When receiving two calls in quick succession (e.g., when a call waiting in a queue is directed to an extension immediately after the previous unanswered call stops ringing), some SLTs require a pause, after the first call stops ringing, to receive the second call's Caller ID information.	0–15 s	Feature Manual References 2.19.1 Caller ID
SLT MW Mode	Enables the use of the Message Waiting Lamp on an SLT extension connected to the extension port.  Note  This setting has to be disabled for message waiting by FSK.	Disable, MW- Lamp	Feature Manual References 2.20.1 Message Waiting

Name Description	Value Range	Links
Wrap-up Timer  Specifies the length of time that must pass after completing a call before an extension will accept another call when logged in as a member of an Incoming Call Distribution Group.  This timer is used when "Options—Wrap-up Timer based on" is set to "Extension" in 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous.	0-3000 s	PC Programming Manual References  11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group— Group Settings—Member List—Wrap-up Timer 11.5.3 PBX Configuration —[3-5-3] Group— Incoming Call Distribution Group—Miscellaneous— Options—Wrap-up Timer based on  Feature Manual References 2.2.2.8 Log-in/Log-out

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
PDN Delayed Ringing	Specifies the delayed ringing setting for calls to a PDN extension (an extension with one or more PDN buttons).	Immediate, 1 Ring, 2 Rings, 3 Rings, 4 Rings, 5 Rings, 6 Rings	Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension
Built-in Communication Assistant	Specifies whether to enable or disable the Communication Assistant (CA) application for each extension.	Disable, Basic Only, Enable	PC Programming Manual References  9.5.1 PBX Configuration— [1-1] Configuration—Slot— Site Property—Main—Port Number—Built-in Communication Assistant Server
			Feature Manual References
			2.26.2 CA (Communication Assistant)

Name	Description	Value Range	Links
Mobile Extension	Specifies whether to enable or disable mobile extension features (with a cellular phone or other outside destination) for the extension.	Disable, Enable	Feature Manual References 2.27.1 Cellular Phone Features—SUMMARY
Guest Room	Specifies "Yes" for Guest Room of each extension port when the hotel uses a FOS system (Front Office Software).	Yes, No	Feature Manual References 2.23.4 Built-in FOS Interface

### **FWD / DND**

Call Forwarding (FWD) and Do Not Disturb (DND) settings for each extension can be referred. FWD and DND settings can be programmed separately for each extension in 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension—FWD/DND.

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the extension.	Max. 5 digits (consisting of 0–9)	
Extension Name	Specifies the name of the extension.	Max. 20 characters	
FWD Mode for Call from CO	Indicates the forwarding type of incoming trunk calls (reference only).	None, FWD All, FWD Busy, FWD N/A, FWD Busy N/A	PC Programming Manual References 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND
			Feature Manual References 2.3.2 Call Forwarding (FWD)
FWD Destination for Call from CO	Indicates the forwarding destination of incoming trunk calls (reference only).	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND
			Feature Manual References 2.3.2 Call Forwarding (FWD)
FWD Mode for Call from Extension	Indicates the forwarding type of incoming intercom calls (reference only).	None, FWD All, FWD Busy, FWD N/A, FWD Busy N/A	PC Programming Manual References 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND
			Feature Manual References 2.3.2 Call Forwarding (FWD)

Name	Description	Value Range	Links
FWD Destination for Call from Extension	Indicates the forwarding destination of incoming intercom calls (reference only).	Max. 32 digits (consisting of 0–9, *, #, [ ] [Secret], and P [Pause])	PC Programming Manual References  12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND  Feature Manual References
			2.3.2 Call Forwarding (FWD)
FWD No Answer Time	Specifies the length of time that an incoming call rings at the extension before the call is forwarded.	0–120 s	PC Programming Manual References  12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND
			Feature Manual References 2.3.2 Call Forwarding (FWD)
Keep ring after FWD NA to CO	Specifies whether an extension continues to ring after forwarding an incoming call to an outside destination via FWD N/A or FWD Busy N/A.	Disable, Enable	PC Programming Manual References  12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension— FWD/DND Feature Manual References
			2.3.2 Call Forwarding (FWD)
Remote FWD COS	Specifies the COS that allows the FWD setting on the extension to be changed from another extension. This COS must then be set for the extensions that will remotely change the FWD setting.	Disable, 1–512	Feature Manual References 2.3.2 Call Forwarding (FWD)

# 12.1.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—CLIP Generate

CLIP Generate allows the CLIP numbers for a set of locations in series to be programmed together. Preassigned CLIP numbers for those locations will be overwritten.

If a number generated here is longer than 16 digits, the additional digits will be discarded.

Name	Description	Value Range	Links
Location Entry —Beginning Entry Location (Ext. Number)	Specifies the extension number of the first location to be programmed.	Wired extension number	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings  Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Location Entry —Number to Generate	Specifies the number of locations to be programmed.	1–total number of connected wired	PC Programming Manual References
	A CLIP number will only be assigned to connected wired extensions, even if	extensions	12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
	the number entered here is larger than the total		Feature Manual References
	number of wired extensions.		4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Parameter— Deleting Digits	Specifies the number of digits to be deleted from	0–5	PC Programming Manual References
	the start of an extension number when using it as part of the CLIP number.		12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
			Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Parameter— Head of ID	Specifies a prefix number to be applied to all	Max. 16 digits (consisting of	PC Programming Manual References
	generated CLIP numbers.	0–9, *, and #)	12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
			Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Parameter— Tail of ID	Specifies a suffix number to be applied to all	Max. 16 digits (consisting of	PC Programming Manual References
	generated CLIP numbers.	0–9, *, and #)	12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension— Extension Settings
			Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)

# 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension—FWD/DND

For each extension, separate Call Forwarding (FWD) and Do Not Disturb (DND) settings can be programmed for incoming intercom and trunk calls. Select the desired extension from the **Extension Number / Name** list.

To copy the FWD/DND settings of an extension to another extension, click Copy to.

Name	Description	Value Range	Links
Forward / DND—For external calls	Specifies the FWD/DND setting for external calls.  If Always (All), Busy, No Answer, or Busy / No Answer is selected, the FWD destination field can be set.	Always (All), Busy, No Answer, Busy / No Answer, Do Not Disturb, Off	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY
Forward / DND—For internal calls	Specifies the FWD/DND setting for internal calls.  If Always (All), Busy, No Answer, or Busy / No Answer is selected, the FWD destination field can be set.  If For both external calls and internal calls is checked, this setting becomes unavailable, and the value set for external calls is applied to internal calls.	Always (All), Busy, No Answer, Busy / No Answer, Do Not Disturb, Off	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY

# 12.1.3 PBX Configuration—[4-1-3] Extension—Wired Extension—Speed Dial

Personal Speed Dialling allows extension users to dial frequently dialled numbers using two-digit speed dialling numbers (00–99). A maximum of 100 Personal Speed Dialling numbers can be programmed for each extension. Select the desired extension from the **Extension Number / Name** list.

Name	Description	Value Range	Links	
Speed Dialling - Personal	Specifies the name of the Personal Speed Dialling number	Personal Speed Dialling number	Max. 20 characters	Feature Manual References
Name	to call using the Personal Speed Dialling Directory shown on the extension's display.		2.6.4 Speed Dialling— Personal/System	
Speed Dialling - Personal Number	Specifies the number to be dialled by the Personal Speed Dialling number.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [ ] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.6.4 Speed Dialling— Personal/System	

# 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button

### Overview

Each flexible button can be customised to allow one-touch access to a certain feature. A maximum of 84 flexible buttons can be customised for each extension. Select the desired extension from the **Extension Number / Name** list.

### Note

- Rows whose Key Location field is coloured can be customised.
- · The number of available flexible buttons is displayed in Available Keys on the screen.
- · This feature is available only for DPTs and IP-PTs.

### **KX-NT505** Flexible Buttons

KX-NT553/KX-NT556 IP-PTs can be connected to up to 4 KX-NT505 48 key add-on units. When an extension that has one or more KX-NT505 units connected is selected in the **Extension Number / Name** list, **Number of Connections NT505** and **NT505 Location No.** are displayed. In **Number of Connections NT505**, specify the number of connected KX-NT505 units (a maximum of 4). This configuration is available at the Installer level only. Then, in **NT505 Location No.**, select a KX-NT505 to program. Up to 48 flexible buttons can be programmed for each KX-NT505 unit.

### Note

Up to 64 KX-NT505 units can be connected to the PBX system.

### **Copying Flexible Button Settings**

To copy the flexible button settings of an extension to another extension, click **Copy to**. This operation (Copy to) is available at the User (Administrator) level.

#### Note

The **Copy to** button can be used with KX-NT505 units, even if the number of connected KX-NT505 units differs between extensions. Settings for **NT505 Location No.** will be copied to the same number of the copy target extension. However, if a matching **NT505 Location No.** does not exist at the target destination, those settings will not be copied.

For more information on flexible buttons, see "2.21.2 Flexible Buttons" in the Feature Manual. Once flexible buttons have been programmed, the Terminal Label Print utility can be used to print label sheets, which can be attached to extension telephones for quick reference. For details, see 1.2.2.1 Editing and Printing Terminal Labels in Off-line Mode.

To access the Super Master CS for related programming, click **SIP-CS Web**. The CS Web login screen will open in your web browser.

### **Note**

For this button to be enabled, you must specify the URL of the Super Master CS in the **Utility—CS-Web Connection**. See **7.12 Utility—CS-Web Connection**.

Name	Description	Value Range	Links
Туре	Specifies the feature to be assigned to the flexible button.	Not Stored, Loop CO, Single CO, Group CO, DSS, Onetouch, ICD Group, Message Waiting, FWD/DND (Both), FWD/DND (External), FWD/DND (Internal), Group Fwd (Both), Group Fwd (External), Group Fwd (Internal), Account, Conference, Terminate, EFA, Charge, Call Park, Call Log, Log-in/Log-out, Hurry-up, Wrap-up, System Alarm, Time Service, Answer, Release, TRS Level Change, ISDN Service, CLIR, COLR, ISDN Hold, Headset, Time Service - Automatic/Manual, Check In, Check Out, Cleaned Up, Two-way Record, Two-way Transfer, LCS, Voice Mail Transfer, NDSS, CTI, PDN, SDN, DN	PC Programming Manual References 12.1.4.1 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Flexible button data copy
		For each KX-UT series SIP phone that is connected to the PBX, at least one DN button must be assigned to the extension. Without a DN button assigned, the extension will not be able to make or receive calls.	
Parameter Selection (for Single CO)	Specifies the trunk to be accessed.	1–600	Feature Manual References 2.5.5.3 Trunk Access
Parameter Selection (for Group CO)	Specifies the trunk group to be accessed.	1–96	Feature Manual References 2.5.5.3 Trunk Access
Parameter Selection (for Call Park)	Specifies whether a call is parked in an idle parking zone automatically or in a specific parking zone.	Automatic, Specific	Feature Manual References 2.13.2 Call Park

Name	Description	Value Range	Links
Parameter Selection (for Log-in/Log-out)	Specifies which incoming call distribution groups that the extension belongs to are logged in to or logged out from.	None: The incoming call distribution group is selected manually. All: All incoming call distribution groups that the extension belongs to. Incoming Group: A prespecified incoming call distribution group	Feature Manual References 2.2.2.8 Log-in/Log-out
Parameter Selection (for Time Service)	Selects which time modes are switched manually.	All (Day/Night/Lunch/Break), Day/Night/Break, Day/Night/ Lunch, Day/Night	Feature Manual References 5.1.4 Time Service
Parameter Selection (for TRS Level Change)	Specifies the TRS/Barring level to be used temporarily on a certain extension.	Level 1–Level 7	Feature Manual References 2.7.1 Toll Restriction (TRS)/Call Barring (Barring) 2.7.4 Dial Tone Transfer
Parameter Selection (for Time Service - Automatic/ Manual)	Specifies the Time Table to be used when the Time Service Switching Mode is set to Automatic.	Table 1–Table 32 or Table 1– Table 128  Note  The maximum number of time tables (1 per tenant) depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants (and therefore, time tables) is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	Feature Manual References 5.1.4 Time Service
Parameter Selection (for SDN)	Specifies the delayed ringing setting for calls arriving at an SDN button.	Immediate, 1 Ring, 2 Rings, 3 Rings, 4 Rings, 5 Rings, 6 Rings, No Ring	Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension

Name	Description	Value Range	Links
Extension Number (for DSS)	Specifies the number of an extension to be accessed.	Max. 5 digits (consisting of 0–9)	
Extension Number (for ICD Group)	Specifies the floating extension number of an incoming call distribution group to be accessed.	Max. 5 digits (consisting of 0–9)	
Extension Number (for Message Waiting)	Specifies the number of an extension or floating extension number of an incoming call distribution group for which messages are checked. If this cell is left empty, the extension will check its own messages only.	Max. 5 digits (consisting of 0–9)	
Extension Number (for Group Fwd (Both))	Specifies the floating extension number of an incoming call distribution group or the extension number to set FWD remotely whose intercom and trunk calls will be forwarded.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY 2.3.2 Call Forwarding (FWD)
Extension Number (for Group Fwd (External))	Specifies the floating extension number of an incoming call distribution group or the extension number to set FWD remotely whose trunk calls will be forwarded.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY 2.3.2 Call Forwarding (FWD)
Extension Number (for Group Fwd (Internal))	Specifies the floating extension number of an incoming call distribution group or the extension number to set FWD remotely whose intercom calls will be forwarded.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY 2.3.2 Call Forwarding (FWD)
Extension Number (for Call Log)	Specifies the extension's own number or the floating extension number of an incoming call distribution group for which call log information is displayed. If the cell is left empty, the extension will display its own call log information.	Max. 5 digits (consisting of 0–9)	

Name	Description	Value Range	Links
Extension Number (for Log-in/Log-out)	Specifies the floating extension number of an incoming call distribution group to log-in to or log-out from.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.2.2.8 Log-in/Log-out
Extension Number (for Hurry-up)	Specifies the floating extension number of the incoming call distribution group whose longest waiting call will be redirected (Manual Queue Redirection).	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.2.2.4 Queuing Feature
Extension Number (for Two-way Record)	Specifies the floating extension number of the UM group containing the extension's mailbox.	Max. 5 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview
Extension Number (for Two-way Transfer)	Specifies the floating extension number of the UM group containing the desired mailbox.	Max. 5 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview
Extension Number (for Voice Mail Transfer)	Specifies the floating extension number of the UM group containing the desired mailbox.	Max. 8 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview
Extension Number (for SDN)	Specifies the floating extension number of the PDN extension corresponding to this SDN button.  Note that the extension specified here must have a PDN button registered for the SDN button to function.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension
Extension Name	Indicates the name of the extension, when an extension number is specified (reference only).	Max. 20 characters	
Dial (for One-touch)	Specifies the number to be dialled. The PBX can have a maximum of 2000 One-touch Dialling buttons for extensions.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.6.2 One-touch Dialling

Name	Description	Value Range	Links
Dial (for ISDN Service)	Specifies the number required to access the telephone company's ISDN service.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	Feature Manual References 4.1.2.11 ISDN Service Access by Keypad Protocol
Dial (for NDSS)	Specifies the network extension number of the extension to be accessed using Network Direct Station Selection.  Note that only extension numbers that have been previously registered in 17.4 PBX Configuration—[9-4] Private Network—NDSS Key Table can be specified here.	Max. 16 digits (consisting of 0–9)	Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Label Name	Specifies the name of each flexible button for KX-NT366 and KX-NT553/ KX-NT556/KX-NT560 IP-PTs, and KX-UT248 and KX-UT670 SIP-MLTs. The name specified here is displayed on the LCD for each button.	Max. 12 characters  Note  The maximum length for KX-UT248 and KX-UT670 labels is 10 characters.	Feature Manual References 2.21.2 Flexible Buttons
Optional Parameter (Ringing Tone Type Number) (for Time Service)	Specifies the Time Table to be used for changing time modes in the Automatic Switching mode.	Table 1–Table 32 or Table 1– Table 128  Note  The maximum number of time tables (1 per tenant) depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants (and therefore, time tables) is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	Feature Manual References 5.1.4 Time Service

Name	Description	Value Range	Links
Optional Parameter (Ringing Tone Type Number) (for Loop CO, Single CO, Group CO, ICD Group, SDN)	Specifies the ring tone type.	IP-PT (except KX-NT265/ KX-NT321): 1–30 KX-NT265/KX-NT321: 1–8 (Even if ring tone 9–30 is selected, ring tone 1 is heard.) S-PS: Not available. Other telephones: 1–8 (Even if ring tone 9–30 is selected, ring tone 2 is heard.)	
Optional Parameter (Ringing Tone Type Number) (for Call Park)	Specifies the number of the parking zone a call is to be parked in when a Call Park button with Parameter Selection (for Call Park) on this screen set to Specific is pressed.	Park 00–Park 99	Feature Manual References 2.13.2 Call Park
Ext No. of Mailbox (for Two-way Transfer)	Specifies the number of the extension whose mailbox will be used to record conversations using Onetouch Two-way Transfer. (For example, a secretary can record a conversation into the mailbox of a boss.) If the cell is left empty, the extension user must specify the number of an extension each time.	Max. 5 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview

# 12.1.4.1 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Flexible button data copy

The flexible button settings (including key label settings) of an extension can be copied to different extensions.

Name	Description	Value Range	Links
Destination Extension Line	Select the number and name of the extension that will receive the copied settings. Multiple extensions can be selected. To select all extensions at once, click <b>Select All</b> . When selecting multiple extensions, note that if the source extension has an SDN button, the copy operation cannot be performed.		PC Programming Manual References 12.1.4 PBX Configuration— [4-1-4] Extension—Wired Extension—Flexible Button

# 12.1.5 PBX Configuration—[4-1-5] Extension—Wired Extension—PF Button

Each Programmable Feature (PF) button can be customised to access a certain feature with one touch. A maximum of 12 PF buttons can be customised for each extension. Select the desired extension from the **Extension Number / Name** list.

Name	Description	Value Range	Links
Туре	Specifies whether to store a dialling number for the one-touch access.	Not Stored, One Touch	Feature Manual References 2.21.2 Flexible Buttons
Dial	Specifies the number to be dialled.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [ ] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.21.2 Flexible Buttons

# 12.1.6 PBX Configuration—[4-1-6] Extension—Wired Extension—NDSS Link Data - Send

It is possible to cancel the transmission of an extension's status data over the network. Select the desired extension from the **Extension Number / Name** list.

This screen can be accessed only in On-line mode.

Name	Description	Value Range	Links
Network BLF Data to NDSS	Selects whether extension status data is transmitted over the network	OFF, ON	PC Programming Manual References
Key of Other PBX - Other PBX (Network PBX	for the selected extension. This setting is automatically set to <b>ON</b> when the feature is used, and can		17.1 PBX Configuration—[9-1] Private Network—TIE Table
ÌD=1)	only be manually changed from <b>ON</b>		Feature Manual References
	to <b>OFF</b> , to cancel data transmission.		4.3.5.1 Network Direct Station Selection (NDSS)

# 12.1.7 PBX Configuration—[4-1-7] Extension—Wired Extension—CLIP ID Table

Up to 8 CLIP IDs can be set for each wired extension.

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the extension (reference only).	Max. 5 digits (consisting of 0–9)	
Extension Name	Indicates the name of the extension (reference only).	Max. 20 characters	
CLIP 1–8	Specifies up to 8 CLIP IDs for the extension.	Max. 16 digits (consisting of 0–9, *, and #)	

# 12.2 PBX Configuration—[4-2] Extension—Portable Station

# 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings

For each Portable Station (PS), various extension settings can be assigned. A maximum of 512 PSs can be programmed.

To copy the settings of an extension to another extension, click **Copy to**. The copied data includes FWD/DND and flexible button settings.

To assign a set of CLIP numbers automatically, click **CLIP Generate**. To assign names and tenants to extension user groups, click **Extension User Group Table**. See **11.2 PBX Configuration—[3-2] Group—User Group** for more details.

### Main

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References 9.31 PBX Configuration— [1-2] Configuration— Portable Station— Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 9.31 PBX Configuration— [1-2] Configuration— Portable Station— Extension Name
Property	Indicates the property (reference only).	Portable Station	
User Group	Specifies the extension user group to which the PS belongs. The extension user group is used to compose tenants, call pickup groups and paging groups.	1–256	Feature Manual References 5.1.2 Group 5.1.3 Tenant Service
cos	Specifies the COS of the PS.	1–512	PC Programming Manual References 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings
			Feature Manual References 5.1.1 Class of Service (COS)

Name	Description	Value Range	Links
Extension	Specifies the PIN of the PS.  CAUTION  There is a risk that fraudulent telephone calls will be made if a third party discovers a personal identification number (PIN) (verification code PIN or extension PIN) of the PBX.  The cost of such calls will be billed to the owner/renter of the PBX.  To protect the PBX from this kind of fraudulent use, we strongly recommend:  a. Keeping PINs secret.  b. Selecting complex, random PINs that cannot be easily guessed.  c. Changing PINs frequently.  To change an extension PIN:  1. Click Edit under Extension PIN for the extension to change.  2. In the window that appears, enter the new extension PIN and then enter it again to confirm it.  3. Click OK.	Max. 10 digits (consisting of 0–9)	Feature Manual References 2.24.1 Extension Personal Identification Number (PIN)

# **Intercept Destination**

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS	Max. 5 digits (consisting of 0–9)	PC Programming Manual References
	(reference only).		9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References
			9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension Name

Name	Description	Value Range	Links
Intercept Destination— When called party does not answer—Day, Lunch, Break, Night	Specifies the Intercept Routing destination of calls in each time mode for Intercept Routing–No Answer and Intercept Routing–DND. Note that Intercept Routing–Busy calls are routed using Intercept Destination—When Called Party is Busy below.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References  12.2.1 PBX Configuration— [4-2-1] Extension—Portable Station—Extension Settings— Intercept Destination—Intercept Destination—When Called Party is Busy  Feature Manual References 2.1.1.6 Intercept Routing
Intercept Destination— When Called Party is Busy	Specifies the Intercept Routing destination of calls when the extension is busy.	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	Feature Manual References 2.1.1.6 Intercept Routing

## **Intercept No Answer Time**

Name	Description	Value Range	Links
Extension Number	per number of the PS (consisting of	PC Programming Manual References	
	(reference only).	0–9)	9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References
			9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension Name
Intercept No Answer Time —Day, Lunch, Break, Night	Specifies the length of time until an unanswered call is redirected to the intercept routing destination in each time mode. When this setting is set to "0", the system timer is used.	0–240 s	PC Programming Manual References  10.3 PBX Configuration—[2-3] System —Timers & Counters—Dial / IRNA / Recall / Tone—Intercept Routing No Answer (IRNA)—Day, Lunch, Break, Night
	uscu.		Feature Manual References
			2.1.1.6 Intercept Routing

### **CLIP**

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References 9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension No.

Name	Description	Value Range	Links
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References  9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension Name
CLIP ID	Specifies the CLIP number sent to the public network to show on the called party's telephone display when making a trunk call.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
CLIP on Extension/C O	Selects the CLIP number to show on the called party's telephone.	Extension: Show the CLIP number specified in CLIP ID. CO: Show the CLIP number specified in Subscriber Number in 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port or 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port.	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port—ISDN CO—Subscriber Number  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—CO Setting— Subscriber Number  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings—CLIP—CLIP ID  Feature Manual References  4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)
CLIR	Specifies whether to restrict the display of the CLIP number on the called party's telephone when making a public network trunk call.	Disable, Enable	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
COLR	Specifies whether to restrict the display of the CLIP number of the PS on the caller's telephone display when answering a call.	Disable, Enable	Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)

### **UM**

Name	Description	Value Range	Links
Extension Number	Specifies the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	

Name	Description	Value Range	Links
Extension Name	Specifies the name of the PS.	Max. 20 characters	
Two-way Recording	Specifies whether to enable the two- way recording feature for the PS using the Unified Messaging system.	Enable, Disable	Feature Manual References 3.2.2.34 Two-way Record/Two-way Transfer

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0– 9)	PC Programming Manual References 9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension Name
Ring Pattern Table	Specifies the Ring Tone Pattern Table to be used by the PS.	1–8	PC Programming Manual References  10.8.1 PBX Configuration—[2-8-1] System—Ring Tone Patterns—Call from CO  10.8.2 PBX Configuration—[2-8-2] System—Ring Tone Patterns—Call from DOORPHONE  10.8.3 PBX Configuration—[2-8-3] System—Ring Tone Patterns—Call from Others  Feature Manual References
			2.1.3.2 Ring Tone Pattern Selection
Programmed Mailbox No.	Specifies the mailbox number of the incoming call distribution group's mailbox for Voice Processing Systems (VPS) with DTMF Integration.	Max. 16 digits (consisting of 0–9, *, and #)	

Name	Description	Value Range	Links
Transfer Recall Destination	Specifies the transfer recall destination when an extension user transfers a call with the Call Transfer without Announcement feature and the transferred call is not answered within a certain time period.	Max. 5 digits (consisting of 0– 9)	Feature Manual References 2.12.1 Call Transfer
ARS Itemised Code	Specifies the itemised billing code used by the ARS feature for identifying the calls made from the PS for accounting and billing purposes.	code used by the ARS (consisting of 0– feature for identifying the calls made from the PS for	PC Programming Manual References 16.5 PBX Configuration—[8-5] ARS—Carrier
			Feature Manual References
			2.7.6 Verification Code Entry 2.8.1 Automatic Route Selection (ARS)

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References
			9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References
			9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension Name
Manual C. Waiting for Extension Call	Selects the method of receiving call waiting notification from other extensions.	Off: No notification BSS: Tone from the handset or built-in speaker	Feature Manual References 2.1.3.3 Call Waiting
Automatic C. Waiting	Specifies whether to receive call waiting notification for a call from trunk, a doorphone call or a call via an incoming call distribution group.	Off, On	Feature Manual References 2.1.3.3 Call Waiting

Name	Description	Value Range	Links
Set featur	Sets or cancels the Hot Line feature. The number specified in <b>Option 2</b> on this screen is dialled automatically after going off-hook when the Hot Line feature is active.	Off, On	PC Programming Manual References
		alled automatically after going f-hook when the Hot Line	10.3 PBX Configuration—[2-3] System—Timers & Counters— Dial / IRNA / Recall / Tone—Dial —Hot Line (Pickup Dial) Start
			Feature Manual References
			2.6.6 Hot Line
Pickup Dial	Specifies the number to be	Max. 32 digits	Feature Manual References
No.	dialled automatically after going off-hook when the Hot Line feature is active.	(consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	2.6.6 Hot Line

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References
			9.31 PBX Configuration— [1-2] Configuration—Portable Station—Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 9.31 PBX Configuration— [1-2] Configuration—Portable Station—Extension Name
Call Pickup Deny	Specifies whether calls can be picked up by other extensions.	Disable: Allows other extension users to pick up calls to your PS Enable: Prevents other extension users from picking up calls to your PS	Feature Manual References 2.4.3 Call Pickup
Executive Override	Specifies whether calls can be interrupted by other extensions.	Disable: Allows other extension users to	Feature Manual References
Deny		interrupt an existing call Enable: Prevents other extension users from interrupting an existing call	2.10.2 Executive Busy Override
Absent Message	Specifies the Personal Absent Message which, unlike the System Absent Message, can be customised for each PS.	Max. 16 characters	Feature Manual References 2.20.2 Absent Message

Name	Description	Value Range	Links
Charge Limit	Specifies the maximum limit of call charges allowed for the PS. When this limit is reached, the PS	0–9999999	PC Programming Manual References
	cannot be used to make further trunk calls.  The number of decimal places		14.2 PBX Configuration— [6-2] Feature—Hotel & Charge
	that can be specified here depends on the value set in		Feature Manual References
	Charge Options—Digits After Decimal Point in 14.2 PBX Configuration—[6-2] Feature— Hotel & Charge		2.7.2 Budget Management

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  9.31 PBX Configuration—  [1-2] Configuration—  Portable Station—Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References  9.31 PBX Configuration—  [1-2] Configuration—  Portable Station—Extension  Name
Outgoing Preferred Line	Selects the line to be seized after going off-hook to make a call.	No Line: No line is seized. Idle: An idle trunk is seized automatically from the programmed trunk groups. ICM/PDN: An extension line is seized, or, for a PDN extension, an idle PDN button is selected. F-1–F-12: A trunk programmed for a flexible button (F-1–F-12) is seized. A flexible button customised as a Single-CO, Group-CO, Loop-CO, or ICD Group button must be selected.	PC Programming Manual References  12.2.3 PBX Configuration— [4-2-3] Extension—Portable Station—Flexible Button  Feature Manual References  2.5.5.2 Line Preference— Outgoing

Name	Description	Value Range	Links
Incoming Preferred Line	Selects the line on which an incoming call is answered after going off-hook.  Note that even if a specific PDN button is selected here, a call ringing at any PDN button on the extension will be answered when going off-hook.	No Line: No line is selected. Select a line by pressing the desired Line Access button to answer a call. Ringing Line: The longest ringing call is selected. PDN: The call arriving at any PDN button is selected. F-1–F-12: The call arriving at a flexible button (F-1–F-12) is selected. A flexible button customised as a Single-CO, Group-CO, Loop-CO, or ICD Group button must be selected.	PC Programming Manual References  12.2.3 PBX Configuration— [4-2-3] Extension—Portable Station—Flexible Button  Feature Manual References  2.4.2 Line Preference— Incoming
Call Waiting Tone Type	Selects the type of Call Waiting tone sent to the busy extension.	CW Tone 1, CW Tone 2	Feature Manual References 2.10.4.2 Call Waiting Tone
LCS Recording Mode	Specifies whether to continue or stop recording the message in the PS's mailbox when the PS user answers a call that was being monitored.	Stop Record, Keep Record	Feature Manual References 3.1.1 Unified Messaging System Overview

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference	Max. 5 digits (consisting of 0–9)	PC Programming Manual References
	only).		9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References
			9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension Name
Display	Selects the display language	Language1-	Feature Manual References
Language	of the PS.	Language5	2.21.4 Display Information
Incoming Call Display	Selects which caller information is shown on the first line of the PS's display.	Caller ID Name, CO Line Name, DDI/DID Name	Feature Manual References 2.21.4 Display Information
Automatic LCD Switch when Start Talking	Enables the first line of the display to show the call duration automatically after answering a trunk call.	Disable, Enable	Feature Manual References 2.21.4 Display Information

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0– 9)	PC Programming Manual References 9.31 PBX Configuration— [1-2] Configuration—Portable Station—Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 9.31 PBX Configuration— [1-2] Configuration—Portable Station—Extension Name
Flexible Button Programming Mode	Specifies whether the PS user can modify all flexible buttons without limitation, or only the One-touch Dialling buttons. When the mode is set to <b>One-touch Dial</b> , there is no need to enter "2" before the number when customising a One-touch Dialling button.	No Limitation, One-touch Dial	Feature Manual References 2.6.2 One-touch Dialling

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0– 9)	PC Programming Manual References 9.31 PBX Configuration—[1-2] Configuration—Portable Station—Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 9.31 PBX Configuration—[1-2] Configuration—Portable Station—Extension Name
Character Input Mode	Selects the character table to be used for entering characters.	Table 1: Standard mode Table 2: Option mode	
Flash Mode during CO Conversation	Selects the function of the FLASH/RECALL button during a trunk conversation.	EFA, Terminate, Flash Recall	Feature Manual References 2.11.6 Flash/Recall/Terminate 2.11.7 External Feature Access (EFA)
Incoming Call Log Memory	Specifies the number of incoming trunk calls that are retained in the PS's Incoming Call Log memory.	0–100	Feature Manual References 2.19.2 Incoming Call Log

Name	Description	Value Range	Links
Outgoing Call Log Memory	Specifies the number of telephone numbers dialled by the PS that are retained in the PS's Outgoing Call Log memory.	1–100	Feature Manual References 2.6.3 Last Number Redial
ISDN Bearer	Selects the ISDN bearer mode. When <b>Automatic</b> is selected, the bearer mode is set automatically depending on the type of the PS.	Automatic, Speech, Audio	Feature Manual References 4.1.2.1 Integrated Services Digital Network (ISDN)— SUMMARY

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References 9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension Name
Group CW w/o Tone (Ring after Call)	Enables an incoming call to an incoming call distribution group to arrive at a previously busy extension at the moment that the extension goes on-hook for the previous call.	Disable, Enable	
Wrap-up Timer	Specifies the length of time that must pass after completing a call before a PS will accept another call when logged in as a member of an Incoming Call Distribution Group. This timer is used when "Options—Wrap-up Timer based on" is set to "Extension" in 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous.	0–3000 s	PC Programming Manual References  11.5.1.1 PBX Configuration— [3-5-1] Group—Incoming Call Distribution Group—Group Settings—Member List—Wrapup Timer 11.5.3 PBX Configuration— [3-5-3] Group—Incoming Call Distribution Group— Miscellaneous—Options—Wrapup Timer based on
			Feature Manual References 2.2.2.8 Log-in/Log-out

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0– 9)	PC Programming Manual References  9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension No.
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References  9.31 PBX Configuration—[1-2] Configuration—Portable Station —Extension Name
PDN Delayed Ringing	Specifies the delayed ringing setting for calls to a PDN extension (an extension with one or more PDN buttons).	Immediate, 1 Ring, 2 Rings, 3 Rings, 4 Rings, 5 Rings, 6 Rings	Feature Manual References 2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension
Built-in Communication Assistant	Specifies whether to enable or disable the Communication Assistant (CA) application for each extension.	Disable, Basic Only, Enable	PC Programming Manual References  9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Port Number— Built-in Communication Assistant Server  Feature Manual References
			2.26.2 CA (Communication Assistant)
Mobile Extension	Specifies whether to enable or disable mobile extension features (with a cellular phone or other outside destination) for the extension.	Disable, Enable	Feature Manual References 2.27.1 Cellular Phone Features— SUMMARY

### **FWD / DND**

Call Forwarding (FWD) and Do Not Disturb (DND) settings for each PS can be referred. FWD and DND settings can be programmed separately for each PS in 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station—FWD/DND.

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0– 9)	PC Programming Manual References  9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension No.

Name	Description	Value Range	Links
Extension Name	Specifies the name of the PS.	Max. 20 characters	PC Programming Manual References  9.31 PBX Configuration—[1-2] Configuration—Portable Station— Extension Name
FWD Mode for Call from CO	Indicates the forwarding type of incoming trunk calls (reference only).	None, FWD All, FWD Busy, FWD N/A, FWD Busy N/A	PC Programming Manual References 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND Feature Manual References 2.3.2 Call Forwarding (FWD)
FWD Destination for Call from CO	Indicates the forwarding destination of incoming trunk calls (reference only).	Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND Feature Manual References 2.3.2 Call Forwarding (FWD)
FWD Mode for Call from Extension	Indicates the forwarding type of incoming intercom calls (reference only).	None, FWD All, FWD Busy, FWD N/A, FWD Busy N/A	PC Programming Manual References 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND Feature Manual References 2.3.2 Call Forwarding (FWD)
FWD Destination for Call from Extension	Indicates the forwarding destination of incoming intercom calls (reference only).	Max. 32 digits (consisting of 0– 9, *, #, [] [Secret], and P [Pause])	PC Programming Manual References 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND Feature Manual References 2.3.2 Call Forwarding (FWD)
FWD No Answer Time	Specifies the length of time that an incoming call rings at the PS before the call is forwarded.	0–120 s	PC Programming Manual References  12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND  Feature Manual References  2.3.2 Call Forwarding (FWD)

Name	Description	Value Range	Links
Keep ring after FWD NA to CO	Specifies whether a PS continues to ring after forwarding an incoming call to an outside destination via FWD N/A or FWD Busy N/A.	Disable, Enable	PC Programming Manual References
			12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station— FWD/DND
	Of two basy two.		Feature Manual References 2.3.2 Call Forwarding (FWD)
Remote FWD COS	Specifies the COS that allows the FWD setting on the extension to be changed from another extension. This COS must then be set for the extensions that will remotely change the FWD setting.	Disable, 1–512	Feature Manual References 2.3.2 Call Forwarding (FWD)

# 12.2.1.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—CLIP Generate

CLIP Generate allows the CLIP numbers for a set of locations in series to be programmed together. Preassigned CLIP numbers for those locations will be overwritten.

If a number generated here is longer than 16 digits, the additional digits will be discarded.

Name	Description	Value Range	Links
Location Entry —Beginning Entry Location	Specifies the extension number of the first location to be programmed.	PS extension number	PC Programming Manual References 12.2.1 PBX Configuration—[4-2-1]
(Ext. Number)			Extension—Portable Station— Extension Settings
			Feature Manual References
			4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Location Entry —Number to	Specifies the number of locations to be	1–total number of connected	PC Programming Manual References
Generate	programmed. A CLIP number will only be assigned to registered PS extensions, even if the	PS extensions	12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
	number entered here is		Feature Manual References
	larger than the total number of PS extensions.		4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)

Name	Description	Value Range	Links
Parameter— Deleting Digits	Specifies the number of digits to be deleted from the start of an extension number when using it as part of the CLIP number.	0–4	PC Programming Manual References  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
			Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Parameter— Head of ID	Specifies a prefix number to be applied to all generated CLIP numbers.	Max. 16 digits (consisting of 0–9, *, and #)	PC Programming Manual References  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
			Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)
Parameter— Tail of ID	Specifies a suffix number to be applied to all generated CLIP numbers.	Max. 16 digits (consisting of 0–9, *, and #)	PC Programming Manual References  12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station— Extension Settings
			Feature Manual References 4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/ COLP)

# 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station—FWD/DND

For each PS, separate Call Forwarding (FWD) and Do Not Disturb (DND) settings can be programmed for incoming intercom and trunk calls. Select the desired PS from the **Extension Number / Name** list. To copy FWD/DND values from one location to another, click **Copy to**.

Name	Description	Value Range	Links
Forward / DND—For external calls	Specifies the FWD/DND setting for external calls.  If Always (All), Busy, No Answer, or Busy / No Answer is selected, the FWD destination field can be set.	Always (All), Busy, No Answer, Busy / No Answer, Do Not Disturb, Off	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY

Name	Description	Value Range	Links
Forward / DND—For internal calls	Specifies the FWD/DND setting for internal calls.  If Always (All), Busy, No Answer, or Busy / No Answer is selected, the FWD destination field can be set.  If For both external calls and internal calls is checked, this setting becomes unavailable, and the value set for external calls is applied to internal calls.	Always (All), Busy, No Answer, Busy / No Answer, Do Not Disturb, Off	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY

# 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button

Each flexible button can be customised to allow one-touch access to a certain feature. A maximum of 12 flexible buttons can be customised for each PS. Select the desired PS from the **Extension Number / Name** list.

To copy values from one location to another, click the **Copy to** button. For more information on flexible buttons, see "2.21.2 Flexible Buttons" in the Feature Manual.

Name	Description	Value Range	Links
Туре	Specifies the feature to be assigned to the flexible button.	Not Stored, Loop CO, Single CO, Group CO, DSS, One-touch, ICD Group, Message Waiting, FWD/DND (Both), FWD/DND (External), FWD/DND (Internal), Group Fwd (Both), Group Fwd (External), Group Fwd (Internal), Account, Conference, Terminate, EFA, Charge, Call Park, Log-in/Log-out, Hurry-up, Wrap-up, Time Service, TRS Level Change, ISDN Service, CLIR, COLR, ISDN Hold, Time Service - Automatic/Manual, Two-way Record, Two-way Transfer, LCS, Voice Mail Transfer, NDSS, CTI, PDN, SDN	PC Programming Manual References  12.2.3.1 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button —Flexible button data copy
Parameter Selection (for Single CO)	Specifies the trunk to be accessed.	1–600	Feature Manual References 2.5.5.3 Trunk Access

Name	Description	Value Range	Links
Parameter Selection (for Group CO)	Specifies the trunk group to be accessed.	1–96	Feature Manual References 2.5.5.3 Trunk Access
Parameter Selection (for Call Park)	Specifies whether a call is parked in an idle parking zone automatically, or in a specific parking zone.	Automatic, Specific	Feature Manual References 2.13.2 Call Park
Parameter Selection (for Log-in/Log-out)	Specifies which incoming call distribution groups that the PS belongs to are logged in to or logged out from.	None: The incoming call distribution group is selected manually. All: All incoming call distribution groups that the PS belongs to. Incoming Group: A pre-specified incoming call distribution group	Feature Manual References 2.2.2.8 Log-in/Log-out
Parameter Selection (for Time Service)	Selects which time modes are switched manually.	All (Day/Night/Lunch/ Break), Day/Night/ Break, Day/Night/ Lunch, Day/Night	Feature Manual References 5.1.4 Time Service
Parameter Selection (for TRS Level Change)	Specifies the TRS/Barring level to be used temporarily on a certain PS.	Level 1–Level 7	Feature Manual References 2.7.1 Toll Restriction (TRS)/Call Barring (Barring) 2.7.4 Dial Tone Transfer
Parameter Selection (for Time Service - Automatic/ Manual)	Specifies the Time Table to be used when the Time Service Switching Mode is set to Automatic.	Table 1–Table 32	Feature Manual References 5.1.4 Time Service
Parameter Selection (for SDN)	Specifies the delayed ringing setting for calls arriving at an SDN button. The value specified here is only used when System Wireless—SDN Delayed Ringing with LCD on 10.9 PBX Configuration—[2-9] System—System Options is set to "Enable".	Immediate, 1 Ring, 2 Rings, 3 Rings, 4 Rings, 5 Rings, 6 Rings, No Ring	PC Programming Manual References  10.9 PBX Configuration —[2-9] System—System Options—Option 4— System Wireless—SDN Delayed Ringing with LCD Feature Manual References  2.9.1 Primary Directory Number (PDN)/ Secondary Directory Number (SDN) Extension

Name	Description	Value Range	Links
Extension Number (for DSS)	Specifies the number of an extension to be accessed.	Max. 5 digits (consisting of 0–9)	
Extension Number (for ICD Group)	Specifies the floating extension number of an incoming call distribution group to be accessed.	Max. 5 digits (consisting of 0–9)	
Extension Number (for Message Waiting)	Specifies the number of an extension or floating extension number of an incoming call distribution group for which messages are checked. If this cell is left empty, the PS will check its own messages only.	Max. 5 digits (consisting of 0–9)	
Extension Number (for Group Fwd (Both))	Specifies the floating extension number of an incoming call distribution group or the extension number to set FWD remotely whose intercom and trunk calls will be forwarded.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY 2.3.2 Call Forwarding (FWD)
Extension Number (for Group Fwd (External))	Specifies the floating extension number of an incoming call distribution group or the extension number to set FWD remotely whose trunk calls will be forwarded.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY 2.3.2 Call Forwarding (FWD)
Extension Number (for Group Fwd (Internal))	Specifies the floating extension number of an incoming call distribution group or the extension number to set FWD remotely whose intercom calls will be forwarded.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.3.1 Call Forwarding (FWD)/Do Not Disturb (DND)—SUMMARY 2.3.2 Call Forwarding (FWD)
Extension Number (for Log-in/Log-out)	Specifies the floating extension number of an incoming call distribution group to log-in to or log-out from.	Max. 5 digits (consisting of 0–9)	
Extension Number (for Hurry-up)	Specifies the floating extension number of the incoming call distribution group whose longest waiting call will be redirected (Manual Queue Redirection).	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.2.2.4 Queuing Feature

Name	Description	Value Range	Links
Extension Number (for Two-way Record)	Specifies the floating extension number of the UM group containing the PS's mailbox.	Max. 5 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview
Extension Number (for Two-way Transfer)	Specifies the floating extension number of the UM group containing the desired mailbox.	Max. 5 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview
Extension Number (for Voice Mail Transfer)	Specifies the floating extension number of the UM group containing the desired mailbox.	Max. 8 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview
Extension Number (for SDN)	Specifies the floating extension number of the corresponding (owner) extension for the SDN button.  Note that the extension specified here must have a PDN button registered for the SDN button to function.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.9.1 Primary Directory Number (PDN)/ Secondary Directory Number (SDN) Extension
Extension Name	Indicates the name of the extension, when an extension number is specified (reference only).	Max. 20 characters	
Dial (for One-touch)	Specifies the number to be dialled. The PBX can have a maximum of 500 One-touch Dialling buttons for PSs.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.6.2 One-touch Dialling
Dial (for ISDN Service)	Specifies the number required to access the telephone company's ISDN service.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [] [Secret], P [Pause], and F [Flash])	Feature Manual References 4.1.2.11 ISDN Service Access by Keypad Protocol
Dial (for NDSS)	Specifies the network extension number of the extension to be accessed using Network Direct Station Selection.  Note that only extension numbers that have been previously registered in 17.4  PBX Configuration—[9-4]  Private Network—NDSS Key Table can be specified here.	Max. 16 digits (consisting of 0–9)	Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)

Name	Description	Value Range	Links
Optional Parameter (or Ringing Tone Type Number) (for Time Service)	Specifies the Time Table to be used for changing time modes in the Automatic Switching mode.	Table 1–Table 32	Feature Manual References 5.1.4 Time Service
Optional Parameter (or Ringing Tone Type Number) (for Call Park)	Specifies the number of the parking zone a call is to be parked in when a Call Park button with Parameter Selection (for Call Park) on this screen set to Specific is pressed.	Park 00–Park 99	Feature Manual References 2.13.2 Call Park
Ext No. of Mailbox (for Two-way Transfer)	Specifies the number of the extension whose mailbox will be used to record conversations using One-touch Two-way Transfer. (For example, a secretary can record a conversation into the mailbox of a boss.) If the cell is left empty, the extension user must specify the number of an extension each time.	Max. 5 digits (consisting of 0–9)	Feature Manual References 3.1.1 Unified Messaging System Overview

### 12.2.3.1 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Flexible button data copy

The flexible button settings of a PS can be copied to different PSs.

Name	Description	Value Range	Links
Destination Extension Line	Select the number and name of the PS that will receive the copied settings. Multiple PSs can be selected. To select all PSs at once, click <b>Select All</b> .  When selecting multiple extensions, note that if the source extension has an SDN button, the copy operation cannot be performed.		PC Programming Manual References  12.2.3 PBX Configuration— [4-2-3] Extension—Portable Station—Flexible Button

### 12.2.4 PBX Configuration—[4-2-4] Extension—Portable Station—NDSS Link Data - Send

It is possible to cancel the transmission of an extension's status data over the network. Select the desired extension from the **Extension Number / Name** list.

This screen can be accessed only in On-line mode.

Name	Description	Value Range	Links
Network BLF Data to NDSS Key of Other PBX - Other PBX (Network PBX ID=1)	Selects whether extension status data is transmitted over the network for the selected extension. This setting is automatically set to <b>ON</b> when the feature is used, and can only be manually changed from <b>ON</b> to <b>OFF</b> , to cancel data transmission.	OFF, ON	PC Programming Manual References 17.4 PBX Configuration—[9-4] Private Network—NDSS Key Table Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)

### 12.2.5 PBX Configuration—[4-2-5] Extension—Portable Station —CLIP ID Table

Up to 8 CLIP IDs can be set for each wireless extension.

Name	Description	Value Range	Links
Extension Number	Indicates the extension number of the PS (reference only).	Max. 5 digits (consisting of 0–9)	
Extension Name	Indicates the name of the PS (reference only).	Max. 20 characters	
CLIP 1–8	Specifies up to 8 CLIP IDs for the PS.	Max. 16 digits (consisting of 0–9, *, and #)	

## 12.3 PBX Configuration—[4-3] Extension—DSS Console

A DSS Console can be used in conjunction with a PT connected to the same PBX. The **DPT Type—Type** of the extension port that DSS Console is connected must be set to **DSS** in the Port Property screen of the extension card that the DSS console is connected to. For details, see **To access port properties** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

#### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. Unless noted otherwise, the programming information is the same as described in the PC Programming Manual of the legacy gateway PBX. Refer to the corresponding **Extension—DSS Console** section in the PC Programming Manual of the legacy gateway PBX for more information.

To copy DSS Console setting values from one location to another, click the **Copy to** button. Once DSS console buttons have been programmed, the Terminal Label Print utility can be used to print label sheets, which can be attached to DSS consoles for quick reference. For details, see **1.2.2.1 Editing and Printing Terminal Labels in Off-line Mode**.

### Section 13

### PBX Configuration—[5] Optional Device

This section serves as reference operating instructions for the Optional Device menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

### 13.1 PBX Configuration—[5-1] Optional Device— Doorphone

The settings to establish doorphone calls can be programmed.

To assign destinations for doorphone calls easily, click **Destination Setting** (see **2.1.7 Extension Number Setting**).

The **Site**, **Shelf**, **Slot**, and **Port** for each item are displayed for your reference. For details, see **Common Programming Reference Items** in **9.1 PBX Configuration—[1-1] Configuration—Slot**.

Description	Value Range	Links
Indicates the number of the doorphone (reference only).	Doorphone number	Feature Manual References
		2.18.1 Doorphone Call
Specifies the doorphone name.	Max. 20 characters	Feature Manual References
		2.18.1 Doorphone Call
Specifies the destination number of doorphone calls	Max. 32 digits (consisting of 0–9, *, #,	PC Programming Manual References
for each port in each time mode.	[] [Secret], and P [Pause])	10.4 PBX Configuration— [2-4] System—Week Table
		Feature Manual References 2.18.1 Doorphone Call
	Indicates the number of the doorphone (reference only).  Specifies the doorphone name.  Specifies the destination number of doorphone calls for each port in each time	Indicates the number of the doorphone (reference only).  Specifies the doorphone name.  Max. 20 characters  Specifies the destination number of doorphone calls for each port in each time  Doorphone number  Max. 32 digits (consisting of 0–9, *, #, [] [Secret], and P

Name	Description	Value Range	Links
Tenant Number	Specifies the tenant number for the doorphone port in order to apply the Time Table (day/lunch/break/ night).	Note  The maximum number of time tables (1 per tenant) depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants (and therefore, time tables) is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References  10.4 PBX Configuration— [2-4] System—Week Table  Feature Manual References  2.18.1 Doorphone Call 5.1.3 Tenant Service
COS	Specifies the Class of Service (COS) number. COS programming determines the doorphone ports that are able to make trunk calls, and sets restrictions on intercom calls from certain extensions (Internal Call Block).	1–512	PC Programming Manual References  10.7.1 PBX Configuration —[2-7-1] System—Class of Service—COS Settings— TRS—TRS Level—Day, Lunch, Break, Night 10.7.3 PBX Configuration —[2-7-3] System—Class of Service—Internal Call Block Feature Manual References  2.1.2.2 Internal Call Block 2.18.1 Doorphone Call

Name	Description	Value Range	Links
Service Group Number	Specifies the Service Group number sent to the Unified Messaging system when the incoming call destination is the floating extension number of a UM group. The Service Group number is used to allow the Unified Messaging system to send the applicable greeting message to the caller.	None, 1–64	Feature Manual References 2.18.1 Doorphone Call 3.1.1 Unified Messaging System Overview
VM Trunk Group No.	Specifies the number of the VM trunk group sent to the VPS when the incoming call destination is the floating extension number of a VM (DPT) Group (connected to a KX-NCP/KX-TDE series PBX). The VM trunk group number is used to allow the VPS to send the applicable greeting message to the caller.	1–48	

### 13.2 PBX Configuration—[5-2] Optional Device— External Pager

Settings for the external pager (external speaker) can be specified.

Click **Extension List View** to view a list of all programmed extension numbers and types (see **6.5 Tool—Extension List View**).

Name	Description	Value Range	Links
ID	Indicates the Site ID corresponding to the site numbers of PBXs in the Onelook network (reference only).	1–16	
Floating Extension Number	Specifies the floating extension number of the external pager.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.17.1 Paging 2.17.2 Trunk Answer From Any Station (TAFAS) 2.28.1 Background Music (BGM)
Name	Specifies the name of the external pager.	Max. 20 characters	Feature Manual References 2.17.1 Paging 2.17.2 Trunk Answer From Any Station (TAFAS) 2.28.1 Background Music (BGM)

# 13.3 PBX Configuration—[5-3] Optional Device—Voice Message

## 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message—DISA System

Direct Inward System Access (DISA) enables outside callers to access specific PBX features as if the caller were using an SLT extension of the PBX.

For more information on DISA, see "2.16.1 Direct Inward System Access (DISA)" in the Feature Manual.

### **Option 1**

Name	Description	Value Range	Links
DISA Security— DISA Security Mode	Selects the DISA security mode to prevent unauthorised access to the PBX. In Trunk or All Security mode, the caller is required to override security by Walking COS or Verification Code Entry in order to enable the restricted feature temporarily.	None: Intercom calls, TIE line calls, and trunk calls can be made. Trunk: Intercom calls and TIE line calls without PBX code can be made. TIE line calls with PBX code and trunk calls are restricted. All: All calls are restricted.	Feature Manual References 2.7.5 Walking COS 2.7.6 Verification Code Entry
DISA Security— Remote Walking COS through DISA without PIN (Activation Key Required)	Enables registered caller ID numbers to be automatically recognised as PBX extensions when calling through DISA, and to use the Walking COS features without entering a PIN.	Disable, Enable (Get DISA)	
DISA Intercept— Intercept when destination through DISA sets DND	Selects how DISA calls are handled if the destination sets DND, and disables Idle Extension Hunting.	Busy Tone, Enable, Busy Message	
DISA Intercept— Intercept when all DISA ports are busy	Selects how DISA calls are handled if all DISA ports are currently in use.	to Operator, to AA-0, to AA-9, Disable (Busy Tone)	
DISA Intercept— Intercept when No Dial after DISA answers	Selects how DISA calls are handled if the caller does not select any option from the menu.	to Operator, to AA-0, to AA-9, Disable (Reorder Tone)	

Name	Description	Value Range	Links
CO-CO with DISA—DISA to Public CO	Specifies whether the DISA port is released when a trunk-to-public trunk call using DISA is established. To enable this setting, "CO-CO with DISA—Fwd/Transfer to Public CO" on this screen should be set to "Enable".  Setting this to "Disable" will free up DISA ports faster, but prevent DISA being used to detect the end of a call and disconnect the trunk quickly.	Disable (Release DISA): The DISA port is released when a trunk- to-public trunk call using DISA is established. Enable: DISA stays connected for the duration of the call, to allow detection of the end of the call.	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device— Voice Message—DISA System—Option 1— CO-CO with DISA— Fwd/Transfer to Public CO
CO-CO with DISA—DISA to Private Network	Specifies whether the DISA port is released when a trunk-to-private trunk call using DISA is established. To enable this setting, "CO-CO with DISA—Fwd/Transfer to Private Network" on this screen should be set to "Enable". Setting this to "Disable" will free up DISA ports faster, but prevent DISA being used to detect the end of a call and disconnect the trunk quickly.	Disable (Release DISA): The DISA port is released when a trunk- to-private trunk call using DISA is established. Enable: DISA stays connected for the duration of the call, to allow detection of the end of the call.	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device— Voice Message—DISA System—Option 1— CO-CO with DISA— Fwd/Transfer to Private Network
CO-CO with DISA—Fwd/ Transfer to Public CO	Enables trunk-to-public trunk calls to be established using DISA.	Disable: Trunk-to-public trunk calls are established without using DISA. Enable (Get DISA): Trunk-to-public trunk calls are established using DISA, and DISA can be used to detect the end of the call.	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device— Voice Message—DISA System—Option 1— CO-CO with DISA— Fwd/Transfer to Public CO
CO-CO with DISA—Fwd/ Transfer to Private Network	Enables trunk-to-private trunk calls to be established using DISA.	Disable: Trunk-to-private trunk calls are established without using DISA. Enable (Get DISA): Trunk-to-private trunk calls are established using DISA, and DISA can be used to detect the end of the call.	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device— Voice Message—DISA System—Option 1— CO-CO with DISA— Fwd/Transfer to Private Network

Name	Description	Value Range	Links
CO-CO with DISA—Transfer by DTMF "#" (Activation Key Required)	Specifies whether an outside party such as a cellular phone can transfer a trunk call to an extension within the PBX by dialling "#" + extension number.	Disable: "#" is ignored if dialled. Enable (as "Flash"): The current trunk call will be placed on hold, then transferred to the extension whose number is entered.	
CO-CO with DISA—Return to DISA Top Menu by DTMF "*"	Enables a trunk caller to return to the DISA top menu by pressing "*" while hearing a ringback, reorder, or busy tone. If disabled, retrying the call is possible by pressing "*".	Disable, Enable	

### **Option 2**

Name	Description	Value Range	Links
Timed Reminder Message—Day,	Specifies the pre-recorded message to play when a	None, 1– 64	PC Programming Manual References
Lunch, Break, Night	Timed Reminder call is answered in each time mode.		13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message— DISA Message
			Feature Manual References 2.24.4 Timed Reminder

## 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message

Outgoing messages (OGM) for DISA calls can be specified. A maximum of 64 OGMs can be programmed. To view a list of all programmed extension numbers and types, click **Extension List View** (see **6.5 Tool—Extension List View**). To assign AA destinations easily, click **Destination Setting** (see **2.1.7 Extension Number Setting**).

Name	Description	Value Range	Links
Floating Extension Number	Specifies the floating extension number of the OGM.	Max. 5 digits (consisting of 0– 9)	Feature Manual References 2.28.2 Outgoing Message (OGM) 2.16.1 Direct Inward System Access (DISA) 5.5.8 Floating Extension
Name	Specifies the name of the OGM.	Max. 20 characters	Feature Manual References 2.28.2 Outgoing Message (OGM) 2.16.1 Direct Inward System Access (DISA)

Name	Description	Value Range	Links
1 Digit AA Destination (Extension Number)—Dial 0–9	Specifies the destination for each DISA Automated Attendant (AA) number. After listening to an OGM, the caller can be directed to the destination by dialling a 1-digit DISA AA number.	Max. 5 digits (consisting of 0– 9, *, and #)	Feature Manual References 2.28.2 Outgoing Message (OGM) 2.16.1 Direct Inward System Access (DISA)
Busy / DND Message No.	Selects the OGM to be played for the caller when the destination party is busy or sets DND.	None, 1–64	PC Programming Manual References 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message —DISA System Feature Manual References 2.16.1 Direct Inward System
			Access (DISA)
Fax Extension	Specifies the extension number to which to transfer a call when a fax signal is detected.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.16.2 Automatic Fax Transfer

### 13.4 PBX Configuration—[5-4] Optional Device— External Relay

Settings related to external relays can be programmed.

Before programming these settings, For Output - Device Type must be set to "Relay" in the DOORPHONE card's property settings. ( $\rightarrow$  9.30 PBX Configuration—[1-1] Configuration—Slot—DOORPHONE Card—Card Property)

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
External Relay No.	Indicates the number of the external relay (reference only).	1–80	Feature Manual References 2.18.4 External Relay Control
Name	Specifies the relay name.	Max. 20 characters	Feature Manual References 2.18.4 External Relay Control
Relay Activate Time	Specifies the length of time that the relay stays on when activated.	1–7 s	Feature Manual References 2.18.4 External Relay Control
COS Number	Specifies the Class of Service (COS) number. COS programming determines the extensions that are able to activate relays.	1–512	PC Programming Manual References  10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Optional Device & Other Extensions—External Relay Access
			Feature Manual References 2.1.2.2 Internal Call Block 2.18.4 External Relay Control

# 13.5 PBX Configuration—[5-5] Optional Device—External Sensor

Settings related to external sensors can be programmed.

To assign destinations for sensor calls easily, click **Destination Setting** (see **2.1.7 Extension Number Setting**).

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
External Sensor No.	Indicates the number of the external sensor (reference only).	1–80	Feature Manual References 2.18.3 External Sensor
Name	Specifies the sensor name.	Max. 20 characters	Feature Manual References 2.18.3 External Sensor
Destination— Day, Lunch, Break, Night	Specifies the destination number of sensor calls for each port in each time mode.	Max. 32 digits (consisting of 0–9, *, #, [ ] [Secret], and P [Pause])	Feature Manual References 2.18.3 External Sensor
Tenant No.	Specifies the tenant to which the sensor belongs, to determine the Time Table for the sensor. (The tenant number corresponds to the Time Table number.)	Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References  10.4 PBX Configuration— [2-4] System—Week Table  Feature Manual References  2.18.3 External Sensor 5.1.3 Tenant Service
Sensor Alarm —Email notification	Enables e-mail notification when the sensor detects an alarm.	Enable, Disable	Feature Manual References 2.18.3 External Sensor 5.1.3 Tenant Service
Sensor Alarm —Email Address	Specifies the e-mail address that will receive a notification when the sensor detects an alarm.	Max.128 characters	Feature Manual References 2.18.3 External Sensor 5.1.3 Tenant Service

### 13.5 PBX Configuration—[5-5] Optional Device—External Sensor

Name	Description	Value Range	Links
Sensor Alarm —Email Comment	Specifies comments in the e-mail received when the sensor detects an alarm.	Max. 256 characters	Feature Manual References 2.18.3 External Sensor 5.1.3 Tenant Service

# Section 14 PBX Configuration—[6] Feature

This section serves as reference operating instructions for the Feature menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

# 14.1 PBX Configuration—[6-1] Feature—System Speed Dial

The System Speed Dialling Table is used to store frequently dialled numbers as well as callers who should be automatically routed to certain extensions when they call (Calling Line Identification [CLI] distribution). The System Speed Dialling Table is available for all extension users when making or receiving a call. In Basic Memory, a maximum of 1000 System Speed Dialling numbers (e.g., telephone numbers, feature numbers) can be programmed with other related parameters. 100 numbers are displayed at a time. To display other sets of numbers, click the applicable tab.

Nam e	Description	Value Range	Links
Memory	Selects the System Speed Dialling Table to be programmed. Whether a tenant uses the basic System Speed Dialling Table or the additional table depends on the setting of System Speed Dial in 14.6 PBX Configuration —[6-6] Feature— Tenant.	Basic Memory: the standard table Expansion for Tenant 1–32 or 1–128: additional tables  Note  If "Expansion for Tenant" is selected, and the PBX has been setup using the System Resource Type configuration, a maximum of 300 System Speed Dialling numbers can be saved for each tenant. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.  The maximum number of time tables (1 per tenant) depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants (and therefore, time tables) is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References 14.6 PBX Configuration—[6-6] Feature—Tenant— System Speed Dial Feature Manual References 2.6.4 Speed Dialling —Personal/System 2.19.1 Caller ID 5.1.3 Tenant Service
Nam e	Specifies a name for the System Speed Dialling number.	Max. 20 characters	Feature Manual References 2.6.4 Speed Dialling —Personal/System 2.19.1 Caller ID
CO Line Acce ss Num ber + Telep hone Num ber	Specifies the telephone number (including the Trunk Access number) or feature number assigned to the System Speed Dialling number.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], [ ] [Secret], P [Pause], and F [Flash])	Feature Manual References 2.6.4 Speed Dialling —Personal/System 2.19.1 Caller ID

Nam e	Description	Value Range	Links
CLI Desti natio n	Specifies the CLI destination (extension) to which incoming calls from the programmed telephone number are routed. If a Caller ID Modification Table is being used, the modified number must match the telephone number above (CO Line Access Number + Telephone Number) in order for the call to be routed correctly.	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  18.2 PBX Configuration—[10-2] CO & Incoming Call— DIL Table & Port Settings—CLI for DIL —CLI Ring for DIL— Day, Lunch, Break, Night  18.3 PBX Configuration—[10-3] CO & Incoming Call— DDI / DID Table—CLI Ring for DDI/DID— Day, Lunch, Break, Night
			Feature Manual References
			2.1.1.5 Calling Line Identification (CLI) Distribution 2.19.1 Caller ID

# 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge

Various settings related to the hospitality features of the PBX can be set.

### Main

Name	Description	Value Range	Links
Hotel Operator— Extension 1–4	Specifies the numbers of the extensions designated as hotel operators.	Max. 5 digits (consisting of 0–9)	Feature Manual References 2.23.1 Hospitality Features— SUMMARY 2.23.2 Room Status Control
SMDR for External Hotel Application 1 —Room Status Control	Selects whether check-in and check-out data is output on SMDR.	No Print, Print	PC Programming Manual References 19.1 PBX Configuration—[11-1] Maintenance—Main  Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR) 2.23.2 Room Status Control
SMDR for External Hotel Application 1 —Timed Reminder (Wake-up Call)	Selects whether Timed Reminder data is output on SMDR.	No Print, Print	PC Programming Manual References 19.1 PBX Configuration—[11-1] Maintenance—Main Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR) 2.24.4 Timed Reminder
SMDR for External Hotel Application 2 —Printing Message 1–8	Specifies the text of the message output on SMDR when this Printing Message is selected from an extension.  The "%" character can be used in a message, and requires a number to be entered in its place when the message is selected from an extension. This character can be used a maximum of seven times in a Printing Message.	Max. 16 characters	PC Programming Manual References  11.1.4 PBX Configuration—[3-1-4] Group—Trunk Group—Dialling Plan—Charge 19.1 PBX Configuration—[11-1] Maintenance—Main  Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR) 2.22.2 Printing Message 2.23.3 Call Billing for Guest Room
Timed Reminder Message for SIP- MLT / Standard SIP Phone— Message	Specifies the message displayed on a SIP-MLT or Standard SIP Phone LCD screen for the Timed Reminder feature.	Max. 20 characters	Feature Manual References 2.24.4 Timed Reminder

### Bill

Name	Description	Value Range	Links
Checkout Billing— Billing for Guest	Activates call billing features for the PBX.	OFF, ON	PC Programming Manual References 9.5 PBX Configuration—[1-1] Configuration—Slot—Site Property
			Feature Manual References 2.23.3 Call Billing for Guest Room
Checkout Billing— LCD for "Telephone"	Specifies the name of charge item 1 as shown on the display of the hotel operator extension when entering room charges.	Max. 12 characters	Feature Manual References 2.23.3 Call Billing for Guest Room
Checkout Billing— LCD for "Minibar"	Specifies the name of charge item 2 as shown on the display of the hotel operator extension when entering room charges.	Max. 12 characters	Feature Manual References 2.23.3 Call Billing for Guest Room
Checkout Billing— LCD for "Others"	Specifies the name of charge item 3 as shown on the display of the hotel operator extension when entering room charges.	Max. 12 characters	Feature Manual References 2.23.3 Call Billing for Guest Room
Checkout Billing— Bill (SMDR) for "Telephone"	Specifies the name of charge item 1 as printed on the guest bill.	Max. 12 characters	Feature Manual References 2.23.3 Call Billing for Guest Room
Checkout Billing— Bill (SMDR) for "Minibar"	Specifies the name of charge item 2 as printed on the guest bill.	Max. 12 characters	Feature Manual References 2.23.3 Call Billing for Guest Room
Checkout Billing— Bill (SMDR) for "Others"	Specifies the name of charge item 3 as printed on the guest bill.	Max. 12 characters	Feature Manual References 2.23.3 Call Billing for Guest Room
SMDR for External Hotel Application— Language for Bill (SMDR)	Specifies the language used for standard items shown on guest bills printed out using the Call Billing feature.	Language 1– Language 5	Feature Manual References 2.23.3 Call Billing for Guest Room
SMDR for External Hotel Application— Header 1–3	Specifies the text printed at the top of the guest bill.	Max. 80 characters	Feature Manual References 2.23.3 Call Billing for Guest Room

Name	Description	Value Range	Links
SMDR for External Hotel Application— Footer 1–3	Specifies the text printed at the bottom of the guest bill.	Max. 80 characters	Feature Manual References 2.23.3 Call Billing for Guest Room

### Charge

Name	Description	Value Range	Links
Margin & Tax— Margin Rate for "Telephone" (%)	Specifies the percentage margin to be added to telephone charges displayed on the guest bill.	0.00–99.99 %	Feature Manual References 2.22.3 Call Charge Services 2.23.3 Call Billing for Guest Room
Margin & Tax— Tax Rate for "Telephone" (%)	Specifies the percentage tax rate to be used when calculating guest telephone charges.	0.00–99.99 %	Feature Manual References 2.23.3 Call Billing for Guest Room
Margin & Tax— Tax Rate for "Minibar" (%)	Specifies the percentage tax rate to be used when calculating guest charges for charge item 2.	0.00–99.99 %	Feature Manual References 2.23.3 Call Billing for Guest Room
Margin & Tax— Tax Rate for "Others" (%)	Specifies the percentage tax rate to be used when calculating guest charges for charge item 3.	0.00–99.99 %	Feature Manual References 2.23.3 Call Billing for Guest Room
Charge Options —Digits After Decimal Point	Specifies the number of digits to display after the decimal point for the currency in use.	0–6	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Charge Limit 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Charge Limit 14.3 PBX Configuration—[6-3] Feature —Verification Code—Budget Management  Feature Manual References 2.21.4 Display Information 2.22.3 Call Charge Services 2.23.3 Call Billing for Guest Room

Name	Description	Value Range	Links
Charge Options —Currency	Specifies the currency characters shown on the display of the extension and the SMDR.	Max. 3 characters	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Charge Limit 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Charge Limit 14.3 PBX Configuration—[6-3] Feature —Verification Code—Budget Management  Feature Manual References 2.21.4 Display Information 2.22.1.1 Station Message Detail Recording (SMDR) 2.22.3 Call Charge Services
Charge Options —Currency Display Position	Specifies whether the currency characters are displayed before or after the call charge.	Head, Tail	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Charge Limit 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Charge Limit 14.3 PBX Configuration—[6-3] Feature —Verification Code—Budget Management  Feature Manual References 2.22.3 Call Charge Services
Charge Options —Action at Charge Limit	Selects what happens when the amount of the call charge reaches the preprogrammed limit during a conversation.	Alarm: Only a warning tone is heard. Alarm + Disconnect: A warning tone is heard, and then the call is disconnected.	PC Programming Manual References  12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Charge Limit 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Charge Limit Feature Manual References 2.7.2 Budget Management

Name	Description	Value Range	Links
Charge Options —Meter Start on	Enables the PBX to start counting the call	Disable, Enable	PC Programming Manual References
Answer Detection	charge when the answer signal from the telephone company is detected.		12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Charge Limit 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Charge Limit
			Feature Manual References
			2.22.3 Call Charge Services

# 14.3 PBX Configuration—[6-3] Feature—Verification Code

A verification code is used to override the Toll Restriction (TRS)/Call Barring (Barring) of the extension in use to make a certain trunk call, or to identify the call for accounting and billing purposes. A maximum of 1000 verification codes can be programmed with other related parameters. 100 codes are displayed at a time. To display other sets of codes, click the applicable tab.

Name	Description	Value Range	Links
Verification Code	Specifies the verification code.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.7.6 Verification Code Entry
User Name	Specifies the user name assigned to the verification code.	Max. 20 characters	Feature Manual References 2.7.6 Verification Code Entry
Verification Code PIN	PIN making a trunk call with the verification code. (c		Feature Manual References 2.7.6 Verification Code Entry
	CAUTION  There is a risk that fraudulent telephone calls will be made if a third party discovers a personal identification number (PIN) (verification code PIN or extension PIN) of the PBX. The cost of such calls will be billed to the owner/renter of the PBX. To protect the PBX from this kind of fraudulent use, we strongly recommend:		
	<ul><li>a. Keeping PINs secret.</li><li>b. Selecting complex, random PINs that cannot be easily guessed.</li></ul>		
	c. Changing PINs frequently.		

Name	Description	Value Range	Links
COS Number	Specifies the COS that applies when making a trunk call with the verification code.	1–512	PC Programming Manual References 10.7.1 PBX Configuration —[2-7-1] System—Class of Service—COS Settings
			Feature Manual References 2.7.6 Verification Code Entry 5.1.1 Class of Service (COS)
Itemised Billing Code for ARS	Specifies the itemised billing code used by the ARS feature for identifying calls made with a verification code for accounting and billing purposes.	Max. 10 digits (consisting of 0–9, *, and #)	PC Programming Manual References  16.5 PBX Configuration— [8-5] ARS—Carrier
			Feature Manual References 2.8.1 Automatic Route Selection (ARS)
Budget Management	Specifies the limit of the call charge that will be counted on the verification code. The number of decimal places that can be specified here depends on the value set in Charge Options—Digits After Decimal Point in 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge.	0-9999999	Feature Manual References 2.7.2 Budget Management

# 14.4 PBX Configuration—[6-4] Feature—Second Dial Tone

A programmed Pause time can be inserted automatically between the Second Dial Tone Waiting code and the following digits. When a programmed Second Dial Tone Waiting code is dialled after seizing a trunk, a pre-programmed number of pauses are inserted after the code.

A maximum of 100 Second Dial Tone Waiting codes can be programmed. 20 codes are displayed at a time. To display other sets of codes, click the applicable tab.

Name	Description	Value Range	Links
Second Dial Tone Waiting Code	Specifies the Second Dial Tone Waiting code.	Max. 4 digits (consisting of 0–9, *, and #)	Feature Manual References 2.5.4.7 Pause Insertion
Pause Repeating Counter	Specifies the number of pauses to be inserted when waiting for the second dial tone.	0–20	Feature Manual References 2.5.4.7 Pause Insertion

# 14.5 PBX Configuration—[6-5] Feature—Absent Message

When a display PT user calls an extension, a message is shown on the caller's telephone display describing the reason for absence. A maximum of 8 Absent Messages can be programmed, and any extension user can select one of them.

#### Note

When using this feature in conjunction with the Unified Messaging (UM) system, changing a message here will create a difference between the displayed message and the UM's pre-recorded greeting that corresponds to the absent message. To use both features in synchronisation, you must record a corresponding greeting for each absent message changed. For details about changing UM system prompts, see 7.9 Utility—UM – System Prompts Customisation.

Name	Description	Value Range	Links
Absent Message		Max. 16 characters	Feature Manual References
	display.		2.20.2 Absent Message

### 14.6 PBX Configuration—[6-6] Feature—Tenant

A maximum of 32 or 128<sup>-1</sup> tenants can share the PBX. Each tenant is composed of specified extension user groups. The PBX offers each tenant its own Time Table and system resources. To assign extensions as operators easily, click **Extension No. Setting** (see **2.1.7 Extension Number** 

To assign extensions as operators easily, click **Extension No. Setting** (see **2.1.7 Extension Number Setting**).

The maximum number of tenants depends on the **System Capacity Selection**setting made when the Easy Setup Wizard was run for the PBX. If the **System Resource Type** was selected, the maximum number of tenants is 128. If the **Standard Type** or **IP-Extension Type** was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.

Name	Description	Value Range	Links
Music On Hold	Specifies the audio source to be used for Music on Hold.	Same as System Setting, BGM1, BGM2, BGM3, BGM4, BGM5, BGM6, BGM7, BGM8, Tone	PC Programming Manual References 10.2 PBX Configuration— [2-2] System—Operator & BGM
			Feature Manual References 2.13.4 Music on Hold 5.1.3 Tenant Service
Operator (Extension Number)	Specifies the extension number or the floating extension number of an incoming call distribution group to be designated as the	Max. 5 digits (consisting of 0–9)	PC Programming Manual References 10.2 PBX Configuration— [2-2] System—Operator & BGM
	tenant operator. When this parameter is left unspecified, the PBX operator serves as the tenant operator.		Feature Manual References 5.1.3 Tenant Service 5.1.5 Operator Features
ARS Mode	Specifies the ARS mode used when making a trunk call.	Off: ARS is disabled. On for Local Access Operation: ARS operates when an extension user makes a call using any Idle Line Access method. On for Any CO Access Operation: ARS operates when an extension user makes a call using any Trunk Access method. Same as System Setting: The setting specified in ARS Mode in 16.1 PBX Configuration—[8-1] ARS—System Setting is applied.	PC Programming Manual References  16.1 PBX Configuration— [8-1] ARS—System Setting Feature Manual References  2.8.1 Automatic Route Selection (ARS) 5.1.3 Tenant Service

Name	Description	Value Range	Links
System Speed Dial	Specifies which system speed dialling table is used by the tenant.	Same as System Setting: PBX common system speed dialling numbers are used. Tenant Exclusive: Individual tenant system speed dialling numbers are used.	PC Programming Manual References 14.1 PBX Configuration— [6-1] Feature—System Speed Dial Feature Manual References 2.6.4 Speed Dialling— Personal/System 5.1.3 Tenant Service
Time Service Mode	Specifies which PBX's clock in a One-look network is used as reference for the tenant's Time Service functions and for ICD Group functions.	Normal: Use the clock of the PBX to which the device or trunk for a service (e.g., incoming call features) is connected.  1–16: Use the clock of the PBX in the One-look network with the selected Site ID.	Feature Manual References 5.1.3 Tenant Service 5.1.4 Time Service
Extension Directory	Specifies whether the display for the Speed Dialling numbers is for the entire system, or only for the extensions of the tenant group that the extension belongs to.	System: All system Speed Dialling numbers are displayed. Tenant: Only the extensions of the tenant group that the extension belongs to are displayed.	Feature Manual References 2.6.4 Speed Dialling— Personal/System 5.1.3 Tenant Service

# Section 15 PBX Configuration—[7] TRS

This section serves as reference operating instructions for the TRS menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

### 15.1 PBX Configuration—[7-1] TRS—Denied Code

Toll Restriction (TRS)/Call Barring (Barring) prohibits an extension from making certain trunk calls. Each time mode of every COS is assigned one of the seven TRS/Barring levels. TRS/Barring level 7 provides the maximum restriction (all trunk calls are prohibited) and level 1 provides the minimum (all trunk calls are allowed). TRS/Barring levels 2–6 are used to restrict calls according to the combination of denied codes here and excepted codes in **15.2 PBX Configuration—[7-2] TRS—Exception Code**. If the leading digits of the dialled number are not found in the applicable Denied Code tables, the call is made. A maximum of 100 denied codes can be programmed for each level. 20 codes are displayed at a time. To display other sets of codes, click the applicable tab.

Name	Description	Value Range	Links
Level 2– Level 6	Specifies the leading digits of toll restricted numbers for each level.	Max. 16 digits (consisting of 0–9, *, #, and X)	PC Programming Manual References 10.7.1 PBX Configuration—[2-7-1] System— Class of Service—COS Settings—TRS—TRS Level—Day, Lunch, Break, Night 15.2 PBX Configuration—[7-2] TRS—Exception Code
			Feature Manual References 2.7.1 Toll Restriction (TRS)/Call Barring (Barring)

## 15.2 PBX Configuration—[7-2] TRS—Exception Code

Toll Restriction (TRS)/Call Barring (Barring) prohibits an extension from making certain trunk calls. Each time mode of every COS is assigned one of the seven TRS/Barring levels. TRS/Barring level 7 provides the maximum restriction (all trunk calls are prohibited) and level 1 provides the minimum (all trunk calls are allowed). TRS/Barring levels 2–6 are used to restrict calls according to the combination of denied codes in 15.1 PBX Configuration—[7-1] TRS—Denied Code and excepted codes here. A call denied by the applicable Denied Code tables is checked against the applicable Exception Code tables, and if a match is found, the call is made.

A maximum of 100 exception codes can be programmed for each level. 20 codes are displayed at a time. To display other sets of codes, click the applicable tab.

Name	Description	Value Range	Links
Level 2– Level 6	Specifies the leading digits of the numbers to be exempted from toll restriction/call barring for each level.	Max. 16 digits (consisting of 0–9, *, #, and X)	PC Programming Manual References 10.7.1 PBX Configuration—[2-7-1] System— Class of Service—COS Settings—TRS—TRS Level—Day, Lunch, Break, Night 15.1 PBX Configuration—[7-1] TRS—Denied Code
			Feature Manual References 2.7.1 Toll Restriction (TRS)/Call Barring (Barring)

## 15.3 PBX Configuration—[7-3] TRS—Special Carrier

If the PBX has access to multiple telephone companies, a Special Carrier Access Code is required each time a trunk call is made. By programming these Special Carrier Access Codes here, Toll Restriction (TRS)/ Call Barring (Barring) can restrict or allow calls to be made by ignoring the codes and looking at the telephone number only. If a Special Carrier Access Code is found in the dialled number, TRS/Barring will look only at the following digits.

A maximum of 100 Special Carrier Access Codes can be programmed.

Name	Description	Value Range	Links
Special Carrier Access Code	Specifies a Special Carrier Access Code. Special Carrier Access Codes and Host PBX Access codes should be unique.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 2.5.4.9 Special Carrier Access Code 2.7.1 Toll Restriction (TRS)/Call Barring (Barring)

### 15.4 PBX Configuration—[7-4] TRS—Emergency Dial

Any extension user can dial the programmed emergency numbers at any time after seizing a trunk. The restrictions imposed on the extension, such as Toll Restriction (TRS)/Call Barring (Barring), Account Code—Forced mode, and Extension Dial Lock are disregarded.

A maximum of 10 emergency numbers can be programmed.

Name	Description	Value Range	Links
Emergency Number	Specifies the numbers used for making emergency calls. It is not necessary to start the emergency number with a Trunk Access number.	Max. 32 digits (consisting of 0–9, *, #, T [Transfer], P [Pause], and F [Flash])	Feature Manual References 2.5.4.2 Emergency Call

### 15.5 PBX Configuration—[7-5] TRS—Miscellaneous

Toll Restriction (TRS)/Call Barring (Barring) prohibits an extension from making certain trunk calls. The following optional settings can be programmed to activate a TRS/Barring check, override TRS/Barring, or switch between TRS/Barring methods.

Name	Description	Value Range	Links
TRS Override by System Speed Dialling	Enables an outgoing trunk call to override TRS/Barring when the call is made using System Speed Dialling.	Disable, Enable	PC Programming Manual References  14.1 PBX Configuration—  [6-1] Feature—System  Speed Dial
			Feature Manual References
			2.7.1 Toll Restriction (TRS)/ Call Barring (Barring)
TRS Check for Dial " * # "	Enables a TRS/Barring check for the user-dialled "*" and "#". This is useful in preventing unauthorised calls which could possibly be made through certain telephone company exchanges.	No Check, Check	Feature Manual References 2.7.1 Toll Restriction (TRS)/ Call Barring (Barring)
Mode when Dial Time-out before TRS Check	Selects whether a trunk is disconnected if the TRS/ Barring check has not been completed when the trunk Inter-digit timer expires.	Disconnect: The trunk is disconnected as soon as the timer expires. Keep: The TRS/Barring check is performed when the timer expires.	PC Programming Manual References 10.3 PBX Configuration— [2-3] System—Timers & Counters Feature Manual
			References 2.7.1 Toll Restriction (TRS)/ Call Barring (Barring)
Dial Digits Limitation After Answering— Dial Digits	Specifies a limit to be placed on the number of digits which can be dialled after an extension user receives a trunk call. If the number of dialled digits exceeds the programmed limit, the line will be disconnected.	None, 1–7	Feature Manual References 2.7.1 Toll Restriction (TRS)/ Call Barring (Barring) 2.11.8 Trunk Call Limitation
TRS Check after EFA	Enables TRS/Barring to check the digits dialled after External Feature Access (EFA) during a trunk call.	Disable, Enable	Feature Manual References 2.7.1 Toll Restriction (TRS)/ Call Barring (Barring) 2.11.7 External Feature Access (EFA)

Name	Description	Value Range	Links
TRS Table Mode for Level N (N=2_6)	Selects the method of TRS/Barring to be used for restricting calls. The level of TRS/Barring is determined by the telephone codes set in the Denied Code Tables and Exception Code Tables.	Deny Table 2_N + Except Table N_6: The Denied Code Tables for the higher levels are applied to all levels below it, and the Exception Code Tables for the lower levels are applied to all levels above it. Deny Table N + Except Table N: Each level has its own separate set of denied codes and exception codes, which are only applied to that level.	Feature Manual References 2.7.1 Toll Restriction (TRS)/ Call Barring (Barring)

# Section 16 PBX Configuration—[8] ARS

This section serves as reference operating instructions for the ARS menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

## 16.1 PBX Configuration—[8-1] ARS—System Setting

Automatic Route Selection (ARS) automatically selects the appropriate carrier at the time a trunk call is made, according to the programmed settings. The user-dialled number will be checked and modified in order to connect it to the appropriate carrier.

Name	Description	Value Range	Links
ARS Mode	Selects the condition to determine when to operate ARS.	Off: ARS is disabled. On for Local Access Operation: ARS operates when an extension user makes a call using Idle Line Access method. On for Any CO Access Operation: ARS operates when an extension user makes a call using Idle Line Access, Trunk Access, or S-CO Line Access method.	Feature Manual References 2.5.5.3 Trunk Access 2.8.1 Automatic Route Selection (ARS)
Mode When Any Carrier is not programmed for the Dial	Selects what happens when the dialled number is not found in Leading Number in 16.2 PBX Configuration—[8-2] ARS—Leading Number.	Disconnect: the line will be disconnected. Local Access: the dialled number will be handled by Idle Line Access method.	Feature Manual References 2.8.1 Automatic Route Selection (ARS)

### 16.2 PBX Configuration—[8-2] ARS—Leading Number

Specifies the area codes and/or telephone numbers as leading numbers that will be routed by the ARS feature. A maximum of 1000 different leading numbers can be programmed, and each leading number can select a Routing Plan Table number, which determines the ARS procedure.

The additional (remaining) number of digits can also be specified for each leading number. The additional (remaining) number of digits must be specified only when "#", for example, is needed after the dialled number. The "#" will be added after the programmed number of digits of the user-dialled number (excluding the leading number).

100 leading numbers are displayed at a time. To display other sets of leading numbers, click the applicable tab.

Name	Description	Value Range	Links
Leading Number	Specifies the leading number.	Max. 16 digits (consisting of 0–9, *,	Feature Manual References
		#, and X)	2.8.1 Automatic Route Selection (ARS)
Additional Number of	Specifies the additional (remaining) number of digits	0–15	Feature Manual References
Digits	following each leading number.	2.8.1 Automatic Route Selection (ARS)	
Routing Plan Number	Specifies the Routing Plan Table number used for each	1–48	Feature Manual References
	leading number.		2.8.1 Automatic Route Selection (ARS)

### 16.3 PBX Configuration—[8-3] ARS—Routing Plan Time

The start and end times of a maximum of 4 different time blocks are shown for each day of the week. There are 48 Routing Plan Tables, and each Routing Plan Table can have its own time blocks. Select the desired Routing Plan Table number from the **Routing Plan** list.

- To adjust the currently displayed Routing Plan, click and drag the divisions between two time periods.
- To programme the time blocks of the currently displayed Routing Plan, including adding or deleting time blocks, click Time Setting.

#### 16.3.1 PBX Configuration—[8-3] ARS—Routing Plan Time— Time Setting

The start times of a maximum of 4 different time blocks can be programmed for each day of the week, for the selected Routing Plan. Each time block automatically ends when the subsequent block begins.

Name	Description	Value Range	Links
Time-A–D— Setting	Enables the setting of the start time for each time block.	Disable, Enable	Feature Manual References
			2.8.1 Automatic Route Selection (ARS)
Time-A-D— Hour, Minute	Note Time-A must be the earliest block in the day, and the following blocks must be set in chronological order.  Correct programming example: Time-A: 8:00 Time-B: 17:00 Time-C: 21:00  Incorrect programming example: Time-A: 8:00 Time-B: 13:00 Time-B: 13:00 Time-C: 11:30 Time-D: 17:00	00:00– 23:59	Feature Manual References 2.8.1 Automatic Route Selection (ARS)

## 16.4 PBX Configuration—[8-4] ARS—Routing Plan Priority

The carrier priority (1 through 6) in a Routing Plan Table can be programmed for each time zone of each day of the week. Select the desired Routing Plan Table number from the **Routing Plan** list. Select the desired day of the week by clicking the applicable tab.

Name	Description	Value Range	Links
Time-A-Time- D	Specifies the carrier to be given priority for each time zone.	None, 1–128	Feature Manual References 2.8.1 Automatic Route Selection (ARS)

#### 16.5 PBX Configuration—[8-5] ARS—Carrier

#### **Carrier**

It is possible to specify how user-dialled numbers are modified for connecting to the appropriate carrier. A maximum of 128 different carriers can be programmed to be used with the ARS feature.

Name	Description	Value Range	Links
Carrier Name	Specifies the carrier name.	Max. 20 characters	Feature Manual References 2.8.1 Automatic Route Selection (ARS)
Removed Number of Digits	Specifies the number of leading digits to remove from the user-dialled number.	0–15	Feature Manual References 2.8.1 Automatic Route Selection (ARS)
Modify Command	Specifies the commands to modify the user-dialled number to access the carrier. For details of each command, see the Feature Manual.	Max. 16 characters (consisting of 0–9, *, #, C, P, A, G, I and H)	Feature Manual References 2.8.1 Automatic Route Selection (ARS)
CLIP Table No.	Sets the CLIP numbers established for each extension (wired/wireless) of a carrier. The CLIP IDs for each CLIP number are set in 12.1.7 PBX Configuration—[4-1-7] Extension— Wired Extension—CLIP ID Table and 12.2.5 PBX Configuration—[4-2-5] Extension—Portable Station—CLIP ID Table.	1–8	Feature Manual References 2.8.1 Automatic Route Selection (ARS)
Carrier Access Code	Specifies the carrier access code. The carrier access code can be added to the user-dialled number by specifying "C" in <b>Modify Command</b> on this screen.	Max. 32 digits (consisting of 0–9, *, #, and P [Pause])	Feature Manual References 2.8.1 Automatic Route Selection (ARS)

#### **TRG Priority**

Selects the order in which trunk groups are seized when making calls via each carrier.

Name	Description	Value Range	Links
Trunk Group— Priority 1–Priority 4	Specifies which trunk group is seized in the order of priority 1 to priority 4.	None, 1–96	Feature Manual References 2.8.1 Automatic Route Selection (ARS)

#### **TRG 01-TRG 96**

Selects the trunk groups that connect to the carrier.

Name	Description	Value Range	Links
TRG 01- TRG 96	Enables each trunk group for each carrier. If a cell is highlighted in blue, that trunk group is enabled for use with that carrier.	OFF (white), ON (blue)	Feature Manual References 2.8.1 Automatic Route Selection (ARS)

#### **Authorisation Code for Tenant**

Specifies an Authorisation code for each tenant. The Authorisation codes can be added to the user-dialled number by specifying "A" command in **Modify Command** on the **Carrier** tab.

Name	Description	Value Range	Links
Authorisation Code for Tenant —Tenant 1– Tenant 32/Tenant 128	Specifies the Authorisation code of each carrier for each tenant.  Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 2.8.1 Automatic Route Selection (ARS) 5.1.3 Tenant Service

## 16.6 PBX Configuration—[8-6] ARS—Leading Number Exception

Specifies telephone numbers that will not be connected using the ARS feature. When the user-dialled number includes a leading number exception, the PBX sends the number to a trunk by the Idle Line Access method if ARS Mode in 16.1 PBX Configuration—[8-1] ARS—System Setting is "on".

A maximum of 200 different leading number exceptions can be programmed. 20 leading number exception entries are displayed on the screen at a time. To display other sets, click the applicable tab.

Name	Description	Value Range	Links
Leading Number	Specifies the leading number exception.	Max. 16 digits (consisting of 0–9, *, #, and X)	Feature Manual References
Exception			2.8.1 Automatic Route Selection (ARS)

### 16.7 PBX Configuration—[8-7] ARS—Authorisation Code for TRG

An Authorisation code can be specified for each trunk group. The Authorisation codes entered here can be added to user-dialled numbers by adding "G" to the **Modify Command** specified on the **Carrier** tab of screen **16.5 PBX Configuration—[8-5] ARS—Carrier**.

8 trunk groups are displayed on the screen at a time. To display other groups, click the applicable tab.

Name	Description	Value Range	Links
TRG—TRG 01–TRG 96	Specifies the Authorisation code of each carrier for each trunk group.	Max. 10 digits (consisting of 0–9, *, and #)	PC Programming Manual References  16.5 PBX Configuration—[8-5] ARS— Carrier—Carrier—Modify Command
			Feature Manual References 2.8.1 Automatic Route Selection (ARS)

#### Section 17

#### PBX Configuration—[9] Private Network

This section serves as reference operating instructions for the Private Network menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

### 17.1 PBX Configuration—[9-1] Private Network—TIE Table

A TIE line is a privately leased communication line between two or more PBXs, which provides cost effective communications between company members at different locations.

A maximum of 32 TIE Line Routing and Modification Tables can be programmed. It is necessary to make unified tables with all PBXs at different locations in a TIE line network in order to identify the trunk route to be used when an extension makes or receives a TIE line call.

There are two types of routing methods: the Extension Number Method, where all extensions in the network are given a unique extension number; and the PBX Code Method, where each PBX is given a unique code, which is dialled before the extension number to call an extension at another PBX.

Two priority sets (from a total of 8) are displayed at a time. To display other priority sets, click the applicable tab.

Using a private network, up to 8 PBXs can share one voice mail system (centralised VM) connected to another PBX. This can provide voice mail for extensions attached to any of the PBXs in the network.

Name	Description	Value Range	Links
Own PBX Code	Specifies the PBX code of the local PBX, when using PBX Code Method numbering on a TIE line network. If this cell is left empty, the Extension Number Method is used.	Max. 7 digits (consisting of 0–9)	Feature Manual References 4.3.1 TIE Line Service

#### **Priority 1-Priority 8**

Name	Description	Value Range	Links
Leading Number	Specifies the leading number for other PBX extension numbers or the PBX code of others in the TIE line network.	Max. 3 digits (consisting of 0–9, *, and #)	Feature Manual References 4.3.1 TIE Line Service
Removed Number of Digits	Specifies the number of leading digits of the dialled number to be removed for each priority.	0–15	Feature Manual References 4.3.1 TIE Line Service
Added Number	Specifies the number to be added to the dialled number in place of the removed digits for each priority.	Max. 32 digits (consisting of 0–9, *, #, and P [Pause])	Feature Manual References 4.3.1 TIE Line Service
Trunk Group	Specifies the trunk group to be used for TIE line calls for each priority.	None, 1–96	Feature Manual References 4.3.1 TIE Line Service

#### **Enhanced QSIG**

Name	Description	Value Range	Links
Leading Number	Specifies the leading number for other PBX extension numbers or the PBX code of other PBXs in the TIE line network.	Max. 3 digits (consisting of 0–9, *, and #)	Feature Manual References 4.3.5 QSIG Enhanced Features

Name	Description	Value Range	Links
Enhanced QSIG Call Information (Activation Key Required)	Enables Network Message Waiting information to be sent from the PBX to which the voice mail system is attached to extensions connected to other PBXs in the network.	Disable, Enable	Feature Manual References 4.3.5 QSIG Enhanced Features

### 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission

Settings related to the transmission of extension BLF (Busy Line Field) data or Message Waiting notifications over a network of PBXs can be programmed.

Extension BLF data is used to show the status of a monitored extension attached to another PBX on a Network DSS (NDSS) button. Network Message Waiting notifications are used for the Centralised VM feature, and a voice mail system can send notifications to extensions connected to any PBX in the network.

Name	Description	Value Range	Links
Network Data Transmission for Centralised Operator Feature— Network PBX ID	Specifies the Network ID of the PBX, for Network Direct Station Selection (NDSS). This parameter must be set in correspondence with the Network IDs assigned to other PBXs in the network. Network IDs 1-8 can only be assigned to one PBX each within a network. Assigning the same Network ID to two PBXs will cause network data transmission problems. Changing this value in On-line mode will automatically clear any NDSS Link Data.	0: The PBX retransmits BLF data sent by other PBXs. 1: The PBX receives BLF data sent by other PBXs. 2–8: The PBX transmits BLF data over the network.	Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Network Data Transmission for Centralised Operator Feature— Data Transmission VoIP->ISDN	Selects whether to re-send BLF data received from a VoIP port through any ISDN ports that are set to transmit BLF data.	Disable, Enable	PC Programming Manual References  9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port—ISDN CO —Networking Data Transfer  9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property - PRI Port—CO Setting—Networking Data Transfer  Feature Manual References  4.3.5.1 Network Direct Station Selection (NDSS)

Name	Description	Value Range	Links
Network Data Transmission for Centralised Operator Feature— Data Transmission ISDN->VoIP	Selects whether to re-send BLF data received from an ISDN port through any VoIP ports that are set to transmit BLF data.	Disable, Enable	PC Programming Manual References 17.3 PBX Configuration—[9-3] Private Network—Network Operator (VoIP)—IP-GW Card Slot No. to notify BLF data to Network Operator
			Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Network Data Transmission for Centralised Operator Feature— Data Transmission Counter	Specifies the maximum number of "hops", or transmissions between two PBXs, before a packet of BLF data is discarded.	1–63	Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Network Data Transmission for Centralised Operator Feature— Data Broadcasting Interval Timer	Specifies the frequency of BLF data transmission. The PBX will send data over the network periodically according to the interval specified here.	100 × n (n=0– 30) ms	Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Network MSW Data Transmission for Centralised VM Feature—Data Re- transmission: Repeat Counter	Specifies the number of times re-transmission of network message waiting notifications is repeated before being cancelled.	0–10	PC Programming Manual References 17.1 PBX Configuration—[9-1] Private Network—TIE Table— Enhanced QSIG Call Information (Activation Key Required)
			Feature Manual References 4.3.5.2 Centralised Voice Mail
Network MSW Data Transmission for Centralised VM Feature—Data Re- transmission: Repeat Timer	Specifies the length of time between repeated retransmission of network message waiting notifications.	10-240 s	PC Programming Manual References 17.1 PBX Configuration—[9-1] Private Network—TIE Table— Enhanced QSIG Call Information (Activation Key Required)
			Feature Manual References 4.3.5.2 Centralised Voice Mail

## 17.3 PBX Configuration—[9-3] Private Network—Network Operator (VoIP)

This screen allows network operators to be programmed. A network operator is an extension at a remote PBX that will monitor other PBX extensions using Network Direct Station Selection (NDSS). The settings on this screen should be programmed at the PBX that is to be monitored (Network Data Transmission for Centralised Operator Feature—Network PBX ID 2–8). Up to 8 network operators can be programmed.

Name	Description	Value Range	Links
Network Operator Extension No.	Specifies the number of an extension at the monitor PBX (the PBX whose Network Data Transmission for Centralised Operator Feature—Network PBX ID is set to 1 in 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission). Any extension at the monitor PBX can be specified here.	Max. 16 digits (consisting of 0–9, *, and #)	PC Programming Manual References  17.2 PBX Configuration— [9-2] Private Network— Network Data Transmission— Network Data Transmission for Centralised Operator Feature—Network PBX ID  Feature Manual References  4.3.5.1 Network Direct Station Selection (NDSS)
Site	Specifies the PBX in the One-look network where the V-IPGW16 card is installed for sending extension status data.	Site name in the One-look network	
IP-GW Card Slot No. to notify BLF data to Network Operator	Specifies the slot number of the card used to send extension status data. This setting is only required when using VoIP to transmit data.	Undefined, Shelf No. – Slot No.	PC Programming Manual References  9.1 PBX Configuration—[1-1] Configuration—Slot  Feature Manual References  4.3.5.1 Network Direct Station Selection (NDSS)

### 17.4 PBX Configuration—[9-4] Private Network—NDSS Key Table

Extensions at up to 7 other PBXs that will be monitored using Network Direct Station Selection (NDSS) can be registered. A maximum of 250 extensions can be registered. To create an NDSS button to monitor an extension, the extension must be registered here first.

To clear NDSS link data, click the **NDSS Clear** button. The **NDSS Clear** button can be used only in On-line mode.

Note that the parameters on this screen can only be set when the Network Data Transmission for Centralised Operator Feature—Network PBX ID is set to 1 in the 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission screen.

Name	Description	Value Range	Links
Network Extension No.	Specifies the number of the remote extension (attached to another PBX) that will be monitored. The number input here can use either Extension Number Method or PBX Code Method.	Max. 16 digits (consisting of 0–9, *, and #)	Feature Manual References 4.3.1 TIE Line Service 4.3.5.1 Network Direct Station Selection (NDSS)
Network Extension Name for Programming Reference	Specifies the name of the network extension. This name is only shown here, not on the displays of extensions.	Max. 20 characters	Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)
Network PBX ID of Network Extension to be monitored	Indicates the Network Data Transmission for Centralised Operator Feature—Network PBX ID of the PBX that the extension is connected to (reference only).	None, 1–8	PC Programming Manual References 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission—Network Data Transmission for Centralised Operator Feature—Network PBX ID Feature Manual References 4.3.5.1 Network Direct Station Selection (NDSS)

### 17.5 PBX Configuration—[9-5] Private Network—Centralised UM/VM Unit

View and programme settings for using the Unified Messaging system and VPSs in a private network. To view a list of all programmed extension numbers and types, click **Extension List View** (see **6.5 Tool—Extension List View**).

Name	Description	Value Range	Links
Unit No.	Indicates the unit number of the UM system or VM unit, as assigned by the PBX (reference only).		
Floating Extension No. (TIE)	Specifies the floating extension number of the centralised UM or VM (VPS) group. This floating extension number must start with the number used to access a TIE line or the extensions of another PBX.	Max. 8 digits (consisting of 0–9)	
Group Name (20 characters)	Specifies the name of the centralised UM or VM (VPS) group, which will be shown on the display of extensions that call it.	Max. 20 Characters	

#### Section 18

#### PBX Configuration—[10] CO & Incoming Call

This section serves as reference operating instructions for the CO & Incoming Call menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

## 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings

Trunks can be assigned a name, and grouped into a maximum of 256 trunk groups.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
Card Type	Indicates the type of card to which the trunk is connected (reference only).	Card type	
CO Name	Specifies the trunk name which is shown on the extension's display when receiving a call from the trunk.	Max. 20 characters	Feature Manual References 2.21.4 Display Information
Trunk Group Number	Specifies the trunk group number to which the trunk belongs. When a V-IPGW card is installed, the value is automatically set to "7" for the corresponding trunks.	1–96	Feature Manual References 5.1.2 Group

### 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings

Direct In Line (DIL) or Direct Dialling In (DDI)/Direct Inward Dialling (DID) can be selected for each trunk as the method of distributing incoming trunk calls to certain destinations. For each trunk to which DIL distribution is set, different destinations can be programmed depending on the time mode (day/lunch/break/night). If desired, Calling Line Identification (CLI) distribution can be used in conjunction with DIL distribution.

#### DIL

For each trunk to which DIL distribution is set, different DIL destinations can be programmed depending on the time mode (day/lunch/break/night). Generally, DIL distribution is used for trunk calls from analogue trunks. Tenant number and service group number can also be programmed for each trunk.

To assign DIL destination numbers, enter directly or click **Destination Setting** (see **2.1.7 Extension Number Setting**).

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
Card Type	Indicates the trunk card type (reference only).	Card type	Feature Manual References
			2.1.1.1 Incoming Trunk Call Features—SUMMARY
Trunk Property	Indicates the networking type of each trunk (reference only).	Public, Private(TIE), VPN	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY 4.3.1 TIE Line Service 4.3.3 ISDN Virtual Private Network (ISDN-VPN)
Distribution Method	Selects the distribution method for incoming trunk calls. The value range of this setting depends on the card type and <b>Trunk Property</b> assigned for each trunk.	DIL: Distribution depends on the trunk through which the calls arrive DDI/DID: Distribution depends on the DDI/DID number of the calls MSN: Distribution depends on the MSN of the calls	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY
DIL Destination— Day, Lunch, Break, Night	Specifies the DIL destination in each time mode.	Max. 5 digits (consisting of 0–9)	PC Programming Manual References 10.6.1 PBX Configuration —[2-6-1] System— Numbering Plan—Main
			Feature Manual References 2.1.1.2 Direct In Line (DIL)
			4.3.1 TIE Line Service

Name	Description	Value Range	Links
Tenant Number	Specifies the tenant number, to determine the Time Table by which calls are distributed depending on the time of day.	Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	Feature Manual References 2.1.1.2 Direct In Line (DIL) 5.1.3 Tenant Service 5.1.4 Time Service
UM Service Group No.	Specifies the Service Group number sent to the Unified Messaging system when the incoming call destination is the floating extension number of a UM group. The Service Group number is used to allow the Unified Messaging system to send the applicable greeting message to the caller.	None, 1–64	Feature Manual References 2.1.1.2 Direct In Line (DIL) 3.2.1 System Features— 3.2.1.40 Service Group
VM Trunk Group No.	Specifies the number of the VM trunk group sent to the VPS when the incoming call destination is the floating extension number of a VM (DPT) Group (connected to a KX-NCP/KX-TDE series PBX). The VM trunk group number is used to allow the VPS to send the applicable greeting message to the caller.	1–48	

#### **CLI for DIL**

When CLI distribution is enabled for a trunk to which DIL distribution is set, incoming trunk calls will be distributed to the CLI destinations (instead of the DIL destinations) if the caller's identification number is found in the System Speed Dialling Table.

CLI distribution can be enabled or disabled for each time mode (day/lunch/break/night) on a trunk basis.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
Card Type	Indicates the trunk card type (reference only).	Card type	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY
Trunk Property	Indicates the networking type of each trunk (reference only).	Public, Private(TIE), VPN	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY 4.3.1 TIE Line Service 4.3.3 ISDN Virtual Private Network (ISDN-VPN)
Distribution Method	Selects the distribution method for incoming trunk calls. The value range of this setting depends on the card type and <b>Trunk Property</b> assigned for each trunk.	DIL: Distribution depends on the trunk through which the calls arrive DDI/DID: Distribution depends on the DDI/DID number of the calls MSN: Distribution depends on the MSN of the calls	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY
CLI Ring for DIL—Day, Lunch, Break, Night	Enables CLI distribution in each time mode.	Disable, Enable	Feature Manual References 2.1.1.2 Direct In Line (DIL) 2.1.1.5 Calling Line Identification (CLI) Distribution

#### DDI / DID / TIE / MSN

For each trunk to which DDI/DID distribution is set, or for each trunk whose **Trunk Property** on this screen is **Private (TIE)**, modification parameters for DDI/DID number and TIE line call numbers can be programmed.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

Name	Description	Value Range	Links
Card Type	Indicates the trunk card type (reference only).	Card type	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY
Trunk Property	Indicates the networking type of each trunk (reference only).	Public, Private(TIE), VPN	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY 4.3.1 TIE Line Service 4.3.3 ISDN Virtual Private Network (ISDN-VPN)

Name	Description	Value Range	Links
Distribution Method	Selects the distribution method for incoming trunk calls. The value range of this setting depends on the card type and <b>Trunk Property</b> assigned for each trunk.	DIL: Distribution depends on the trunk through which the calls arrive DDI/DID: Distribution depends on the DDI/DID number of the calls MSN: Distribution depends on the MSN of the calls	Feature Manual References 2.1.1.1 Incoming Trunk Call Features—SUMMARY 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI) 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service
DDI/DID/TIE/ MSN— Remove Digit	Specifies the number of leading digits to be removed from the incoming called number for DDI/DID distribution or for TIE line service.	0–15	Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI) 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service 4.3.1 TIE Line Service
DDI/DID/TIE/ MSN— Additional Dial	Specifies the number to be added to the incoming called number in the place of the removed digits for DDI/DID distribution or for TIE line service.	Max. 8 digits (consisting of 0–9, *, and #)	Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI) 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service 4.3.1 TIE Line Service

### 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table

Incoming trunk calls with DDI/DID numbers can be distributed to specific destinations. Each DDI/DID number has a destination programmed for each time mode (day/lunch/break/night).

When CLI distribution is enabled for a DDI/DID number, incoming trunk calls with that DDI/DID number will be distributed to the CLI destinations (instead of the DDI/DID destinations) if the caller's identification number is found in the System Speed Dialling Table, which is used as the Caller ID Table. CLI distribution can be enabled or disabled for each time mode (day/lunch/break/night) on a DDI/DID number basis. A maximum of 1000 DDI/DID numbers can be programmed with other related parameters. 100 numbers are displayed at a time. To display other sets of numbers, click the applicable tab.

To assign DDI/DID destination numbers, enter directly or click **Destination Setting** (see **2.1.7 Extension Number Setting**). It is possible to programme DDI/DID numbers and DDI/DID destinations in each time mode (day/lunch/break/night) for a set of locations in series at once by clicking **Automatic Registration**, or to programme DDI/DID names for a set of locations in series at once by clicking **Name Generate**.

Name	Description	Value Range	Links
DDI / DID Number		Max. 32 digits (consisting of 0–9, *,	PC Programming Manual References
		and #)	18.3.1 PBX Configuration— [10-3] CO & Incoming Call— DDI / DID Table—Automatic Registration
			Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
DDI / DID Name	Specifies the name for the DDI/DID number which is shown on the extension's display when receiving a call with the DDI/DID number. The name of the DDI/DID number can be printed out on SMDR.	Max. 20 characters	PC Programming Manual References  18.3.2 PBX Configuration— [10-3] CO & Incoming Call— DDI / DID Table—Name Generate  19.1 PBX Configuration—[11-1] Maintenance—Main—SMDR Options—Option—DDI/DID Number & Name  Feature Manual References
			2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)

Name	Description	Value Range	Links
DDI / DID Destination— Day, Lunch, Break, Night	Specifies the DDI/DID destination in each time mode.	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  10.6.1 PBX Configuration— [2-6-1] System—Numbering Plan—Main  18.3.1 PBX Configuration— [10-3] CO & Incoming Call— DDI / DID Table—Automatic Registration  Feature Manual References  2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)  4.3.1 TIE Line Service
Tenant Number	Specifies the tenant number, to determine the Time Table by which calls are distributed depending on the time of day.	Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References 10.4 PBX Configuration—[2-4] System—Week Table Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)

Name	Description	Value Range	Links
UM Service Group No.	Specifies the Service Group number sent to the Unified Messaging system when the incoming call destination is the floating extension number of a UM group. The Service Group number is used to allow the Unified Messaging system to send the applicable greeting message to the caller.	None, 1–64	Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI) 3.1.1 Unified Messaging System Overview
VM Trunk Group No.	Specifies the number of the VM trunk group sent to the VPS when the incoming call destination is the floating extension number of a VM (DPT) Group (connected to a KX-NCP/KX-TDE series PBX). The VM trunk group number is used to allow the VPS to send the applicable greeting message to the caller.	1–48	
CLI Ring for DDI/DID— Day, Lunch, Break, Night	Enables CLI distribution in each time mode.	Disable, Enable	PC Programming Manual References  14.1 PBX Configuration—[6-1] Feature—System Speed Dial  Feature Manual References  2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)  2.1.1.5 Calling Line Identification (CLI) Distribution

#### 18.3.1 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table—Automatic Registration

Automatic Registration allows DDI/DID numbers and DDI/DID destinations in each time mode (day/lunch/break/night) to be programmed at once for a set of locations in series.

Name	Description	Value Range	Links
Beginning Entry Location	Specifies the number of the first location to be programmed.	1–1000	PC Programming Manual References 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
			Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
Generate DDI/DID Number (From)	Specifies the DID number of the first location to be programmed. DDI/DID numbers for subsequent locations will be generated automatically, by adding one to the value of the previous location.	Max. 32 digits (consisting of 0–9)	PC Programming Manual References 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
	the value of the previous location.		Feature Manual References 2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
Number of Registration	Specifies the number of locations to be programmed.	1–1000	PC Programming Manual References  18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table  Feature Manual References 2.1.1.3 Direct Inward Dialling
Destination— Day, Lunch, Break, Night	Specifies the number of the DDI/DID destination in each time mode for the first location to be programmed. If the same destination is to be used for all locations for a certain time mode, click the appropriate Same all check box. If the Same all check box for a certain time mode is not clicked, the destination numbers for subsequent locations will be generated automatically, by adding one to the value of the previous location for that time mode.	Max. 5 digits (consisting of 0–9)	PC Programming Manual References  18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table  Feature Manual References  2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)

#### 18.3.2 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table—Name Generate

Name Generate allows DDI/DID names to be programmed at once for a set of locations in series. If a name generated here is longer than 20 characters, the additional characters will be discarded.

Name	Description	Value Range	Links
Beginning	Specifies the number of the first location to be	1–1000	PC Programming Manual References
Entry Location	programmed.		18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
			Feature Manual References
			2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
Number to	Specifies the number of	1–1000	PC Programming Manual References
Generate	locations to be programmed.		18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
			Feature Manual References
			2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
No. of Digits	Specifies the number of	0–32	PC Programming Manual References
to Delete	digits to be deleted from the start of a DDI/DID		18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
	number when using it as part of the DDI/DID name.		Feature Manual References
			2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
Name Prefix	Specifies the text to be	Max. 20	PC Programming Manual References
	included at the start of each DDI/DID name.	characters	18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
			Feature Manual References
			2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)
Name Suffix	Specifies the text to be	Max. 20	PC Programming Manual References
	included at the end of each DDI/DID name.	characters	18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
			Feature Manual References
			2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)

### 18.4 PBX Configuration—[10-4] CO & Incoming Call—MSN Table

Incoming ISDN-BRI (Basic Rate Interface) line calls with Multiple Subscriber Numbers (MSNs) can be distributed to a certain destination. Each MSN has a destination programmed for each time mode (day/lunch/break/night).

A maximum of 10 MSNs can be programmed for each ISDN-BRI port.

To use this feature, **Access Mode** in **9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property** - **BRI Port** must be set to **P-MP**.

#### **MSN**

To assign MSN destination numbers, enter directly or click **Destination Setting** (see **2.1.7 Extension Number Setting**).

Name	Description	Value Range	Links
Site	Indicates the site number of the PBX in the One-look network (reference only).	1– 16	
Shelf	Indicates the shelf type and/or position (reference only).	1 (Physical), Virtual	
Slot	Indicates the slot position of the BRI card that is set to MSN distribution (reference only).	Slot number	
Port	Indicates the port number of the BRI card that is set to MSN distribution (reference only).	Port number	
MSN Number	Specifies the MSN.	Max. 16 digits (consisting of 0–9, *, and #)	PC Programming Manual References 9.27 PBX Configuration— [1-1] Configuration—Slot— Port Property - BRI Port
			Feature Manual References 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service

Name	Description	Value Range	Links
MSN Name	Specifies the name for the MSN which is shown on the extension's display when receiving a call with the MSN.	Max. 20 characters	PC Programming Manual References  9.27 PBX Configuration— [1-1] Configuration—Slot— Port Property - BRI Port  Feature Manual References  2.1.1.4 Multiple Subscriber
MSN	Specifies the MSN destination	Max. 5 digits (consisting	Number (MSN) Ringing Service  PC Programming Manual
Destination —Day, Lunch, Break, Night	in each time mode.	of 0–9)	References 9.27 PBX Configuration— [1-1] Configuration—Slot— Port Property - BRI Port
			Feature Manual References 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service
Tenant Number	Specifies the tenant number, to determine the Time Table by which calls are distributed depending on the time of day.	Note  The maximum number of tenants depends on the System Capacity Selection setting made when the Easy Setup Wizard was run for the PBX. If the System Resource Type was selected, the maximum number of tenants is 128. If the Standard Type or IP-Extension Type was selected, the maximum number of tenants is 32. For details, refer to "5.4.1 Easy Setup Wizard" in the Installation Manual.	PC Programming Manual References  9.27 PBX Configuration— [1-1] Configuration—Slot—Port Property - BRI Port 10.4 PBX Configuration— [2-4] System—Week Table  Feature Manual References 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service

Name	Description	Value Range	Links
UM Service Group No.	Specifies the Service Group number sent to the Unified Messaging system when the incoming call destination is the floating extension number of a UM group.	None, 1–64	PC Programming Manual References 9.27 PBX Configuration— [1-1] Configuration—Slot— Port Property - BRI Port
	The Service Group number is used to allow the Unified Messaging system to send the applicable greeting message to the caller.		Feature Manual References 2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service
VM Trunk Group No.	Specifies the number of the VM trunk group sent to the VPS when the incoming call destination is the floating extension number of a VM (DPT) Group (connected to a KX-NCP/KX-TDE series PBX). The VM trunk group number is used to allow the VPS to send the applicable greeting message to the caller.	1–48	

#### **CLI for MSN**

When CLI distribution is enabled for an ISDN-BRI line to which MSN distribution is set, incoming trunk calls will be distributed to the CLI destinations (instead of the MSN destinations) if the caller's identification number is found in the System Speed Dialling Table.

CLI distribution can be enabled or disabled for each time mode (day/lunch/break/night) on a trunk basis.

Name	Description	Value Range	Links
Site	Indicates the site number of the PBX in the One-look network (reference only).	1– 16	
Shelf	Indicates the shelf type and/or position (reference only).	1 (Physical), Virtual	
Slot	Indicates the slot position of the BRI card that is set to MSN distribution (reference only).	Slot number	
Port	Indicates the port number of the BRI card that is set to MSN distribution (reference only).	Port number	

Name	Description	Value Range	Links
CLI Ring for MSN—Day,	Enables CLI distribution in each time mode.	Disable, Enable	PC Programming Manual References
Lunch, Break, Night			9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property - BRI Port
			Feature Manual References
			2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service 2.1.1.5 Calling Line Identification (CLI) Distribution

# 18.5 PBX Configuration—[10-5] CO & Incoming Call—Miscellaneous

The Intercept Routing feature can activate when the destination of an incoming call is unavailable, or when there is no destination for the call, to reroute the call to an alternate destination.

Name	Description	Value Range	Links
Intercept—Intercept Routing - DND (Destination sets DND.)	Enables the Intercept Routing—DND feature to activate when the original destination is in DND mode.	Disable (Busy Tone): Sends a busy tone to the caller. (However, a call through an LCOT card will ring at the original destination while the caller hears a ringback tone.) Enable: Redirects the call to the intercept destination	Feature Manual References 2.1.1.6 Intercept Routing 2.3.3 Do Not Disturb (DND)
Intercept—Routing to Operator - No Destination (Destination is not programmed.)	Enables the Intercept Routing—No Destination feature to activate when there is no destination for the call.	Disable (Reorder Tone): Sends a reorder tone to the caller. (However, a call through an LCOT card will ring at the original destination while the caller hears a ringback tone.) Enable: Redirects the call to an operator	Feature Manual References 2.1.1.7 Intercept Routing—No Destination
Intercept—Intercept Routing for Extension Call	Enables the Intercept Routing feature to operate for extension calls.	Disable, Enable	Feature Manual References 2.1.1.7 Intercept Routing—No Destination

## Section 19

## PBX Configuration—[11] Maintenance

This section serves as reference operating instructions for the Maintenance menu of the PBX Configuration menu of the Setup screen of Web Maintenance Console.

## 19.1 PBX Configuration—[11-1] Maintenance—Main

### **SMDR**

Station Message Detail Recording (SMDR) automatically records detailed information about incoming and outgoing calls.

Name	Description	Value Range	Links
SMDR Format— Type	Selects the format of SMDR output.	Type A: 80 digits without call charge information Type B: 80 digits with call charge information Type C: 120 digits	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
SMDR Format— Port	Selects the Serial Interface port that is used to output the SMDR data.	None, LAN(TELNET), RS-232C	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
SMDR Format— Page Length (Number of Lines)	Specifies the number of lines on a page of output paper. Match the SMDR output to the paper size being used in the printer.	No Print, 4–99	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
SMDR Format— Blank Footer Length (Number of Lines)	Specifies the number of lines to be skipped at the end of every page. The number of lines for the skip perforation should be shorter than the page length.	0–95	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
SMDR Format— Date Format	Selects the printed date format.	MM-DD-YY, DD- MM-YY, YY-MM- DD, YY-DD-MM	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
SMDR Format— Time Format (12H / 24H)	Selects whether times are displayed using the 12- or 24-hour format.	12H, 24H	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Print Information —Outgoing Call	Specifies whether the dialled digits of outgoing trunk calls are printed. Class of Service (COS) programming determines the printable records.	No Print, Print	PC Programming Manual References 10.7.1 PBX Configuration— [2-7-1] System—Class of Service—COS Settings—CO & SMDR—Outgoing CO Call Printout (SMDR)  Feature Manual References
			2.22.1.1 Station Message Detail Recording (SMDR)

Name	Description	Value Range	Links
Print Information —Incoming Call	Specifies whether the information relating to incoming trunk calls, such as caller's identification name and number, is printed.	No Print, Print	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Print Information —Intercom Call	Specifies whether the dialled digits of outgoing intercom calls are printed.	No Print, Print	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Print Information —Log-in / Log- out	Specifies whether the log- in/log-out status is printed.	No Print, Print	Feature Manual References 2.2.2.8 Log-in/Log-out 2.22.1.1 Station Message Detail Recording (SMDR)
Print Information —Hotel Room Status	Selects whether check-in and check-out data is output on SMDR.	No Print, Print	PC Programming Manual References 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge
			Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR) 2.23.2 Room Status Control
Print Information —Timed Reminder (Wake-up Call)	Selects whether Timed Reminder data is output on SMDR.	No Print, Print	PC Programming Manual References  14.2 PBX Configuration—[6-2] Feature—Hotel & Charge  Feature Manual References
			2.22.1.1 Station Message Detail Recording (SMDR) 2.24.4 Timed Reminder
Print Information —Error Log	Specifies whether PBX error log information is output to SMDR.	No Print, Print	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR) 5.6.4 Local Alarm Information

### **SMDR Options**

Name	Description	Value Range	Links
Option—ARS Dial	Selects the type of the dialled number to be printed for a call with the ARS feature.	Dial before ARS Modification: The user-dialled number Dial after ARS Modification: The ARS modified number	Feature Manual References 2.5.4.8 Host PBX Access Code (Access Code to the Telephone Company from a Host PBX) 2.8 Automatic Route Selection (ARS) Features 2.22.1.1 Station Message Detail Recording (SMDR)
Option—Caller ID Number & Name	Selects the printing format of caller identifications for incoming trunk calls.	None, Number, Name, Name + Number	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Option— DDI/DID Number & Name	Selects the printing format of incoming trunk calls with a DDI/DID number.	None, Number, Name, Name + Number	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Option—Secret Dial	Selects the printing format of calls with a secret dial. The secret dial conceals all or part of the dialled number. Note that selecting Dial before ARS Modification in Option—ARS Dial on this screen indicates the dialled numbers as dots regardless of this setting.	Print "" (Secret), Print Dialled Number	Feature Manual References 2.6.1 Memory Dialling Features—SUMMARY 2.22.1.1 Station Message Detail Recording (SMDR)

Name	Description	Value Range	Links
Option— Privacy Mode	Selects whether private dialling is enabled or disabled, and how many digits to hide when enabled. To enable this setting, Print Information—Outgoing Call on the SMDR tab should be set to Print.	Print Dialled Number: Disables private dialling; all dialled numbers (including additional digits dialled after connection) are shown on SMDR. No Print: No additional digits dialled after connection will be shown on SMDR. Print "X", Print "XX", Print "XXX"; Print "XXXX": The selected number of digits at the end of dialled telephone numbers, and any additional digits dialled after connection, are shown on SMDR as "X".	PC Programming Manual References  19.1 PBX Configuration— [11-1] Maintenance—Main— SMDR—Print Information— Outgoing Call Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Option— Condition Code "RC"	Specifies whether the time of receiving an incoming trunk call is printed.	No Print, Print	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Option— Condition Code "AN"	Specifies whether the time of answering an incoming trunk call is printed.	No Print, Print	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Option—Caller ID Modification	Specifies whether Caller ID numbers are recorded on SMDR as received (before being modified by the PBX) or after being modified.	Before Modification, After Modification	PC Programming Manual References  11.1.3 PBX Configuration— [3-1-3] Group—Trunk Group—Caller ID Modification  Feature Manual References  2.22.1.1 Station Message Detail Recording (SMDR)
Emergency Call Notification	Specifies if an emergency call is recorded on SMDR only when the call is completed, or when the call is initially dialled as well.	End of Call, Start and End of Call	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)

Name	Description	Value Range	Links
LAN—SMDR Port Number	Specifies the port number used to output SMDR data via	1–65535	Feature Manual References
	the LAN.		2.22.1.1 Station Message Detail Recording (SMDR)
LAN—SMDR Password	Specifies the password used to output the SMDR data via	Max. 10 characters	Feature Manual References
	the LAN.		2.22.1.1 Station Message Detail Recording (SMDR)
LAN—New Line Code for Telnet	Specifies the new line code for a terminal emulator.	CR + LF, CR	Feature Manual References
	If the terminal emulator automatically feeds lines with a carriage return, select <b>CR</b> (Carriage Return). If not, select <b>CR + LF</b> (Line Feed).		2.22.1.1 Station Message Detail Recording (SMDR)

### **RS-232C**

Name	Description	Value Range	Links
Communication— Baud Rate	Specifies the data transmission speed from the PBX to the printer or personal computer.  To ensure stable transmission, when changing this setting to 57600 or 115200 bps, set Communication—Flow on this screen to Hardware.	2400 bps, 4800 bps, 9600 bps, 19200 bps, 38400 bps, 57600 bps, 115200 bps	PC Programming Manual References 19.1 PBX Configuration—[11-1] Maintenance—Main— RS-232C— Communication—Flow
			Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Communication— Parity Bit	Selects a parity bit code that indicates what type of parity is used to detect an error in the string of bits composing a character.  Make an appropriate selection depending on the requirements of the printer or personal computer.	None, Mark, Space, Even, Odd	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
Communication— Flow	Enables the hardware flow control.	None, Hardware	
Communication— NL Code	Specifies the NL (New Line) code for the printer or personal computer. If the printer or personal computer automatically feeds lines with a carriage return, select <b>CR</b> (Carriage Return). If not, select <b>CR</b> + <b>LF</b> (Line Feed).	CR + LF, CR	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)

Name	Description	Value Range	Links
Communication— Word Length	Specifies the number of bits in each byte of a character. When connecting the Maintenance Console to the PBX using an RS-232C cable, assign the following values to the Serial Interface (RS-232C) port of the PBX: Word Length: 8 bit, Parity Bit: None, Stop Bit: 1 bit  Notice Do not use the following	7 bit, 8 bit	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
	<ul> <li>word Length: 8 bit, Parity Bit: Space, Stop Bit: 1 bit</li> <li>word Length: 8 bit, Parity Bit: Mark, Stop Bit: 2 bit</li> </ul>		
	Word Length: 8 bit, Parity Bit:     Space, Stop Bit: 2 bit		
Communication— Stop Bit	Selects a stop bit code that indicates the end of a bit string which composes a character. Select an appropriate value depending on the requirements of the printer or personal computer.	1 bit, 2 bit	Feature Manual References 2.22.1.1 Station Message Detail Recording (SMDR)
External Modem Command— Automatic Initialisation	Specifies the command to automatically initialise an external modem when it is plugged into the Serial Interface (RS-232C) port of the PBX.	Max. 30 characters	

### **Maintenance**

Name	Description	Value Range	Links
Local Alarm Display— Extension 1, Extension 2	Specifies the extension numbers of PTs that will be notified by the PBX about local alarms. When the PBX detects a PBX error, the System Alarm button on the PT turns on red. When this button is pressed, the display will show the error number, and the button light will turn off automatically.	Max. 5 digits (consisting of 0–9)	Feature Manual References 5.6.4 Local Alarm Information
Daily Test Start Time—Set	Enables the daily self check of the PBX for local alarm and error log.	Disable, Enable	Feature Manual References 5.6.4 Local Alarm Information

Name	Description	Value Range	Links
Daily Test Start Time—Hour	Specifies the hour of the PBX daily self check start time.	0–23	Feature Manual References 5.6.4 Local Alarm Information
Daily Test Start Time—Minute	Specifies the minute of the PBX daily self check start time.	0–59	Feature Manual References 5.6.4 Local Alarm Information
Error Log for UM Port Busy— Detection of All UM Port Busy	Enables error information to be logged in the PBX if UM ports were all busy specified in <b>Detection of All UM Port Busy</b> . This item is recorded by Syslog. If this Log is frequently recorded in your customer, it indicates insufficiency of UM port. Recommend to purchase Activation Keys for expand UM port.	Disable, Enable	PC Programming Manual References 7.3.2 Utility—Log—Syslog
Error Log for UM Port Busy— Detection Busy Threshold Time	Enables error information to be logged in the PBX if UM ports were all busy time specified in <b>Detection Busy Threshold Time</b> . This item is recorded by Syslog. If this Log is frequently recorded in your customer, it indicates insufficiency of UM port. Recommend to purchase Activation Keys for expand UM port.	3-300 (sec)	PC Programming Manual References 7.3.2 Utility—Log—Syslog
Error Log for Centralised VM— Network MSW Transmission (Counter)	Enables error information to be logged in the PBX if network message waiting information is deleted after re-transmission is repeated for the number of times specified in Network MSW Data Transmission for Centralised VM Feature—Data Re-transmission: Repeat Counter in 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission.	Disable, Enable	PC Programming Manual References  17.1 PBX Configuration— [9-1] Private Network—TIE Table—Enhanced QSIG Call Information (Activation Key Required) 17.2 PBX Configuration— [9-2] Private Network— Network Data Transmission —Network MSW Data Transmission for Centralised VM Feature— Data Re-transmission: Repeat Counter  Feature Manual References  4.3.5.2 Centralised Voice Mail

Name	Description	Value Range	Links
Error Log for Centralised VM—	Enables error information to be logged in the PBX if the quantity of	Disable, Enable	PC Programming Manual References
Network MSW Transmission (Buffer)	network message waiting information being re-transmitted is larger than the transmission buffer.		17.1 PBX Configuration— [9-1] Private Network—TIE Table—Enhanced QSIG Call Information (Activation Key Required)
			Feature Manual References
			4.3.5.2 Centralised Voice Mail

### **Password**

Passwords authorise the user to programme the extension and the PBX by a PT or a personal computer.

Name	Description	Value Range	Links
Manager Password - PT Programming— Prog *1	Specifies the manager password to authorise the PT user to access manager programming.	4–10 digits (consisting of 0–9, *, and #)	Feature Manual References 5.1.6 Manager Features

# 19.2 PBX Configuration—[11-2] Maintenance—CS Synchronisation

## 19.2.1 PBX Configuration—[11-2-1] Maintenance—CS Synchronisation—Air Synchronisation

You can programme and view settings for Air Synchronisation Groups.

Select an Air Synchronisation Group (1-16) to programme from the **Air Synchronisation Group Number** drop-down list.

It is possible to synchronise CSs with each other within the air synchronisation group.

Click **Sort** to reorder CSs with traditional CSs first, followed by IP-CSs.

To open the screen described in **7.4.4 Utility—Monitor/Trace—CS Status Monitor—Air Sync Group**, click **CS Status Monitor**.

Air Synchronisation Groups can be programmed only in On-line mode.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

#### **Note**

CSs connected to legacy gateways can be used together with IP-CSs connected to the KX-NS1000 system. CSs connected to legacy gateways must be registered to Air Synchronisation Group Number 1. Do not register CSs connected to legacy gateways to any other Air Synchronisation Group Number.

### **Adding CSs**

Follow the steps below to add CSs to the air synchronisation group.

- 1. Connect the CS to be registered to the network and, if necessary, the power supply.
- 2. Click Add.

A dialogue box will appear. Non-registered (available) CSs are displayed on the left.

- 3. Highlight CSs and click the right arrow to select them for addition.
- 4. Click OK.

#### **Deleting CSs**

Follow the steps below to delete CSs from the air synchronisation group.

1. Click Delete.

A dialogue box will appear. Registered CSs are displayed on the left.

- 2. Highlight CSs and click the right arrow to select them for deletion.
- 3. Click OK.

Name	Description	Value Range	Links
Air Synchronisation Group Number	Select the air synchronisation group to programme.	1–16	
Index	Indicates the CS number (reference only).	1–16	
CS Name	Indicates the name of the CS (reference only).	Max. 20 characters	

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.	INS: The port is in service. OUS: The port is out of service. Fault: The port is not communicating with the network.	
Status	Indicates whether a certain CS is registered (reference only).	-, Registered	
CS Class	Specifies the classification of each CS. This parameter can only be modified when <b>Connection</b> on this screen is set to <b>OUS</b> .	Sync Master CS1, Sync Master CS2, Sync Slave CS	
Primary CS—Index	Specifies the number of the primary CS.	1–16	
Primary CS—Slot	Indicates the slot position of the primary CS (reference only).	Slot number	
Primary CS—Port	Indicates the port number of the primary CS (reference only).	Port number	
Primary CS—CS Name	Indicates the name of the primary CS (reference only).	Max. 20 characters	
Secondary CS—Index	Specifies the number of the secondary CS.	1–16	
Secondary CS—Slot	Indicates the slot position of the secondary CS (reference only).	Slot number	
Secondary CS—Port	Indicates the port number of the secondary CS (reference only).	Port number	
Secondary CS—CS Name	Indicates the name of the secondary CS (reference only).	Max. 20 characters	

## 19.2.2 PBX Configuration—[11-2-2] Maintenance—CS Synchronisation—LAN Synchronisation

You can programme and view settings for LAN Synchronisation Groups.

Select a LAN Synchronisation Group (1-16) to programme from the **LAN Synchronisation Group Number** drop-down list.

It is possible to synchronise CSs with each other within the LAN synchronisation group.

Click Sort to reorder CSs.

To open the screen described in **7.4.5 Utility—Monitor/Trace—CS Status Monitor—LAN Sync Group**, click **CS Status Monitor**.

LAN Synchronisation Groups can be programmed only in On-line mode.

The Site, Shelf, Slot, and Port for each item are displayed for your reference. For details, see Common Programming Reference Items in 9.1 PBX Configuration—[1-1] Configuration—Slot.

#### Note

Only KX-NS0154 IP-CSs can be added to a LAN synchronisation group.

### **Adding CSs**

Follow the steps below to add CSs to the LAN synchronisation group.

- 1. Connect the CS to be registered to the network and, if necessary, the power supply.
- Click Add.A dialogue box will appear. Non-registered (available) CSs are displayed on the left.
- 3. Highlight CSs and click the right arrow to select them for addition.
- 4. Click OK.

### **Deleting CSs**

Follow the steps below to delete CSs from the LAN synchronisation group.

- Click Delete.
   A dialogue box will appear. Registered CSs are displayed on the left.
- 2. Highlight CSs and click the right arrow to select them for deletion.
- 3. Click OK.

Name	Description	Value Range	Links
LAN Synchronisation Group Number	Select the LAN synchronisation group to programme.  Note  You must specify a LAN synchronisation group number or an air synchronisation group number for each IP-CS. Do not leave both of these settings unspecified.	1–16	PC Programming Manual References 19.2.1 PBX Configuration— [11-2-1] Maintenance— CS Synchronisation —Air Synchronisation —Air Synchronisation Group Number
IP Address for Group Control	Specifies the IP address for the group. This is the same value specified in Group Control Setting—IP Address for Group Control in 19.2.3 PBX Configuration—[11-2-3] Maintenance—CS Synchronisation—LAN Sync Group Setting.	239.0.0.0— 239.255.255.255	
Index	Indicates the CS number (reference only).	1–64	
CS Name	Indicates the name of the CS (reference only).	Max. 20 characters	

Name	Description	Value Range	Links
Connection	Indicates the port status. To change the status of the port, click the desired cell in the column, and then select <b>INS</b> or <b>OUS</b> for the port.		
Status	Indicates whether a certain CS is registered (reference only).	-, Registered	
CS Class	Specifies the classification of each CS. This parameter can only be modified when <b>Connection</b> on this screen is set to <b>OUS</b> .	Sync Master CS1, Sync Master CS2-1, Sync Master CS2-2, Sync Slave  Note  Sync Master CS1, Sync Master CS2-1, and Sync Master CS2-1, and Sync Master CS2-2 can each be assigned to only 1 IP-CS in the same LAN synchronisation group.	
MAC Address	Indicates the MAC address of the IP-CS (reference only).	00:00:00:00:00- FF:FF:FF:FF:FF	
Current IP Address	Indicates the current IP address of the IP-CS (reference only).	1.0.0.0–223.255.255.255	

## 19.2.3 PBX Configuration—[11-2-3] Maintenance—CS Synchronisation—LAN Sync Group Setting

You can programme the settings for a LAN synchronisation group.

Name	Description	Value Range	Links
LAN Synchronisation Group Number	Select the LAN synchronisation group to programme.	1–16	
Group Control Setting—Type of Control Packet	Select the method for performing LAN synchronisation.	Multicast, Broadcast	
Group Control Setting—IP Address for Group Control	Specifies the IP address for the group. If Broadcast is selected for Group Control Setting—Type of Control Packet, this setting is greyed out.	239.0.0.0– 239.255.255.255	
Synchronisation Level Setting— Level of Synchronisation Establish (ns)	Specifies the threshold for establishing LAN synchronisation.	0–8192 ns	
Synchronisation Level Setting— Limit level of Synchronisation holding (ns)	Specifies the limit for determining synchronisation holding.	0–8192 ns	

### 19.2.3 PBX Configuration—[11-2-3] Maintenance—CS Synchronisation—LAN Sync Group Setting

Name	Description	Value Range	Links
Synchronisation Level Setting— Maximum duration of Synchronisation holding (s)	Specifies the maximum duration for synchronisation holding.	0–256 s	
Synchronisation Level Setting— Level of Synchronisations Lost and Restart (ns)	Specifies the level at which resynchronisation is performed.	0–32768 ns	
Synchronisation Monitoring Report Setting—Long Term Diagnosis Monitoring timer (h)	Specifies the number of hours between performing in-operation monitoring (long term).	2–168 hours	

# 19.3 PBX Configuration—[11-3] Maintenance—Power Failure Transfer

### **Notice**

This screen is for programming legacy gateway PBXs. For information about setting up a legacy gateway PBX, see **9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2**. For information about programming Power Failure Transfer settings, refer to the corresponding **Maintenance—Power Failure Transfer** section in the PC Programming Manual of the legacy gateway PBX. The following programming items are specific to the KX-NS1000 Web Maintenance Console. Using the Site selection drop-down list, select the site where the legacy gateway PBX is connected, and then programme the settings.

Name	Description	Value Range	Links
Shelf	Specifies the legacy gateway PBX shelf (reference only).	2: Legacy- GW1 3: Legacy- GW2	PC Programming Manual References 9.29 PBX Configuration —[1-1] Configuration— Slot—Legacy-GW1/ Legacy-GW2
PFT Card Position	Specifies the position of the card(s) with power failure transfer ports (reference only).	Pair - 1–Pair - 12	
	Note  The number of available PFT cards and PFT ports depends on the model of the legacy gateway PBX. For details, refer to the documentation for the legacy gateway PBX.		

## Section 20

## UM Configuration—[1] Mailbox Settings

This section serves as reference operating instructions for the Mailbox Settings menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

### 20.1 UM Configuration—[1] Mailbox Settings

A maximum of 1022 subscriber mailboxes can be created. Although the System Manager can use a telephone to create or edit mailboxes, the System Administrator can create several mailboxes at once using Web Maintenance Console. Each mailbox can be edited based upon the needs of the subscriber. Click each tab on the Mailbox Settings screen to specify the desired parameters.

### **Adding Mailboxes**

- 1. Click the + icon.
- 2. Edit each parameter in the "Mailbox" dialogue box.
- 3. Click OK

A range of mailboxes can be added that use the default mailbox settings.

- 1. Click the 🕎 icon.
- 2. Specify the range of mailboxes to add in From and To. Check Use the same number for Mailbox and Extension to assign each mailbox to the same number extension.
- **3.** Enter the number of mailboxes to create in **Number Of Mailboxes**: To edit the default settings to be used for each new mailbox, click **Edit Default Mailboxes** and make changes as necessary.
- When all settings have been made, click OK to create the range of mailboxes.

### **Editing Mailboxes**

To edit a specific mailbox, select the desired mailbox, then click the <u>icon</u> icon. You can also edit specific parameters directly from the Mailbox Settings screen.

### **Deleting Mailboxes**

- 1. Select a mailbox.
- 2. Click the im icon.
- 3. Click OK.

### 20.1.1 UM Configuration—[1-1] Mailbox Settings—Quick Setting

With Quick Settings, you can set the necessary minimum settings for Unified Messaging mailboxes. This setting is available at the User (Administrator) level.

Name	Description	Value Range	Links
Mailbox Number	Specifies the subscriber's mailbox number. The maximum number of digits that can be used for mailbox numbers is set in 24.4 UM Configuration—[5-4] System Parameters—Parameters— Mailbox—Mailbox No. Max. Length (3-8), or when you initialise the system.  Note  The mailbox number can only be set when adding a mailbox; when editing a mailbox, you cannot change the assigned mailbox number.	2-[the value set in Mailbox No. Max. Length (3-8)] digits	PC Programming Manual References 10.9 PBX Configuration— [2-9] System—System Options—Option 9 Feature Manual References 3.1.1 Unified Messaging System Overview 3.2.2 Subscriber Features— 3.2.2.20 Mailbox

Name	Description	Value Range	Links
Extension	Specifies the extension number of the mailbox's subscriber. Any valid extension number including an Extension Group number can be assigned.  Note	2–8 digits	PC Programming Manual References 10.9 PBX Configuration— [2-9] System—System Options—Option 9
	If an Extension Group number is assigned to a mailbox, all group members are able to access the messages stored in the mailbox.		Feature Manual References 3.1.1 Unified Messaging System Overview 3.2.2 Subscriber Features— 3.2.2.20 Mailbox
First Name	Specifies the first name of the subscriber. If there are non-alphabetical characters in the first 4 letters of the first name, the mailbox is not included in the directory.	Max. 20 characters	PC Programming Manual References 21.1 UM Configuration—[2] Class of Service—Directory Listing Feature Manual References 3.2.1.16 Dialling by Name
Last Name	Specifies the last name of the subscriber. If there are non-alphabetical characters in the first 4 letters of the first name, the mailbox is not included in the directory.	Max. 20 characters	

## 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting

### **Mailbox Parameters**

Name	Description	Value Range	Links
Mailbox Number	Specifies the subscriber's mailbox number. The maximum number of digits that can be used for mailbox	2–[the value set in Mailbox No. Max. Length (3-8)] digits	PC Programming Manual References
	numbers is set in 24.4 UM Configuration—[5-4] System Parameters—Parameters— Mailbox—Mailbox No. Max. Length (3-8), or when you initialise		10.9 PBX Configuration—[2-9] System—System Options—Option 9
	the system.		Feature Manual References
	Note  The mailbox number can only be set when adding a mailbox; when editing a mailbox, you cannot change the assigned mailbox number.		3.1.1 Unified Messaging System Overview 3.2.2 Subscriber Features—3.2.2.20 Mailbox

Name	Description	Value Range	Links
Extension	Specifies the extension number of the mailbox's subscriber. Any valid extension number including an Extension Group number can be assigned.  Note  If an Extension Group number is assigned to a mailbox, all group members are able to access the messages stored in the mailbox.	2–8 digits	PC Programming Manual References 10.9 PBX Configuration—[2-9] System—System Options—Option 9 Feature Manual References 3.1.1 Unified Messaging System Overview 3.2.2.20 Mailbox
First Name	Specifies the first name of the subscriber. If there are non-alphabetical characters in the first 4 letters of the first name, the mailbox is not included in the directory.	Max. 20 characters	PC Programming Manual References 21.1 UM Configuration—[2] Class of Service— Directory Listing Feature Manual References
			3.2.1.16 Dialling by Name
Last Name	Specifies the last name of the subscriber. If there are non-alphabetical characters in the first 4 letters of the first name, the mailbox is not included in the directory.	Max. 20 characters	PC Programming Manual References 21.1 UM Configuration—[2] Class of Service— Directory Listing Feature Manual References 3.2.1.16 Dialling by Name

Name	Description	Value Range	Links
Mailbox Password	Specifies the password needed to access the mailbox. If a default password is programmed by an administrator, that password will be assigned automatically when creating all mailboxes.  Administrators can change and delete the password.  To change a password for a mailbox:  1. On the Mailbox Parameters Screen, click Edit under Mailbox Password for the mailbox extension to change.  2. In the window that appears, enter the new password and then enter it again to confirm	Max. 16 digits	PC Programming Manual References 26.1 UM Configuration—[7] System Security— Subscriber Feature Manual References 3.1.2.4 Password Administration
	it.  3. Click OK.		
Mailbox Password (Message Client)	Specifies the password needed to access the mailbox when using a client software programme. If a default password is programmed by an administrator, that password will be assigned automatically when creating all mailboxes.  Administrators can change and delete the password.  To change a password for a mailbox:  1. On the Mailbox Parameters Screen, click Edit under Mailbox Password (Message Client) for the mailbox extension to change.  2. In the window that appears, enter the new password and then enter it again to confirm it.	4–16 characters (A–Z, a–z, 0–9)	PC Programming Manual References 26.1 UM Configuration—[7] System Security— Subscriber Feature Manual References 3.1.2.4 Password Administration

Name	Description	Value Range	Links
Class of Service (Mailbox)	Determines the set of services available to the subscriber.  Note  • We recommend that parameters for each COS number be defined before assigning a Class of Service (COS) to each mailbox or creating new mailboxes.  • COS No. 513 and 514 are assigned by default to the Message Manager and to the System Manager, respectively. No other mailboxes can be assigned to COS No. 513 and 514.	COS No. 1–514	PC Programming Manual References 10.9 PBX Configuration—[2-9] System—System Options—Option 9 21.1 UM Configuration—[2] Class of Service Feature Manual References 3.1.1 Unified Messaging System Overview 3.2.1.11 Class of Service (COS)
Covering Extension	Forwards calls to a second extension when the first extension's subscriber is not available to take the call. The Covering Extension is one of the Incomplete Call Handling options that can be enabled or disabled by the subscriber. The caller can also be transferred the Covering Extension by pressing [0] while a Personal Greeting is being played, or while leaving a message.	1–8 digits	Feature Manual References 3.2.1.14 Covering Extension
	Note  Extension Groups or Logical Extensions (extensions whose calls are set to always be directed their mailboxes) cannot be assigned as covering extensions.		
Interview Mailbox	Assigns an interview mailbox to the subscriber's mailbox. In order for it to function properly, the interview mailbox number must not be the same number as an existing mailbox and an existing mailbox group.	2–[the value set in Mailbox No. Max. Length (3-8)] digits	Feature Manual References 3.2.1.25 Interview Service
	Note  Each caller's replies to an interview session are saved as one message.		

Name	Description	Value Range	Links
All Calls Transfer to Mailbox	If this parameter is set to "Yes", the extension is considered to be a Logical Extension and therefore calls directed to the extension via Automated Attendant service are automatically forwarded to the extension mailbox. The extension does not ring when a call is received.	No, Yes	Feature Manual References 3.2.1.3 Automated Attendant (AA)
Call Transfer Sequence (Selection)	Specifies the method for the Call Transfer Sequence used by the mailbox. Allows each mailbox to be assigned its own Call Transfer Sequence (Personal Transfer Sequence).  Note  This sequence has higher priority than the alternate extension transfer sequence specified in 24.4 UM  Configuration—[5-4] System Parameters—Parameters—PBX Parameters—PBX Environment—Alternate Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;]).	Note  When "System" is selected, the Unified Messaging system uses the extension transfer sequence preprogrammed in 24.4  UM Configuration— [5-4] System Parameters— Parameters—PBX Parameters—PBX Environment— Alternate Extension Transfer Sequence (Up to 16 digits / [0-9* # D R F T X , ;]).	PC Programming Manual References 24.4 UM Configuration—[5-4] System Parameters— Parameters—PBX Parameters—PBX Environment— Alternate Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;]) Feature Manual References 3.2.2.8 Call Transfer Status
Call Transfer Sequence (Other)	Specifies the Call Transfer Sequence used by the mailbox. Only specified if Call Transfer Sequence (Selection) is set to "Other".	Enter a maximum of 16 characters consisting of 0–9, ×, # and special codes:  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause (default 1 s)  ;: Dial Pause (default 3 s)  X: Extension Dialling  0–9, ×, #: Dial Code	Feature Manual References 3.2.2.8 Call Transfer Status

Name	Description	Value Range	Links
No Answer Time (Selection/ Other)	Specifies the length of time that the Unified Messaging system waits before handling unanswered calls to the extension.  Note  When "System" is selected, the Unified Messaging system uses the time pre-programmed in 24.4 UM Configuration—[5-4] System Parameters—Parameters—Dialling Parameters—Call Transfer No Answer Time (10-60 s).	System, Other (If "Other" is selected, specify 10–60 s)	PC Programming Manual References 24.4 UM Configuration—[5-4] System Parameters— Parameters—Dialling Parameters/MSW Notification—Dialling Parameters—Call Transfer No Answer Time (10-60 s)
Call Transfer Status	Determines how the Unified Messaging system handles a call when it reaches the subscriber's extension. Click Edit for the extension to change, programme the settings, and click OK to finish.  Note  This setting can be changed by subscribers.	None: Rings the subscriber's extension.  Call blocking: Handles the call according to the Incomplete Call Handling for No Answer setting for the subscriber's extension. The subscriber's extension will not ring.  Call screening: The caller is prompted to record his or her name. The Unified Messaging system then calls the subscriber and plays back the caller name. The subscriber can choose whether to answer the call.  Intercom Paging: Pages the subscriber by intercom.  Transfer to Mailbox: Transfers the caller to the mailbox.  Transfer to specified  Custom Service Menu: Transfers the caller to the specified Custom Service.  Transfers the caller to one of the specified telephone number 1–5: Transfers the caller to one of the specified telephone numbers in numerical order of priority.	Feature Manual References 3.2.2.8 Call Transfer Status

Name	Description	Value Range	Links
Incomplete Call Handling for No Answer	Specifies how the Unified Messaging system handles a call when there is no answer. Click Edit for the extension to change, programme the settings, and click OK to finish.  Note  This setting can be changed by subscribers.  More than one option can be selected.	Leave a Message: Allows the caller to record a message.  Transfer to a covering extension: Transfers the caller to a covering extension.  Page the mailbox owner by intercom paging: Pages the subscriber by intercom.  Transfer to operator: Transfers the caller to an operator.  Return to top menu: Lets the caller return to top menu and try another extension.  Transfer to specified Custom Service Menu: Transfers the caller to the specified Custom Service.	Feature Manual References 3.2.2.18 Incomplete Call Handling Service
Incomplete Call Handling for Busy	Specifies how the Unified Messaging system handles a call when the extension is busy. Click Edit for the extension to change, programme the settings, and click OK to finish.  Note  This setting can be changed by subscribers.  More than one option can be selected.	Leave a Message : Allows the caller to record a message.  Transfer to a covering extension: Transfers the caller to a covering extension.  Page the mailbox owner by intercom paging: Pages the subscriber by intercom.  Transfer to operator: Transfers the caller to an operator.  Return to top menu: Lets the caller return to top menu and try another extension.  Transfer to specified Custom Service Menu: Transfers the caller to the specified Custom Service.	Feature Manual References 3.2.2.18 Incomplete Call Handling Service
Call Transfer Anytime in Incomplete Handling Menu	Specifies whether callers can input an extension number to transfer their call while the Automated Attendant service is playing an Incomplete Call Handling menu.	Enable, Disable	

### **Notification Parameters**

The Unified Messaging system is able to notify a subscriber when a new message is recorded in his or her mailbox. There are 3 methods the system can use for notification:

- Lighting the Message Waiting Lamp on the subscriber's extension telephone.
- Calling a pre-programmed device (external telephone, etc.). A maximum of 3 devices (Device 1, 2, 3) can be programmed per mailbox.
- Sending an e-mail to a designated address.

Name	Description	Value Range	Links
Message Waiting Lamp	If set to "Enable", the Message Waiting Lamp of the subscriber's telephone turns on when a new message is recorded.	Disable, Enable	Feature Manual References 3.2.1.30 Message Waiting Notification— Lamp
Telephone Device	Specifies the Message Waiting Notification schedule for each device. The following parameters can be specified for devices 1, 2, and 3. Click Edit for the extension to change, set Device Notification for Unreceived Message to "Yes", and programme the settings, then click OK to finish.		Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device No. 1, 2, 3— Notification Type	Specifies the type of message for which notification is sent. Notification can be sent for all messages, or voice messages or fax messages only.	All Messages, Voice Messages, Fax Messages	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device No. 1, 2, 3—Only Urgent Messages	Specifies if notifications will be sent only for messages designated as urgent.	Yes, No	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device

Name	Description	Value Range	Links
Telephone Device— Device No. 1, 2, 3—Dial Number [0-9 * # T X , ;]	Assigns a telephone number to Device 1, 2, or 3. The subscriber can also specify the number to be dialled by entering it from his or her telephone, allowing the subscriber to set this feature on a case by case basis.  Note  When the Unified Messaging system calls a trunk via the PRI card, be sure to add "#" after the telephone number (1112223333 in the example here): 9P1112223333#PP123PP456PPX# (P: Dial Pause) "X" is either the Caller ID information that was received when the message was recorded or the value of System Callback No. (Up to 32 digits) if no Caller ID information was received.	Max. 32 digits consisting of 0–9,   *, # and special codes:   ;: Dial Pause (default 1 s)   ;: Dial Pause (default 3 s)   T: Dial Tone Detection   X: Callback Number Entry Code   0–9, *, #: Dial Code	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device No. 1, 2, 3—No. of Retries	Specifies the number of times the Unified Messaging system will try to send notification if the device is busy or if there is no answer.	0–9 times	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device No. 1, 2, 3—Busy Delay Time (min)	Specifies the time (in minutes) the Unified Messaging system waits before retrying message notification when the called device is busy.	0–120 min	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device No. 1, 2, 3—No Answer Delay Time (min)	Specifies the time (in minutes) the Unified Messaging system waits before retrying message notification when the called device does not answer.	1–120 min	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device

Name	Description	Value Range	Links
Telephone Device— Device No. 1, 2, 3—Use Mode	Specifies if and how each device is used for message notification. The subscriber can also specify the use mode from his or her telephone.  Schedule: If Scheduled is selected here, follow the steps below to specify the time frame:  1. Select a day from the Day drop-down list (Sunday – Saturday).  2. Click Enable Time Frame No. 1 or 2.  3. Enter the start and end times in the Start At (HH:MM) and End At (HH:MM) fields.  4. Repeat steps 1 to 3 for each day to be programmed, and then click OK.	Not use: The selected device is not used for message notification. Continuously: The device is called whenever a message is recorded in the mailbox. If Only Urgent Messages is set to "Yes", the device is called whenever an urgent message is recorded in the mailbox. Scheduled: The selected device is called only during the selected times.	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device Notification Timer— Device Start Delay Time (0-120 min)	Specifies the length of time the system waits after a new message is received before sending message waiting notification.	0–120 min	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device
Telephone Device— Device Notification Timer— Device Interval Time between Device 1, 2, 3 and Next Device	Specifies how long the PBX waits after sending Message Waiting Notification to Device 1, 2, or 3 before sending notification to the next device.	0–120 min	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device

Name	Description	Value Range	Links
E-mail/Text Message Device— Device No. 1, 2, 3—User Name	Specifies the name of the user of the device.	Max. 64 characters	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—E-mail Address	Note  In the mailbox user's profile (See 8.1 Users—User Profiles) if Email 1–3 is input in the Contact tab, and Automatic copy to UM message notification is checked, the e-mail address(es) will be copied to this setting and overwrite any previously input data here.	Max. 128 characters	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3— Notification Type	Specifies the type of Message Waiting Notification to be sent. Notification can be sent for all messages, or voice messages or fax messages only.	All Messages, Voice Messages, Fax Messages	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—Only Urgent Messages	Specifies if Message Waiting Notifications will be sent only for urgent messages.	Yes, No	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—Title Order	Specifies the format of the title of the notification.	Title-ID-Name, Title-Name-ID, ID-Title-Name, Name-Title-ID, ID-Name-Title, Name-ID-Title	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device

Name	Description	Value Range	Links
E-mail/Text Message Device— Device No. 1, 2, 3—Title String	Specifies the text string to be included as part of the title of the notification.	Max. 30 characters	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—Callback Number	Specifies the callback number to be included in the notification.	Max. 32 digits (0–9, *, #)	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—Send Wait Time [0-120 min]	Specifies the delay between the message being left and the sending of the Message Waiting Notification.	0–120 min	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—Attach Voice File	Specifies whether to attach a voice file of the voice message to the notification e-mail.	Yes, No	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
E-mail/Text Message Device— Device No. 1, 2, 3—Attach Fax File	Specifies whether to attach a fax image file of fax messages to the notification e-mail.	Yes, No	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device

Name	Description	Value Range	Links
E-mail/Text Message Device— Device No. 1, 2, 3—Use Mode	Specifies if and how each device is used for message notification.  If Scheduled is selected here, follow the steps below to specify the time frame:  1. Click a day (Sunday – Saturday) tab.  2. Click Enable Time Frame No. 1 or 2.  3. Enter the start and end times in the Start At (HH:MM) and End At (HH:MM) fields.  4. To specify if sent voice message or fax image files are deleted from the Unified Message system after they are sent by email, select "Yes" for Delete After Send (Voice File) or Delete After Send (Fax File).  5. Repeat steps 1 to 4 for each day to be programmed, and then click OK.  Note  If voice message or fax image files are set to be deleted after they are sent by e-mail, be aware that a deleted file cannot be recovered in the event that the e-mail is not sent successfully.	Not use: The selected device is not used for message notification.  Continuously: The device is called whenever a message is recorded in the mailbox. If Only Urgent Messages is set to "Yes", the device is called whenever an urgent message is recorded in the mailbox.  Scheduled: The selected device is called only during the selected times.	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device

### **External MSG Delivery/Auto FWD/Personal Custom Serv**

This tab contains programming items for External Message Delivery, Auto Forwarding, and Personal Custom Service settings.

Name	Description	Value Range	Links
External Message Delivery	If set to "Yes", subscribers are able to utilise the External Message Delivery feature.	No, Yes	Feature Manual References
Active			3.2.2.13 External Message Delivery Service

Name	Description	Value Range	Links
External Message Delivery Prompt Mode	When an external message is delivered, the receiver will be greeted by the system in the specified language. If set to "Primary", the default language will be used. If set to "Selective", the receiver has a choice of prompts. See related explanation in 22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group—Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt.  Note  If set to "Selective" and the receiver uses a rotary telephone, the no-entry selection is specified by 22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group—Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt.	Primary, Selective, Guidance No. 1–8	PC Programming Manual References 22.1 UM Configuration— [3-1] UM Extension / Trunk Service— Service Group— Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt Feature Manual References 3.2.1.42 System Prompts
Auto Forwarding Active	If set to "Yes", the Unified Messaging system automatically forwards messages that have not been played for a specified length of time to another mailbox.	No, Yes	Feature Manual References 3.2.1.2 Auto Forwarding
Auto Forwarding Mailbox Number	Specifies the mailbox to which the messages will be forwarded.  Note  A Mailbox Group number cannot be specified as a destination.	2-[the value set in Mailbox No. Max. Length (3-8)] digits	Feature Manual References 3.2.1.2 Auto Forwarding
Auto Forwarding Delay Time	Specifies the length of time in hours and minutes that the system waits before forwarding unplayed messages. The maximum delay time is 99 h, 59 min.  Note  The delay time must be shorter than the New Message Retention Time, or else messages will be deleted before being forwarded.	00:00–99:59	Feature Manual References 3.2.1.2 Auto Forwarding
Auto Forwarding Message Type	Specifies whether all messages, or only voice messages or only fax messages are forwarded.	All Messages, Voice Messages, Fax Messages	Feature Manual References 3.2.1.2 Auto Forwarding

Name	Description	Value Range	Links
Auto Forwarding Message Type Urgent	Specifies whether only urgent messages are forwarded.	Yes, No	Feature Manual References 3.2.1.2 Auto Forwarding
Auto Forwarding Mode	Specifies if forwarded messages are to be retained in the original mailbox. When set to "Copy", copies of the messages are retained in the original mailbox after forwarding. When set to "Move", messages are forwarded to the receiving mailbox and are not retained in the original mailbox.	Copy, Move	Feature Manual References 3.2.1.2 Auto Forwarding
Auto Forwarding Mode - Message Remains New	Specifies if the forwarded messages remain marked as new. This setting is available only when <b>Auto</b> Forwarding Mode is set to "Copy".	Yes, No	Feature Manual References 3.2.1.2 Auto Forwarding
Auto Forwarding Expires	Specifies the date and time of day for when forwarding of messages will expire.	Date and time	Feature Manual References 3.2.1.2 Auto Forwarding

Name	Description	Value Range	Links
	Specifies the Personal Custom Service. The System Administrator can assign an operation to each key.  Note  • These settings can be changed by subscribers.	Transfer to specified mailbox: 2-[the value set in Mailbox No. Max. Length (3-8)] digits	Feature Manual References 3.2.2.24 Personal Custom Service
	<ul> <li>Make sure to add a trunk access number when you store an outside telephone number.</li> <li>When the Unified Messaging system calls a trunk via the PRI card, be sure to add "#" after the telephone number</li> </ul>	<ul> <li>Transfer to specified extension: 2–8 digits</li> <li>Transfer to specified Custom Service Menu: 1–200</li> <li>Transfer to outside (specified number): Outside Number 1–4</li> </ul>	
	(1112223333 in the example here): 9P1112223333#PP123PP456PPX# (P: Dial Pause) Follow the steps below to edit a Personal Custom Service.		
	1. Click Edit.		
	2. For each Key, specify an Assigned Operation.		
	3. For each Assigned Operation that is specified, specify a Value		
	4. Click <b>OK</b> when finished.		

Name	Description	Value Range	Links
	<ul> <li>Transfer to specified mailbox: Allow the caller to leave messages in a specified mailbox.</li> <li>Transfer to specified extension: Transfers the caller to a specified extension.</li> <li>Transfer to Voice Mail Service: Allows the caller to access Voice Mail Service.</li> <li>Transfer to Automated Attendant Service: Allows the caller to access Automated Attendant Service.</li> <li>Transfer to specified Custom Service Menu: Transfers the caller to the Custom Service specified here.</li> <li>Transfer to operator: Connects the caller to an operator.</li> <li>Transfer to a specified number): Transfers the caller to a specified outside telephone number. Enter a number from the Outside Numbers list (1–4).</li> <li>Page the party: Pages the subscriber.</li> <li>Repeat greeting: Repeats the greeting.</li> <li>None: No operation assigned.</li> </ul>	<ul> <li>Transfer to specified mailbox: 2-[the value set in Mailbox No. Max. Length (3-8)] digits</li> <li>Transfer to specified extension: 2-8 digits</li> <li>Transfer to specified Custom Service Menu: 1-200</li> <li>Transfer to outside (specified number): Outside Number 1-4</li> </ul>	
Outside Numbers	Specifies the outside telephone numbers that can be used for the "Transfer to outside (specified number)" operation in the <b>Custom Service</b> settings. Click <b>OK</b> when finished.	Outside Number #1-#4: Max. 32 digits consisting of 0-9, $\times$ , #, and special codes T: Dial Tone Detection ,: Dial Pause (default 1 s) ;: Dial Pause (default 3 s) 0-9, $\times$ , #: Dial Code	Feature Manual References 3.2.2.24 Personal Custom Service

Name	Description	Value Range	Links
No DTMF Input Operation	Specifies the operation taken when no DTMF input (a caller does not dial anything) is received after the Personal Greeting.	Recording: The caller will be guided to leave a message.  Disconnect (All Day): The line will be disconnected, regardless of the time of day.  Disconnect (Only After Hours): The line will be disconnected only after hours.	Feature Manual References 3.2.2.24 Personal Custom Service
No DTMF Input Operation Wait Time	Specifies the duration of time to wait for DTMF input before the action set in <b>No DTMF Input Operation</b> is performed.	0–10 s	Feature Manual References 3.2.2.24 Personal Custom Service

#### **Personal Distribution List**

Personal Distribution Lists are used to send the same messages to several mailboxes in a single operation. A maximum of 4 lists can be maintained with each list containing a maximum of 40 mailboxes.

Name	Description	Value Range	Links
List 1 Name– List 4 Name	Specifies a list name.	Max. 32 characters	Feature Manual References
			3.2.2.17 Group Distribution Lists

Name	Description	Value Range	Links
List 1 Members–List 4 Members	Specifies the mailbox numbers that belong to the list. Follow the steps below to edit list members.  1. Click Edit for a List Members item.  2. Under Subscribers To Add, click the checkbox in No. for each mailbox to add,	Max. 40 mailboxes per list	Feature Manual References 3.2.2.17 Group Distribution Lists
	referring to the mailbox numbers and mailbox owners' names.		
	3. Click Add.		
	<b>4.</b> Click <b>OK</b> . Follow the steps below to remove members from a list.		
	<ol> <li>Click Edit for Personal Distribution Lists (1–</li> <li>Members item.</li> </ol>		
	2. Under <b>Distribution</b> , click the checkbox in <b>No.</b> for each mailbox to add, referring to the mailbox numbers and mailbox owners' names.		
	3. Click Delete.		
	4. Click OK.		

### Remote Call/Automatic Login/Direct Service

This tab contains programming items for Remote Call Forwarding, Automatic Login, and Direct Service settings.

Name	Description	Value Range	Links
Remote Call Telephone Number 1, 2	Specifies the telephone numbers of destinations to which callers are forwarded when the subscriber sets Remote Call Forwarding. 2 telephone numbers can be specified per mailbox. Telephone numbers can contain the digits "0–9" and "**. These telephone numbers should begin with a trunk access number.  Note  Class of Service programming determines if the subscriber is able to use this feature.	Max. 32 digits (consisting of 0–9 and "**)	PC Programming Manual References 21.1 UM Configuration—[2] Class of Service— Call Transfer to Outside Feature Manual References 3.2.2.29 Remote Call Forwarding Set

Name	Description	Value Range	Links
Auto Login Extension	When this item is set to "Enable", subscribers are able to access their mailbox directly without entering the mailbox number. Subscribers can automatically log in from their extensions, by calling from an outside telephone whose number is stored as a Caller ID number, or by dialling a telephone number assigned to a specified DID number or trunk. When logging in from outside telephones, the Toll Saver feature is also available.	Disable, Enable	Feature Manual References 3.2.2.3 Automatic Login
Auto Login Extension Password Entry Requirement	Specifies if a password is required for the Automatic Login Extension feature.  Notice  If this is set to "No", ensure that unauthorised third-parties are not allowed access to that mailbox.	Yes, No	Feature Manual References 3.2.2.3 Automatic Login
Auto Login Caller ID 1, 2	Specifies the telephone number from which the subscriber can automatically be logged in from. When Caller ID information is received that matches one of these numbers, the caller (subscriber) is automatically logged in to the mailbox. Note that this telephone number must be unique for each mailbox.	Max. 20 digits	Feature Manual References 3.2.2.3 Automatic Login
Auto Login Caller ID Password Entry Requirement	Specifies if a password is required for entry when automatic login is performed using the Caller ID of the number set in Auto Login Caller ID 1 or Auto Login Caller ID 2.	Yes, No  Notice  If this is set to "No", ensure that unauthorised third- parties are not allowed access to that mailbox using the number assigned to Auto Login Caller ID 1 or Auto Login Caller ID 2.	Feature Manual References 3.2.2.3 Automatic Login

Name	Description	Value Range	Links
Auto Login DDI/DID	Specifies the DDI/DID number for Automatic Login. When the Unified Messaging system receives this DDI/DID number from the PBX, the caller (subscriber) is automatically logged in to the mailbox. Note that this number must be unique for each mailbox.	Max. 20 digits	Feature Manual References 3.2.2.3 Automatic Login
Auto Login TRG No.	Specifies the trunk number for Automatic Login. When the Unified Messaging system receives a call on this trunk, the caller (subscriber) is automatically logged in to the mailbox. Note that this number must be unique for each mailbox.	1–96	Feature Manual References 3.2.2.3 Automatic Login
Auto Login DDI/DID, TRG No. Password Entry Requirement	Specifies if a password is required for entry when automatic login is performed using the trunk group number or the DID number.	Yes, No  Notice  If this is set to "No", ensure that unauthorised third- parties are not allowed access to any extensions using the specified trunk group number.	Feature Manual References 3.2.2.3 Automatic Login
Auto Login Toll Saver	Allows subscribers to call the Unified Messaging system and know whether or not new messages have been recorded in their mailboxes by the number of rings they hear before the Unified Messaging system answers their calls. Toll Saver is available under the same conditions as Automatic Login; subscribers can use Toll Saver when calling from an outside telephone whose number is stored as a Caller ID number, or by dialling a telephone number assigned to a specified DID number or trunk.	Disable: Disables the Toll Saver feature. DID: Toll Saver functions when the system receives the pre-programmed DID number from the PBX. Caller ID: Toll Saver functions when Caller ID information is received that matches one of the pre-programmed numbers (Caller ID 1 or 2). Trunk: Toll Saver functions when the system receives a call on the pre-programmed trunk.	Feature Manual References 3.2.2.33 Toll Saver

Name	Description	Value Range	Links
Direct Service UM Extension	Specifies which features can be directly accessed by dialling a Unified Messaging extension number. This setting can only be specified for Unified Messaging extension numbers.  Note  Automatic Login must be enabled for extensions to use this feature.	Record No Answer Greeting: The subscriber can record the greeting played when there is no answer. Record Busy Greeting: The subscriber can record the greeting played when their extension is busy. Record After Hours Greeting: The subscriber can record the greeting played when the system is in night mode. Record Temporary Greeting: The subscriber can record a greeting that is used exclusively until the subscriber disables it. Change Day Main Menu: The subscriber can change the Day Main Menu greeting. Only the Message Manager may make this change. Change Right Main Menu greeting. Only the Message Manager may make this change. Change Emergency Greeting: The subscriber can change the Emergency Greeting. Only the Message Manager may make this change.	PC Programming Manual References 9.7 PBX Configuration—[1-1] Configuration—Slot —UM Port Property 20.1.2 UM Configuration—[1-2] Mailbox Settings— Full Setting— Remote Call/ Automatic Login/ Direct Service—Auto Login Extension Feature Manual References 3.2.2.12 Direct Service Access

### **Fax Options**

Name	Description	Value Range	Links
Automatic Delivery Status	Specifies whether Automatic Delivery is used to automatically forward received faxes to a specified fax machine.	No, Yes	Feature Manual References 3.2.2.2 Automatic Fax Delivery

Name	Description	Value Range	Links
Automatic Delivery Status Default Fax Number [0-9 * # T,;]	Specifies the default number for which to send automatically delivered faxes.	Max. 32 digits consisting of 0– 9, *, # and special codes: ,: Dial Pause (default 1 s) ;: Dial Pause (default 3 s) T: Dial Tone Detection 0–9, *, #: Dial Code	Feature Manual References 3.2.2.2 Automatic Fax Delivery
Automatic Delivery Status Printed Fax Message	Specifies if automatically forwarded faxes are marked as "old" or "new", or deleted.	Delete Automatically, Save as Old, Save as New	Feature Manual References 3.2.2.2 Automatic Fax Delivery
Play Voice/Fax Selection Menu	Specifies if the subscriber will be prompted to choose which messages will be played: either voice messages, information about waiting fax messages, or all messages.	Yes, No	Feature Manual References 3.2.2.2 Automatic Fax Delivery
Fax Number Confirmation	Specifies if a dialled fax number must be reentered for confirmation before sending.	Disable, Enable	
No Space for Receiving Coverage Mode	Specifies the action taken when there is not enough free space in the mailbox to save a fax message in the mailbox.	Transfer to Fax Extension: Transfers the fax to a specified fax extension. Receive in GDM: The fax is redirected to the general delivery mailbox. No Receiving: The fax message is not received and the system goes on hook.	PC Programming Manual References 24.4 UM Configuration—[5-4] System Parameters— Parameters—Fax Management
		Note  If no fax extension is specified but Transfer to Fax Extension is selected, the system will go on hook.	
Cover Page Language	Specifies the language used for the set information generated for fax cover pages.	English (US), English (UK), French, CA French, German, Swedish, Italian, Dutch, Portuguese, Spanish, Norwegian, Danish, Polish, Hungarian, Czech, Russian, Greek, Ukrainian	Feature Manual References 3.2.2.14 Fax Cover Page

### **Announce Number of Messages**

Name	Description	Value Range	Links
Subscriber Service - All New Messages	Specifies if the system announces to subscribers the number of only new messages in their mailbox when the subscriber logs in.	Yes, No	
Subscriber Service - All Messages	Specifies if the system announces to subscribers the number of all messages in their mailbox when the subscriber logs in.	Yes, No	
Subscriber Service - New Voice Messages	Specifies if the system announces to subscribers the number of only new voice messages in their mailbox when the subscriber logs in.	Yes, No	
Subscriber Service - New Fax Messages	Specifies if the system announces to subscribers the number of only new fax messages in their mailbox when the subscriber logs in.	Yes, No	
Subscriber Service - New Urgent Messages	Specifies if the system announces to subscribers the number of only new messages marked as urgent in their mailbox when the subscriber logs in.	Yes, No	
Receiving Message Service - All New Messages	Specifies if the system announces to subscribers the number of only new messages in their mailbox when the subscriber has selected to listen to messages.	Yes, No	
Receiving Message Service - All Messages	Specifies if the system announces to subscribers the number of all messages in their mailbox when the subscriber has selected to listen to messages.	Yes, No	
Receiving Message Service - New Voice Messages	Specifies if the system announces to subscribers the number of only new voice messages in their mailbox when the subscriber has selected to listen to messages.	Yes, No	
Receiving Message Service - New Fax Messages	Specifies if the system announces to subscribers the number of only new fax messages in their mailbox when the subscriber has selected to listen to messages.	Yes, No	
Receiving Message Service - New Urgent Messages	Specifies if the system announces to subscribers the number of only new urgent messages in their mailbox when the subscriber has selected to listen to messages.	Yes, No	
Message Client Display Language	Specifies the language of information generated by the UM system for the mail (IMAP) client.	English, German, French, Italian, Spanish, Dutch, Portuguese, Russian	

### **Quick Menu and Greeting Recording**

Name	Description	Value Range	Links
Quick Menu and Greeting	When this setting is enabled for the Message Manager mailbox, the following features are	Enable, Disable	PC Programming Manual References
Recording	enabled for the Message Manager to access greeting and recording management menus quickly.		23.3 UM Configuration— [4-3] Service Settings— Custom Service
	Custom Service Menu messages for Custom Service 1 and 2 can be recorded and changed from the Top Menu.		Feature Manual References
	Company Greeting No. 1 can be recorded and changed from the Top Menu. This is useful for recording the Emergency Greeting.		3.2.1.17 Emergency Greeting

## 20.1.3 UM Configuration—[1-3] Mailbox Settings—Auto Configuration

Auto Configuration automatically associates extension numbers and mailboxes in bulk. This feature is available at the Installer level only.

Name	Description	Value Range	Links
Select the following options	Specifies Auto configuration mode from the following.  Note  In Re-create all mailboxes mode, all voice data is deleted, including data that is recorded in mailboxes. It is strongly recommended that you backup the voice data that has been recorded in mailboxes.  Backed up voice data can be restored as sound data on a PC by using special software tools. For details, consult the seller where you purchased this PBX.	Create mailboxes Re-create all mailboxes	Installation Manual References 5.12 Automatic Configuration of Mailboxes Feature Manual References 3.1.2.1 Automatic Configuration of Mailboxes
Select UM group where mailboxes are created	Specifies the site where mailboxes are created.	Create mailboxes to the UM group of the PBX where extensions belong to (default) Create mailboxes to the specified UM group (You can select site number from 1-16)	Installation Manual References 5.12 Automatic Configuration of Mailboxes Feature Manual References 3.1.2.1 Automatic Configuration of Mailboxes

# Section 21 UM Configuration—[2] Class of Service

This section serves as reference operating instructions for the Class of Service menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

## 21.1 UM Configuration—[2] Class of Service

Each mailbox is assigned a Class of Service (COS) that determines the set of services that are available to its subscriber. There are 514 classes. Mailboxes can be assigned to their own or to the same COS as needed. COS No. 513 and 514 are assigned by default to the Message Manager and to the System Manager, respectively.

No other mailboxes can be assigned to COS No. 513 and 514.

#### **General**

Name	Description	Value Range	Links
Class Of Service	Specifies the Class of Service's name.	Max. 32 characters	Feature Manual References
Name			3.2.1.11 Class of Service (COS)
Prompt Mode	Specifies the language used for system prompts played for the subscriber during	Primary, Guidance No. 1–	PC Programming Manual References
	Subscriber Service. If set to "Primary", the default language which is selected from all installed languages will be used.	24.4 UM Configuration— [5-4] System Parameters —Parameters—Prompt Setting—Primary Language	
			Feature Manual References 3.2.1.42 System Prompts
Directory Listing	If set to "Yes", the subscriber's name and extension number will be listed in the directory (Dialling by Name).	No, Yes	Feature Manual References 3.2.1.16 Dialling by Name
	Note		
	This setting is not available for COS 514 (System Manager).		

Name	Description	Value Range	Links
Tutorial	The tutorial is a series of voice prompts for setting up the mailbox that is played to subscribers when they first log in to their mailbox. This item specifies if subscribers in the Class of Service hear a normal tutorial, a simplified tutorial, or no tutorial when they first log in to their mailbox.  In the tutorial, subscribers are asked to provide:  — A password  — The mailbox owner's name  — Personal Greetings (No Answer Greeting, Busy Signal Greeting, After Hours Greeting)	Normal: A navigation voice menu is given for each step. Simplified: Only direct prompts are given for making each setting. For Personal Greetings, only a No Answer Greeting can be set. None: No tutorial is played and settings for the mailbox must be made manually.	Feature Manual References 3.2.2.31 Subscriber Tutorial
Call-through Service	Specifies if subscribers in the Class of Service can make outside calls by accessing the subscriber service menu (from an outside telephone) and dialling an outside destination.	Yes, No	Feature Manual References 3.2.2.6 Call-through Service
Remote Call Forward to CO	Select if subscribers in the Class of Service can perform a Remote Call Forward to CO.	Yes, No	Feature Manual References 3.1.1 Unified Messaging System Overview
E-mail Option	Specifies if subscribers in the Class of Service can receive notifications by email when they have a new message waiting.	Yes, No	Feature Manual References 3.2.1.29 Message Waiting Notification—E- mail Device
Fax Option	Specifies if subscribers in the Class of Service can use the fax functions of the Unified Messaging system, such as sending and receiving faxes.	Yes, No	
Desktop Messaging	Specifies if subscribers in the Class of Service can access the contents of their mailboxes with an e-mail application using IMAP. This includes the Microsoft Outlook® e-mail client plug-in.	Yes, No	Feature Manual References 3.3.1 Integration with Microsoft Outlook
System Manager Authority	Specifies if subscribers in the Class of Service have access to the Unified Messaging system as a System Manager.	Yes, No	Feature Manual References 3.1.1 Unified Messaging System Overview

Name	Description	Value Range	Links
Message Manager Authority	Specifies if subscribers in the Class of Service have access to the Unified Messaging system as a Message Manager.	Yes, No	Feature Manual References 3.1.1 Unified Messaging System Overview

#### **Mailbox**

Name	Description	Value Range	Links
Personal Greeting Length (s)	Defines the maximum length (in seconds) of Personal Greetings for subscribers in the Class of Service.  Note  This setting is not available for COS 513 (Message Manager) and COS 514 (System Manager).	1–360 s	Feature Manual References 3.2.2.25 Personal Greetings
Message Length (Selection)	Specifies if the length of messages left for subscribers in the Class of Service are unlimited in duration or have a specified time limit. If set to "Unlimited", the maximum recording time is 60 minutes, and the maximum recording time for two-way conversations (Two-way Record and Two-way Transfer) is unlimited.	Unlimited, Limited	
Message Length (Limited) (min)	Specifies the maximum recording time for messages left to subscribers in the Class of Service. Only specified if Message Length (Selection) is set to "Limited".	1–60 min	
Mailbox Capacity Maximum Message Time (Selection)	Specifies if a maximum limit is applied to the total amount of messages (new and saved) for mailboxes of subscribers in the Class of Service.	Unlimited, Limited	
Mailbox Capacity Maximum Message Time (Limited) (min)	Specifies the total number of available minutes for storing messages (both new and saved) for mailboxes of subscribers in the Class of Service. Only specified if Mailbox Capacity Maximum Message Time (Selection) is set to "Limited".	1–600 min	
New Message Retention Time (Selection)	Specifies if a retention time limit is applied to new messages in mailboxes of subscribers in the Class of Service. If "Unlimited" is selected, new messages will remain in the mailbox until erased by the subscriber.	Unlimited, Limited	

Name	Description	Value Range	Links
New Message Retention Time (Limited) (days)	Defines the number of days that new messages will remain in mailboxes for subscribers in the Class of Service. The storage period begins the day after the message reception. Only specified if New Message Retention Time (Selection) is set to "Limited".	1–30 days	
Saved Message Retention Time (Selection)	Specifies if a retention time limit is applied to saved messages in mailboxes of subscribers in the Class of Service. If "Unlimited" is selected, saved messages will remain in the mailbox until erased by the subscriber.	Unlimited, Limited	
Saved Message Retention Time (Limited) (days)	Defines the number of days that saved messages will remain in mailboxes for subscribers in the Class of Service. Only specified if Saved Message Retention Time (Selection) is set to "Limited".	1–30 days	
Message Retrieval Order	Specifies the order in which messages will be retrieved for subscribers in the Class of Service (played back for listening).	LIFO: Messages are retrieved starting with the most recent (Last In First Out). FIFO: Messages are retrieved starting with the oldest (First In First Out).	
Number of CIDs for Caller Name Announcement (Selection)	Specifies if subscribers in the Class of Service can assign telephone numbers for the Personal Caller Name Announcement feature.	None, Other	
	Note  This setting is not available for COS 513 (Message Manager) and COS 514 (System Manager).		
Number of CIDs for Caller Name Announcement (Other)	Specifies the maximum number of telephone numbers that subscribers in the Class of Service can assign for the Personal Caller Name Announcement feature. Only specified if Number of CIDs for Caller Name Announcement (Selection) is set to "Other".	1–30	

Name	Description	Value Range	Links
Message Envelope Setting	Specifies when message envelopes (message date and time, name of the person who recorded or transferred the message, telephone number of the caller) are announced.	Before: The system announces the message envelope before playing the recorded message.  After: The system announces the message envelope after playing the recorded message.  Require: The system announces the message envelope after playing the recorded message.  Require: The system announces the message envelope when the user presses the appropriate dial key as prompted when listening to the message.	
Mailbox Capacity Warning (Selection)	Specifies if the system alerts mailbox subscribers in the Class of Service that the programmed recording time for their mailboxes is reaching its set amount of message storage time. If set to "None", the warning will not be announced.	None, Other	
Mailbox Capacity Warning (Other) (min)	Specifies when the system alerts mailbox subscribers in the Class of Service that the programmed recording time for mailboxes is reaching its set amount of message storage time. The setting indicates the remaining recording time capacity threshold for when the announcement is heard. Only specified if Mailbox Capacity Warning (Selection) is set to "Other".	1–60 min	

Name	Description	Value Range	Links
Play System Prompt after Personal Greeting	If set to "Yes", directions for recording a message are given to the caller immediately after the personal greeting of the subscriber in the Class of Service has been played.  Note	No, Yes	
	This setting is not available for COS 513 (Message Manager) and COS 514 (System Manager).		
Message Cancel for Live Call Screening	If set to "Yes", the caller's message will be deleted when a subscriber in the Class of Service answers a call via Live Call Screening while the caller is leaving a message.  Note  This setting is not available for COS 514	No, Yes	Feature Manual References 3.2.2.19 Live Call Screening (LCS)
	(System Manager).		
Delete Message Confirmation	If set to "Yes", the system requests confirmation from subscribers in the Class of Service before erasing a message in the mailbox. If set to "No", the message is erased immediately.	No, Yes	
Personal Greeting for Caller ID	If set to "Yes", subscribers in the Class of Service can record personal greetings that are played for specific callers only (Personal Greeting for Caller ID).  Note	No, Yes	Feature Manual References 3.2.2.25 Personal
	This setting is not available for COS 513 (Message Manager) and COS 514 (System Manager).		Greetings
Caller ID Callback	If set to "Yes", subscribers in the Class of Service can call the caller back while listening to the caller's message (Caller ID Callback).	No, Yes	Feature Manual References
			3.2.2.10 Caller ID Callback
Auto Receipt	If set to "Yes", subscribers in the Class of Service can request to receive confirmation when their message has been listened to by the message recipient.	No, Yes	Feature Manual References 3.2.2.1 Auto Receipt
Autoplay New Message	If set to "Yes", the system plays new messages automatically when subscribers in the Class of Service log into their mailboxes.	No, Yes	

Name	Description	Value Range	Links
Play New Messages Sequentially	If set to "Yes", the system plays all new messages for subscribers in the Class of Service sequentially without system prompts. The subscriber's Service Top Menu will be heard after all of the messages are played. This feature is only available when Autoplay New Message is set to "Yes".	No, Yes	
First Playback Urgent Message	If set to "Yes", the system plays urgent messages before regular messages for subscribers in the Class of Service.	No, Yes	Feature Manual References 3.2.2.35 Urgent Message
Announce Message Transferred Information	If set to "Yes", the system plays the information of transferred messages to subscribers in the Class of Service before playing the messages.	No, Yes	
Caller ID Number Announcement	Specifies whether or not the system announces the Caller ID number when a subscriber in the Class of Service plays a message left by a caller, if their name has not been recorded for the Caller Name Announcement feature. If the name has been recorded, it will be announced regardless of this setting.	No, Yes	
	Note  If "Caller ID Callback" is set to "Yes", Caller ID numbers will be announced regardless of this setting (see 21.1 UM Configuration —[2] Class of Service—Mailbox—Caller ID Callback).		
Announce Option Menu after Erasing Message	If set to "Yes", the system plays the option menu after erasing a message for subscribers in the Class of Service. If set to "No", the system plays the next message automatically without playing the option menu.	No, Yes	
New Message Length Announcement	If set to "Yes", the system announces the total length of new messages when the number of new messages is announced for subscribers in the Class of Service.	No, Yes	
Password Expiry Period (Selection)	Specifies if the mailbox passwords for subscribers in the Class of Service will expire after a set time.	Disable, Other	Feature Manual References 3.1.2.4 Password Administration

Name	Description	Value Range	Links
Password Expiry Period (Other)	Specifies the number of days a set mailbox password will be used before it expires and the system prompts the subscriber for a new password. This feature is only available when <b>Password Expiry Period (Selection)</b> is set to "Other".	5–200 days	Feature Manual References 3.1.2.4 Password Administration
Two-way Recorded Message Save Mode	Specifies whether two-way recording sessions are saved in the mailboxes of subscribers in the Class of Service as "old" or "new" messages.	Save as Old, Save as New	Feature Manual References 3.2.2.34 Two- way Record/ Two-way Transfer

#### **Call Transfer**

Name	Description	Value Range	Links
Intercom Paging	Specifies the Intercom Paging group number available to subscribers in the Class of Service.	1–32	PC Programming Manual References
Group	Note  This setting is not available for COS 513 (Message Manager).		24.4 UM Configuration —[5-4] System Parameters— Parameters—Intercom Paging Parameters
Use Call Waiting on Busy	If set to "Yes", the system signals subscribers in the Class of Service when they are on a call and another call is received.  Note	No, Yes	
	This setting is not available for COS 513 (Message Manager).		
Caller ID Screen	If set to "Yes", subscribers in the Class of Service can hear the pre-recorded names of callers when	No, Yes	Feature Manual References
	they receive calls (Caller ID Screening).  Note  This setting is not available for COS 513 (Message Manager).		3.2.1 System Features —3.2.1.9 Caller ID Screening
Notify of Transfer	If set to "Yes", subscribers in the Class of Service will hear "You have a call." when they answer transferred calls.	No, Yes	

Name	Description	Value Range	Links
Call Transfer to Outside	If set to "Yes", the system allows calls to be transferred to a trunk via the following features: Custom Service, Caller ID Callback, Call Transfer Service, Personal Custom Service, Call-through Service.	No, Yes	Feature Manual References 3.2.1.7 Call Transfer to Outside
	Note  This setting is not available for COS 513 (Message Manager).		

## **Hospitality Mode**

Name	Description	Value Range	Links
Hospitality Mode	Specifies whether subscribers in the Class of Service have the Hospitality Mode enabled. (For use with extensions for hotel rooms, etc.) This setting must be set to "Yes" to enable other Hospitality Mode settings. When this item is set to "Yes", only the following options are made available to subscribers:  Listen to Messages  Password  Personal Greetings  Owner Name	No, Yes	Feature Manual References 3.2.1.22 Hospitality Mode
Password	Specifies if subscribers in the Class of Service are given a voice prompt selection to change their password when accessing their mailbox.	No, Yes	PC Programming Manual References 20.1.2 UM Configuration— [1-2] Mailbox Settings—Full Setting—Mailbox Parameters Feature Manual References 3.2.1.22 Hospitality Mode
Personal Greeting	Specifies if subscribers in the Class of Service are given a voice prompt selection to change their Personal Greeting when accessing their mailbox.  Note  For the Personal Greeting of subscribers in a Class of Service with Hospitality mode enabled, only No Answer and Busy greetings can be set.	No, Yes	Feature Manual References 3.2.1.22 Hospitality Mode 3.2.2.25 Personal Greetings

Name	Description	Value Range	Links
Owner Name	Specifies if subscribers in the Class of Service are given a voice prompt selection to change the mailbox owner's name when accessing their mailbox.	No, Yes	Feature Manual References 3.2.1.22 Hospitality Mode
Erase When Check Out - Password	Specifies if the password of the subscriber in the Class of Service is erased when the subscriber's extension is set to the "Check Out" status.	No, Yes	Feature Manual References 2.23.1 Hospitality Features —SUMMARY 3.2.1.22 Hospitality Mode
Erase When Check Out - Personal Greeting	Specifies if the Personal Greeting of the subscriber in the Class of Service is erased when the subscriber's extension is set to the "Check Out" status.	No, Yes	Feature Manual References 2.23.1 Hospitality Features —SUMMARY 3.2.1.22 Hospitality Mode
Erase When Check Out - Owner Name	Specifies if the Owner Name of the subscriber in the Class of Service is erased when the subscriber's extension is set to the "Check Out" status.	No, Yes	Feature Manual References 2.23.1 Hospitality Features —SUMMARY 3.2.1.22 Hospitality Mode

## Section 22

## UM Configuration—[3] UM Extension / Trunk Service

This section serves as reference operating instructions for the Port/Trunk Service menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

## 22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group

The parameters of Service Groups determine how calls are handled throughout the day. Each Service Group (therefore each port) can have a different call service for each time mode (day, night, lunch, break). One of 6 incoming call services (Voice Mail, Automated Attendant, Interview, Custom Service, Fax, or Transfer to Mailbox) can be assigned to each call service.

Once one or more service groups are set, you can assign the service groups to each UM port in 22.2 UM Configuration—[3-2] UM Extension / Trunk Service—Port Assignment.

Name	Description	Value Range	Links
Day, Night, Lunch, and Break Mode - Company Greeting No. (Selection)	Specifies the greeting to be heard by callers, the System Greeting, another message, or no greeting. The System Greeting is "Good morning/Good afternoon/Good evening. Welcome to the Unified Messaging System.".  Each call service can have its own setting.	None, System, Other	Feature Manual References 3.2.1.12 Company Greeting
Day, Night, Lunch, and Break Mode - Company Greeting No. (Other)	Specifies the number of the greeting message to use when "Other" is specified for the greeting selection.	1–32	Feature Manual References 3.2.1.12 Company Greeting
Day, Night, Lunch, and Break Mode - Incoming Call Service	Specifies the incoming call service used to handle calls.	Voice Mail Service, Automated Attendant, Interview Mailbox, Custom Service, Fax Service, Transfer to Mailbox	

Name	Description	Value Range	Links
Day, Night, Lunch, and Break Mode - Incoming Call Service Parameter	Specifies the parameter for the type of Incoming Call Service specified. This is disabled if "Voice Mail Service" or "Automated Attendant" is selected for the Incoming Call Service.	Interview Mailbox: Mailbox number Custom Service: Custom Service number (1–200) Fax Service: Mailbox number Transfer to Mailbox: Mailbox number	
		Mailbox numbers are between 2 digits and the value set in Mailbox No. Max. Length (3-8).	
Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt	Specifies the language of system prompts used by this call service. If set to "Primary", the default language which is selected from all installed languages will be used. When set to "Selective", the caller can select the language of his or her choice, provided the System Administrator or the Message Manager has recorded the Multilingual Selection Menu. To specify a Prompt Selection Number, see 24.4 UM Configuration—[5-4] System Parameters—Parameters—Prompt Setting.	Primary, Selective, Guidance No. 1–8	PC Programming Manual References 24.4 UM Configuration—[5-4] System Parameters— Parameters—Prompt Setting—Primary Language Feature Manual References 3.2.1.42 System Prompts
	Note  If "Selective" is specified, you will need to select a prompt available for callers that cannot input DTMF signals, such as rotary phone callers. See "Prompt for No DTMF Input Callers" below.		

Name	Description	Value Range	Links
Day, Night, Lunch, and Break Mode - Prompt for No DTMF Input Callers	Specifies which language is used when a caller cannot enter any digits to select a language after the Multilingual Selection Menu has been played. If set to "Primary", the default language which is selected from all	Primary, Guidance No. 1–8	PC Programming Manual References 24.4 UM Configuration—[5-4] System Parameters—
	installed languages will be used.		Parameters—Prompt Setting—Primary Language
			Feature Manual References
			3.2.1.42 System Prompts
Day, Night, Lunch, and Break Mode - Delayed Answer Time	Specifies whether the Unified Messaging system answers calls on the port or trunk immediately (0) or after a delay (1 s–60 s).	0–60 s	

## 22.2 UM Configuration—[3-2] UM Extension / Trunk Service—Port Assignment

You can assign a Service Group created in 22.1 UM Configuration—[3-1] UM Extension / Trunk Service —Service Group to each UM port.

- 1. For each UM port number, select a Service Group number (1–64) from the **Service Group** drop-down list.
- 2. Click OK when finished.

## Section 23

## UM Configuration—[4] Service Settings

This section serves as reference operating instructions for the Service Settings menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

## 23.1 UM Configuration—[4-1] Service Settings—Caller ID / PIN Call Routing

A maximum of 200 Caller ID/PIN numbers can be assigned so that callers are automatically forwarded to a pre-programmed destination. A different destination can be set for each time mode (day, night, lunch, break). For **Mode**, select **Caller-ID Mode** or **PIN Mode** from the drop-down list, and then click the button to assign a routing destination. PIN Call Routing is only available when the **Call Transfer Anytime** of a Custom Service is set to "PIN".

#### Wild card input for Caller IDs/PINs

- The wild card, "X", can be used as a substitute for any numbers in the following ways.
  - 1. When Caller ID/PIN numbers include one "\*":
    "\*" matches any number, regardless of the actual numbers of digits. For example, registering "\*" by itself matches all numbers, and registering "201 \*" matches any number that starts with "201".
  - **2.** When Caller ID/PIN numbers include more than one "\*":

    Each "\*" matches a single digit. For example, registering "\*\*\*\*\*\*\*\*\* matches any 10-digit number, and registering "201\*\*\*\*\*\*\* matches any 10-digit number that starts with "201".

#### Note

- If Automatic Login or Holiday Service is used, these will take priority over Caller ID Call Routing settings. Also note that Caller ID Call Routing takes priority over the Trunk Service and Port Service.
- Received Caller ID/PIN numbers are searched for in each service setting table in order from the first registered number to last. When programming Caller ID/PIN routing, note the order of registration, and remember that wild card entries should be entered after any specific routing entries.

#### **Caller-ID Mode**

Name	Description	Value Range	Links
Caller ID No. (Selection)	Specifies the Caller ID number setting so that callers are automatically forwarded to	Private, Out of Area, Long Distance,	Feature Manual References
	a pre-programmed destination.  Others	Others	3.2.1.8 Caller ID Call Routing
Caller ID No. (Other)		· •	Feature Manual References
			3.2.1.8 Caller ID Call Routing
Description	Specifies a name and/or description of the Caller ID number.	Max. 20 characters	Feature Manual References
	When no data is specified in this parameter, the caller's name will be automatically entered here if the caller's name is received from the telephone company.		3.2.1.8 Caller ID Call Routing

Name	Description	Value Range	Links
Call Transfer for Day, Night, Lunch, and Break service	Specifies the destination to which the call from an assigned Caller ID number is automatically forwarded. A destination can be set for each time mode. To disable the setting, select "None". A Mailbox Group number can be entered here instead of a mailbox number.	None: disables this feature.  Custom Service Menu: forwards callers to the specified Custom Service menu. Extension: forwards callers to the specified extension. Mailbox: forwards callers to the specified mailbox. Fax Service: Forwards callers to the fax service.	Feature Manual References 3.2.1.8 Caller ID Call Routing

#### **PIN Mode**

Name	Description	Value Range	Links
PIN No.	Specifies a PIN number (or range of PIN numbers using the wild card, "*") for callers from a specific number or range of numbers that are to be automatically forwarded to a preprogrammed destination. For more information on using "*" with pin numbers, refer to Wild card input for Caller IDs/PINs.	0–9, * (Max. 20 digits)	Feature Manual References 3.2.1.36 PIN Call Routing
Description	Specifies a name and/or description of the PIN number.	Max. 20 characters	Feature Manual References 3.2.1.36 PIN Call Routing
Call Transfer for Day, Night, Lunch, and Break service	Specifies the destination to which the call using an assigned PIN number is automatically forwarded. A destination can be set for each time mode. To disable the setting, select "None". A Mailbox Group number can be entered here instead of a mailbox number.	None: disables this feature.  Custom Service Menu: forwards callers to the specified Custom Service menu. Extension: forwards callers to the specified extension.  Mailbox: forwards callers to the specified mailbox. Fax Service: Forwards callers to the fax service.	Feature Manual References 3.2.1.36 PIN Call Routing

## 23.2 UM Configuration—[4-2] Service Settings— **Parameters**

#### **Automated Attendant**

Name	Description	Value Range	Links
Wait Time for First Digit (0-20 s)	Specifies the length of time the system waits for the caller to dial a digit before assuming the caller cannot input a DTMF signal and therefore activates No DTMF Input Call Coverage	0–20 s	
Menu Repeat Cycle (1-5 times)	Specifies the number of times the system will play the Automated Attendant top menu if the caller does not make a selection.	1–5 times	Feature Manual References 3.2.1.3 Automated Attendant (AA)
Play Owner's Name during Transfer	Determines whether "Transferring you to (name)" is announced to the caller before transferring the caller to an extension.	Enable, Disable	Feature Manual References 3.2.1.3 Automated Attendant (AA)
Operator Service	When operator calls are made, calls are connected to the lowest-numbered operator that is available. To enable/disable the operator setting for each time mode, check/uncheck it.  Note  • The extension assigned as Operator 1 for day mode is automatically designated as the Message Manager. Because the extension number assigned for Operator Service No. 1 in the Day Mode is for the Message Manager, you cannot assign this extension to any other mailbox.  • Extensions assigned as operators can be called by dialling [0], however, when setting features such as Message Waiting Notification and Remote Call Forwarding, the extension number (not "0") must be specified.	Operator Service for Day, Operator Service for Night, Operator Service for Lunch, Operator Service for Break	PC Programming Manual References 10.2 PBX Configuration—[2-2] System—Operator & BGM— PBX Operator—Day, Lunch, Break, Night Feature Manual References 3.2.1.35 Operator Service

Name	Description	Value Range	Links
Operator Service —Operator's Extension	Specifies the extension number for Operator 1, 2, and 3 for the checked time setting.  Note	1–8 digits	Feature Manual References 3.2.1.35 Operator Service
	<ul> <li>The default extension number of Operator 1 in day mode cannot be used with the Message Waiting Notification Lamp feature.</li> </ul>		
	Since the extension number assigned as Operator Service No. 1 for Day is automatically designated as the Message Manager (mailbox number 998), do not assign an individual mailbox to this extension number. Assigning an individual mailbox to this extension will result in the following operations:		
	<ul> <li>Any messages recorded for the extension will be sent to the Message Manager mailbox instead of the extension's assigned mailbox.</li> </ul>		
	<ul> <li>The Message Manager COS         (513) will be applied to call         transfers, etc., instead of the         COS of the assigned         mailbox.</li> </ul>		
	<ul> <li>If the extension user tries to access their mailbox using the Automatic Login feature, the user will access the Message Manager mailbox instead of the assigned mailbox.</li> </ul>		
	This time applies to Operator 1, 2, and 3.		
	If more than one operator is assigned, we recommend setting this value to 15 s.		

Name	Description	Value Range	Links
Operator Service —Operator's Mailbox	Specifies the mailbox number for Operator 1, 2, and 3. Callers to Operator 1, 2, or 3 are prompted to leave a message in this mailbox depending upon how the Busy Coverage Mode or No Answer Coverage Mode is set.	2–8 digits	Feature Manual References 3.2.1.35 Operator Service
Operator Service —Busy Coverage Mode	Specifies how to handle calls when the operator is busy.	Hold: Automatically places the caller on hold and the operator is called again.  No Answer Coverage: Offers the option specified by the No Answer Coverage Mode to the caller. Call Waiting: Signals the operator when another call is waiting using the Call Waiting feature of PBX. Disconnect Message: Disconnects the caller after playing "Thank you for calling".	Feature Manual References 3.2.1.35 Operator Service

Name	Description	Value Range	Links
Operator Service  —No Answer Coverage Mode	Specifies how to handle operator calls when they are not answered within the time period set in Operator Service—Operator No Answer Time (10-60 s).	Caller Select: Allows the caller to leave a message or call another extension. In the following cases, the caller cannot call another extension:  1. No input to Automated Attendant.  2. When the No DTMF Input Operation setting of a Custom Service is set to "Operator".  Leave Message: Instructs the caller to leave a message in the operator's mailbox.  Disconnect Message: Disconnects the caller after playing "Thank you for calling.".  Next Operator: Transfers the caller to the next operator.	PC Programming Manual References 20.1.2 UM Configuration—[1-2] Mailbox Settings— Full Setting—No DTMF Input Operation Feature Manual References 3.2.1.35 Operator Service
Operator Service —Operator No Answer Time (10-60 s)	When a call to an operator is not answered within the time set, the system will offer other options as defined by Operator Service—No Answer Coverage Mode.	10–60 s	Feature Manual References 3.2.1.35 Operator Service
Call Hold Mode	If Call Hold Mode is checked, the system gives callers the option of either holding for a specific extension or selecting one of several Incomplete Call Handling Service options. While on hold, the system periodically gives callers the choice to either continue to hold or select one of the Incomplete Call Handling Service options. If Call Hold Mode is not checked, the system immediately offers callers the Incomplete Call Handling Service and callers are not put on hold.	Enable (checked), Disable (unchecked)	Feature Manual References 3.2.1.3 Automated Attendant (AA)

Name	Description	Value Range	Links
Call Hold Mode —Call Queuing Announcement Mode	If set to "Enable", callers on hold are informed of their current position in the call hold queue. Example: "One other person is waiting to connect."	Enable, Disable	Feature Manual References
			3.2.1.3 Automated Attendant (AA)
Call Hold Mode —Call Retrieval Announcement Timing (1-30 s)	Specifies the interval between the voice guidance message that asks whether or not calls are to be retrieved during call holding. Example: "To cancel holding, press 2 now. Otherwise, I'll try your party again."	1–30 s	Feature Manual References
			3.2.1.3 Automated Attendant (AA)

Name	Description	Value Range	Links	
Alternate Extension	Specifies extensions that require a different transfer sequence than normal. Calls to these extensions will be transferred according with the setting for 24.4 UM Configuration—[5-4] System Parameters—PBX Environment—Alternate Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;]). Click Edit and follow the steps below to edit an alternate extension.	Max. 32 extensions (max. 5 digits per extension)	PC Programming Manual References 24.4 UM Configuration—[5-4] System Parameters —Parameters—PBX Environment— Alternate Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;])	
	Adding an Alternate Extension  1. Click New.		Feature Manual	
	2. Enter an extension number.		References 3.2.1.3 Automated	
	3. Click OK.		Attendant (AA)	
	Editing an Alternate Extension			
	Select the desired alternate extension.			
	2. Click Edit.			
	3. Edit the extension number.			
	4. Click OK.			
	Deleting an Alternate Extension			
	Select the desired alternate extension.			
	2. Click Delete.			
	3. Click Yes.			
	Changing the order of Alternate Extensions Select an extension and click Move up or Move down to change its order in the list. Alternate extensions will be dialled in order from top to bottom.			
	Note			
	Extension Groups and Logical Extensions cannot be assigned.			
List All Names	If set to "Enable", callers can listen to all subscriber names and extension numbers in the Automated Attendant service or Custom Service.	Enable, Disable	Feature Manual References 3.2.1.3 Automated Attendant (AA)	
Operator Transfer Mode	Specifies the timing of the operator transfer.	Transfer immediately, Do not transfer immediately	Feature Manual References 3.2.1.3 Automated Attendant (AA)	

### **No DTMF Input Operation**

Name	Description	Value Range	Links
No DTMF Input Call Coverage for Day, Night, Lunch, and Break (Selection)	Specifies where a caller will be transferred when there is no DTMF input in response to system guidance (for example, the caller is using a rotary phone) for each time mode.	G.D.M.: The caller is transferred to the General Delivery Mailbox. Operator: The caller is transferred to an operator. Mailbox: The caller is transferred to the designated mailbox extension. Extension: The caller is transferred to the designated extension.	Feature Manual References 3.2.1.33 No DTMF Input Operation
No DTMF Input Call Coverage for Day, Night, Lunch, and Break (Parameter)	Specifies the transfer destination if "Mailbox" or "Extension" is selected for No DTMF Input Call Coverage for Day, Night, Lunch, and Break (Selection).	2–8 digits (for extensions) 2–[the value set in <b>Mailbox No. Max. Length (3-8)</b> ] digits (for mailboxes)	Feature Manual References 3.2.1.33 No DTMF Input Operation

### **Name Entry**

Name	Description	Value Range	Links
Number of Digits to Entry Name (3-4 digits)	Specifies the number of digits (letters) that must be entered when using the Dial by Name feature, which allows callers to connect themselves with the desired party by entering the first 3 or 4 letters of the party's name.	3–4 digits	Feature Manual References 3.2.1.16 Dialling by Name
Name Entry Time Out (1-10 s)	Specifies the length of time that the system waits for the caller to enter the first 3 or 4 digits (letters) of the desired party's name. If the required number of digits are not dialled within this time, the previous menu will be played again for the caller.	1–10 s	Feature Manual References 3.2.1.16 Dialling by Name
Key Mode	Specifies the standard used for keypad text entry. If set to use the North American Standard, press [7] for "Q" and [9] for "Z", If set to use the Australasian Standard, press [1] for "Q" and "Z".	North American Standard, Australasian Standard	Feature Manual References 3.2.1.16 Dialling by Name
Name Directory Mode	Specifies one of Last Name, First Name, or Both to be used when entering the name.	Last, First, Both	Feature Manual References 3.2.1.16 Dialling by Name

#### **Toll Saver**

Name	Description	Value Range	Links
Delayed Answer Time for New Message (5-60 s)	Specifies the time period before the system answers the call when there are new messages.	5–60 s	
Delayed Answer Time for No New Message (5-60 s)	Specifies the time period before the system answers the call when there are no new messages.	5–60 s	Feature Manual References 3.2.2.33 Toll Saver

# 23.3 UM Configuration—[4-3] Service Settings—Custom Service

A Custom Service allows callers to perform specific functions by pressing dial buttons on their telephones while listening to voice guidance (Custom Service Menu). Custom Services allow callers to connect themselves to an extension, mailbox, Mailbox Group, operator, fax machine, etc., without the assistance of an operator. A Custom Service Menu ("Press 1 for Sales, press 2 for Service", etc.) can be recorded by the System Manager or the Message Manager, and can be recorded in several languages if needed. The System Manager can create a maximum of 200 Custom Services.

Common uses for Custom Services include:

- callers press a button to connect themselves with the desired destination
- callers press buttons to navigate through a series of other Custom Services before being connected with the desired destination
- callers enter PIN numbers to connect themselves with the desired destination (PIN Call Routing)
- callers enter the first few letters of the desired parties (Dial by Name) to connect themselves with the desired destination

#### **Custom Service Builder**

The Custom Service Builder is a utility that allows the System Administrator to create Custom Services visually. Each Custom Service and its functions can be edited, arranged using a familiar drag-and-drop interface. The following Custom Service types are available:

- Menu & Transfer
- Date Control
- Time Control
- Day Control
- Password

#### **Creating a Custom Service**

- 1. Select a custom service sheet.
- 2. Click the desired Custom Service type under Custom Service Type.
- **3.** Click on an area within the workspace to the right of the menu to place the Custom Service (it can be moved later).
- 4. Double-click the Custom Service icon you placed in the grid.
- **5.** Edit the parameters in the Custom Service parameters dialogue box.
- 6. Click OK.

#### Note

If you are using Windows Internet Explorer, and you become unable to create new Custom Services with the Custom Service Builder, click the browser's Refresh button.

#### **Editing a Custom Service**

Custom Services parameters can be connected to other Custom Services. To connect a parameter to another Custom Service, click and hold the parameter's blue handle, drag it to the desired Custom Service, then release the mouse button.

You can edit each Custom Service in the following ways.

#### [From the Custom Service List]

- 1. Select a custom service sheet.
- 2. Enter the desired Custom Service number under Quick Search and click Edit Custom Service.
- 3. Edit the parameters in the Custom Service parameters dialogue box.
- 4. Click OK.

#### [From the Custom Service Diagram]

- 1. Select a custom service sheet.
- 2. Double-click the desired Custom Service icon in the diagram, or right-click on the desired icon and select **Edit**.
- 3. Edit the parameters in the Custom Service parameters dialogue box.
- 4. Click OK.

#### Example: Setting "Menu & Transfer"

- 1. Click Menu & Transfer under Custom Service Type and drag it to the right side of the screen.
- 2. Drop **Menu & Transfer** on to a position of your choice in the Custom Service diagram. The parameters dialogue box for the Custom Service opens.
- **3.** Enter or select a value for each item. For each parameter, refer to the description in the following section.
- 4. Click Record A Prompt For This Custom Service.

This feature is only available when setting "Menu & Transfer" or "Password". You can also skip this step, and go to step 7.

5. Select Record from extension or Import from recorded file.

When Record from extension is selected:

- 1. Specify the extension number of the telephone used for recording, then click **Connect**.
- **2.** When the specified extension rings, go off-hook.
- 3. Click Record, Play, or Stop to record or play a voice label through the extension.
- 4. Click Disconnect.
- 5. Click OK.

When Import from recorded file is selected:

1. Click the folder icon.

The **Open** dialogue box appears.

**2.** Navigate to the folder containing the WAV files you want to open.

WAV files must meet the following specifications:

- G.711 PCM codec
- 8 kHz, 8-bit sampling rate
- Monaural
- A-law or μ-law encoding
- **3.** Select the desired WAV file.
- 4. Click Open.
- 6. Click OK.

#### 7. Click OK.

## 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer

The below parameters are set for the Menu Transfer Custom Service in the Custom Service Builder. This Custom Service type guides callers to press certain buttons to connect themselves with the designated party. The prompt for this service can be recorded in the CS No. dialogue box. Custom Service prompts can be recorded only in On-line mode.

Name	Description	Value Range	Links
Description	The information typed in this field is for reference only.	Max. 32 characters	Feature Manual References 3.2.1.15 Custom Service
Prompt Mode	Specifies the language for prompts used by this Custom Service.  Note  This parameter overrides a set "Incoming Call Service Prompt".  If "Primary" is selected, the default language which is selected from all installed languages will be used.  If "None" is selected, the prompt mode of previous process will be continued, or "Primary" language will be selected.	None, Primary, Guidance No. 1-8	PC Programming Manual References 22.1 UM Configuration— [3-1] UM Extension / Trunk Service—Service Group—Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt Feature Manual References 3.2.1.15 Custom Service
Menu Repeat Cycle (1-3)	Specifies the number of times the Custom Service menu message will be repeated for the caller.	1–3 times	Feature Manual References 3.2.1.15 Custom Service

Name	Description	Value Range	Links
Call Transfer Anytime	Specifies the type of dialling that the system accepts during the Custom Service in addition to the single-digit Custom Service options. This setting allows callers to dial numbers to connect themselves to an extension or mailbox or enter a PIN.  Note  If you only need to allow callers to dial single-digit Custom Service option numbers, set this parameter to "No". When set to a value other than "No", the system always waits for the amount determined by the Wait for Second Digit (1-5 s) setting before handling the call. This will cause a delay between the time the caller dials a single-digit Custom Service option number and when the call is actually handled.	Extn: enables callers to be transferred directly to their intended party by dialling the extension number.  Mbx: enables callers to leave messages in a mailbox by entering the mailbox number.  PIN: enables callers to be transferred directly to the specified party according to the setting for PIN Call Routing Service by dialling a PIN.  No: disables extension transfer and mailbox transfer; only 1-digit entries will function (following the Custom Service menu)	Feature Manual References 3.2.1.15 Custom Service
Wait for First Digit (0-10 s)	Specifies the length of time that the system waits for the caller to dial the first digit after a Custom Service menu is played for the caller. If this time expires, the No DTMF Operation settings determines how the call is then handled. If this parameter is set to "0", No DTMF Input Operation handles the call immediately after the menu is played for the caller.	0–10 s	Feature Manual References 3.2.1.15 Custom Service

Name	Description	Value Range	Links
Wait for Second Digit (1-5 s)	This parameter is only valid when Call Transfer Anytime is set to a value other than "No". After the caller dials a digit (the first digit) after listening to a Custom Service menu, the system waits for a second digit to be dialled. This gives the caller time to continue dialling a mailbox number, extension number, or PIN. If this time expires without a second digit being entered, the system assumes the caller has selected a Custom Service menu option and handles the call according to the digit dialled by the caller.	1–5 s	Feature Manual References 3.2.1.15 Custom Service
No DTMF Input Operation	Determines how calls are handled when callers do not dial any numbers after listening to the menu message (most likely because they are using rotary telephones) The default setting is "Operator", which allows the caller to be automatically connected to an operator after the menu message plays back ("Press the desired number, or stay on the line to be connected to an operator.").	Trf to Mbx: Allows the caller to leave messages in a specified mailbox. Trf to Ext: Transfers the caller to a specified extension. Operator: Connects the caller to an operator. Trf to Out: Transfers the caller to a specified outside telephone number. Enter the trunk access number of the PBX then the destination telephone number. Exit: Plays the Custom Service exit prompt and disconnects the caller. Prev Menu: Returns the caller to the previous menu (if there was a previous menu). CS: Transfers the caller to the Custom Service specified here. Fax Service: Forwards callers to the fax service.	Feature Manual References 3.2.1.15 Custom Service

Name	Description	Value Range	Links
Key – Assigned Operation: 0–9, *, #	Any of the 16 operations listed below can be assigned to the 0 through 9, *, and # keys on the telephone keypad. Callers are able to access these operations by pressing the corresponding keys on their telephones.	Trf to Mbx: Allows the caller to leave messages in a specified mailbox.  Trf to Ext: Transfers the caller to a specified extension.  Operator: Connects the caller to an operator.  Trf to Out: Transfers the caller to a specified outside telephone number. Enter the trunk access number of the PBX then the destination telephone number.  Exit: Plays the Custom Service exit prompt and disconnects the caller.  Prev Menu: Returns the caller to the previous menu (not available if there was no previous menu).  CS: Transfers the caller to the Custom Service specified here.  VM Serv: Allows the caller to access Voice Mail Service.  Call Trf Serv: Allows the caller to access Automated Attendant Service.  Subscriber Serv: Allows the caller to access the Subscriber Service. The caller needs to press the assigned key followed by the mailbox number that he or she wants to log in. If this option is enabled, it is strongly recommended that each subscriber set a password for his or her mailbox; this will prevent unauthorised callers from accidentally or intentionally accessing subscribers' mailboxes.  Dial by Name: Requests the caller to enter the first 3 or 4 letters of a first or last name of the person the caller wishes to reach, then transfers the caller to the corresponding extension.  Repeat Menu: Repeats the Custom Service menu.  Main Menu: Returns the caller to send fax messages to an extension specified as the fax extension.  List All Names: The system will announce the names and extensions numbers of all subscribers (except those whose Class of Service Directory Listing parameter is set to "No").  Fax Service: Forwards callers to the fax service.  None: No operation assigned.	Feature Manual Referen ces 3.2.1.15 Custom Service
		Example: Assigning key [1] to transfer to extension 101	
		1. Click the check box next to key [1].	
		2. Select "Trf to Ext" in the "Assigned Operation" column.	
		3. Enter "101" in the "Value" column.	
		Example: Cancelling the setting for key [1]	
		1. Clear the check box next to key [1].	

# 23.3.2 UM Configuration—[4-3] Service Settings—Custom Service—Date Control

The below parameters are set for the Date Control Custom Service in the Custom Service Builder.

This service allows you to assign a different operation for up to 5 time periods. The caller makes no selection and no menu is announced.

Name	Description	Value Range	Links
Description	The information typed in this field is for reference only.	Max. 32 characters	Feature Manual References 3.2.1.15 Custom Service
Period 1–5, Outside	Period 1–5: Specifies the name of date period for reference, start and end date, and an operation.  Outside: Allows you to specify an operation that is enabled on all other dates not included in the set periods.	Period 1–5: Name: Max. 16 characters From/To: Select the check box, and then click the input field to select a date (month and day) from the calendar. You can specify a beginning date (From), ending date (To), or both for each period. Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)  Outside: Name: Max. 16 characters Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)	Feature Manual References 3.2.1.15 Custom Service

# 23.3.3 UM Configuration—[4-3] Service Settings—Custom Service—Time Control

The below parameters are set for the Time Control Custom Service in the Custom Service Builder. This service allows you to assign a different operation for up to 5 blocks of time during the day. The caller makes no selection and no menu is announced.

Name	Description	Value Range	Links
Description	The information typed in this field is for reference only.	Max. 32 characters	Feature Manual References
			3.2.1.15 Custom Service

Name	Description	Value Range	Links
Period 1–5, Outside	Period 1–5: Specifies the name of time period for reference, start and end time, and an operation.  Note  When the start time is specified and the end time is "None", the period will end at "00:00".  Outside: Allows you to specify an operation that is enabled for all other times not included in the set time periods.	Period 1–5: Name: Max. 16 characters From/To: Select the check box, click the input field, and then specify a time (hour and minute). You can specify a beginning time (From), ending time (To), or both for each period. Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)  Outside: Name: Max. 16 characters Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)	Feature Manual References 3.2.1.15 Custom Service

# 23.3.4 UM Configuration—[4-3] Service Settings—Custom Service—Day Control

The below parameters are set for the Menu Transfer Custom Service in the Custom Service Builder. This service allows you to assign a different operation for each day of the week, and for all holidays. The caller makes no selection and no menu is announced.

Name	Description	Value Range	Links
Description	The information typed in this field is for reference only.	Max. 32 characters	Feature Manual References
			3.2.1.15 Custom Service

Name	Description	Value Range	Links
Sunday– Saturday, Holiday	Specifies a service for each day of the week and for all holidays.  Note  If an operation is assigned to "Holiday" here, either one of the following settings is required in order to activate the operation for the "Holiday" Custom Service:  a. In the Holiday Table, select "Custom Service Menu" and specify the number of this Date Control—"Holiday" Custom Service, or the number of its higher layered Custom Service (see 23.4 UM Configuration—[4-4] Service Settings—Holiday Table).	Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration —[4-3] Service Settings —Custom Service— Menu & Transfer—Key — Assigned Operation: 0-9, *, #)	Feature Manual References 3.2.1.15 Custom Service
	b. Assign the desired Date Control —"Holiday" Custom Service or its higher layered Custom Service to the desired Port/Trunk (see 22.1 UM Configuration—[3-1] UM Extension / Trunk Service— Service Group). For "Port Affected/Trunk Affected", exclude the Port/Trunk numbers that are assigned to the Date Control—"Holiday" Custom Service or the number of its higher layered Custom Service.		

## 23.3.5 UM Configuration—[4-3] Service Settings—Custom Service—Password

The below parameters are set for the Password Custom Service in the Custom Service Builder. This service requires that callers enter a password, followed by "#". Each password is assigned an operation. If a password is entered correctly, the caller is handled by the password's pre-programmed operation. The prompt for this service can be recorded in the CS No. dialogue box. Custom Service prompts can be recorded only in On-line mode.

Name	Description	Value Range	Links
Description	The information typed in this field is for reference only.	Max. 32 characters	Feature Manual References 3.2.1.15 Custom Service

Name	Description	Value Range	Links
Menu Repeat Cycle (1-3)	Specifies the number of times the Custom Service menu message will be repeated to the caller.	1–3 times	Feature Manual References 3.2.1.15 Custom Service
Wait for First Digit (0-10 s)	Specifies the length of time that the system waits for the caller to dial the first digit after a Custom Service menu is played for the caller. If this time expires, the No DTMF Operation setting determines how the call is then handled.	1–10 s	Feature Manual References 3.2.1.15 Custom Service
Maximum Number of Invalid Entry (1-10)	Specifies the number of times an invalid password is entered before the operation assigned for <b>Entry Failure</b> is executed.	1–10 times	Feature Manual References 3.2.1.15 Custom Service
No DTMF Input Operation	Determines how calls are handled when callers do not dial any numbers in response to system guidance (often because they are rotary telephone users). The default setting is "Operator", which allows the caller to be automatically connected to an operator after the message is played.	Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, Fax Service (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—No DTMF Input Operation)	Feature Manual References 3.2.1.15 Custom Service
Entry Failure	Determines what operation is activated when a caller enters an invalid password X times. (X= the value set for Maximum Number of Invalid Entry (1-10))	Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)	Feature Manual References 3.2.1.15 Custom Service

Name	Description	Value Range	Links
Pass1–5, Cancel	Pass1–5: Specifies a password and an operation for the specified password.  Cancel: Determines the operation that is activated when a caller presses "#" to cancel password entry.	Pass1–5: Password: Max. 12 digits Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)  Cancel: Assigned Operation: Trf to Mbx, Trf to Ext, Operator, Trf to Out, Exit, Prev Menu, CS, VM Serv, Call Trf Serv, Subscriber Serv, Dial by Name, Repeat Menu, Main Menu, Trf to Fax Extn, List All Names, Fax Service, None (see 23.3.1 UM Configuration—[4-3] Service Settings—Custom Service—Menu & Transfer—Key – Assigned Operation: 0–9, *, #)	Feature Manual References 3.2.1.15 Custom Service

# 23.4 UM Configuration—[4-4] Service Settings—Holiday Table

Holidays can be set for and assigned to service groups and Unified Messaging ports. When a call is received from a certain service group or by a certain subscriber during the time frame set for an assigned holiday, the call handling settings for that holiday will be used. This screen is similar to the table found in **10.5 PBX Configuration—[2-5] System—Holiday Table**. You can also access the PBX Holiday Table directly by clicking the **PBX Holiday Table** tab. A maximum of 24 different holidays can be programmed.

Name	Description	Value Range	Links
Setting	Enables the setting of the holiday. This setting synchronises with the PBX's Holiday Table.	Enable, Disable	PC Programming Manual References  10.5 PBX Configuration— [2-5] System—Holiday Table—Holiday Table— Setting
			Feature Manual References
	0 15 11 511		3.2.1.21 Holiday Service
Name of Holiday	Specifies the name of the holiday setting for later reference.	Max. 32 Characters	Feature Manual References
			3.2.1.21 Holiday Service
Start Date (Month Day)	Specifies the month and day of the holiday start date. Click the cell to display a calendar. Select a month using the arrow buttons, and click on a day for the selected month. This setting synchronises with the PBX's Holiday Table.	Month and Day	PC Programming Manual References  10.5 PBX Configuration— [2-5] System—Holiday Table  →Holiday Table—Start Date—Month  →Holiday Table—Start Date—Day  Feature Manual
			References
Start Time	Specifies the time of day on the	Hour and Minute	3.2.1.21 Holiday Service  Feature Manual
Start Time	specified date at which to begin the	Hour and Minute	References
	holiday service. Click the cell to display an array of hours and minutes. Select an hour of the day and a minute of the hour to set the time.		3.2.1.21 Holiday Service

Name	Description	Value Range	Links
End Date (Month Day)	Specifies the month and day of the holiday end date. Click the cell to display a calendar. Select a month using the arrow buttons, and click on a day for the selected month. This setting synchronises with the PBX's Holiday Table.	Month and Day	PC Programming Manual References  10.5 PBX Configuration— [2-5] System—Holiday Table  →Holiday Table—End Date—Month  →Holiday Table—End Date—Day  Feature Manual References  3.2.1.21 Holiday Service
End Time	Specifies the time of day on the specified date at which to end the holiday service. Click the cell to display an array of hours and minutes. Select an hour of the day and a minute of the hour to set the time.	Hour and Minute	Feature Manual References 3.2.1.21 Holiday Service
Retain Holiday	If "Yes" is selected, the holiday will not end regardless of the end time setting. To end the holiday setting when "Yes" is selected and the end time has already passed, set <b>Setting</b> to "Disable" or re-programme the settings for the holiday.	No, Yes	Feature Manual References 3.2.1.21 Holiday Service
Company Greeting No.	Specify the greeting callers hear when calling the affected trunks or ports during the holiday.	None (do not playback): No greeting is heard. No. 1–32: The selected company greeting is heard. System Greeting: The following greeting is heard: "Good morning/ Good afternoon/ Good evening. Welcome to the Unified Messaging System".	Feature Manual References 3.2.1.21 Holiday Service

Name	Description	Value Range	Links
Service	One of 4 incoming call services (Voice Mail, Automated Attendant, Interview, or Custom Service) can be assigned to each holiday. After a greeting is played (if specified), the call will be transferred to the selected service.	Voice Mail Service: The caller is transferred to the Voice Mail Service. Automated Attendant Service: The caller is transferred to the Automated Attendant Service. Interview Mailbox: The caller is transferred to an Interview Mailbox. Custom Service Menu: The caller is transferred to a Custom Service Menu: Service Menu: The caller is	Feature Manual References 3.2.1.21 Holiday Service
Interview Mailbox/ Custom Service Menu	If "Interview Mailbox" or "Custom Service Menu" was selected for <b>Service</b> , specify the Interview Mailbox or Custom Service here.	Interview Mailbox number, Custom Service number	Feature Manual References 3.2.1.21 Holiday Service
Trunk Affected	In this screen, trunk number means service group number. Specify which service groups will be subject to the holiday setting. Click <b>Edit</b> , and then select the check boxes for the service groups to be subject to the holiday setting, or select the <b>All</b> check box to apply the holiday to all service groups. Click <b>OK</b> to finish.	Trunk No. 1–96, All	Feature Manual References 3.2.1.21 Holiday Service
Port Affected	Specify which UM ports will be subject to the holiday setting. Click <b>Edit</b> , and then select the check boxes for the UM ports to be subject to the holiday setting, or select the <b>All</b> check box to apply the holiday to all UM ports. Click <b>OK</b> to finish.	Port No. 1–30, All	Feature Manual References 3.2.1.21 Holiday Service

## Section 24

## UM Configuration—[5] System Parameters

This section serves as reference operating instructions for the System Parameters menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

# 24.1 UM Configuration—[5-1] System Parameters —Mailbox Group

Also called System Group Distribution Lists. Mailbox Groups allow a caller or subscriber to record a message and have it sent to several mailboxes. Messages sent to a Mailbox Group are sent to all subscribers in the group. The system can maintain a maximum of 20 Mailbox Groups. Each group can have a maximum of 200 members. For Personal Group Distribution Lists, see 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Personal Distribution List.

Follow the steps below to create or edit a Mailbox Group.

#### Adding Mailbox Groups

- 1. Specify the Group List No. and Group Name for each Mailbox Group to be used.
- 2. Click OK.

#### **Editing Mailboxes**

To edit a mailbox group, select the desired mailbox group, then click the zi icon. You can also edit specific parameters directly from the Mailbox Group list.

#### **Deleting Mailboxes**

- Select a mailbox group.
- 2. Click the iii icon.
- 3. Click Yes.

#### Adding Mailboxes to a Group

- 1. In the Group Members column, click the Edit button of the group to add mailboxes to.
- 2. In the **Subscribers To Add** column, select the check boxes for the mailbox numbers to add to the group.
- 3. Click Add.
- 4. Click OK.
- 5. Click OK.

#### Recording a Name for the Group in the Edit Mailbox Group dialogue box

Select the desired Mailbox Group and click the z icon.

#### Note

Before you can record, confirm that there is at least 1 member in the group and that you have clicked **Apply** since adding members to the group.

- 2. Select "Record from extension" or "Import from recorded file". When "Record from extension" is selected:
  - Specify the extension number of the telephone used for recording, then click Connect.
  - **2.** When the specified extension rings, go off-hook.
  - Click Record, Play, or Stop to record or play a voice label through the extension.
  - 4. Click Disconnect.
  - 5. Click OK.

When "Import from recorded file" is selected:

1. Click the folder icon.

The **Open** dialogue box appears.

- **2.** Navigate to the folder containing the WAV files you want to open. WAV files must meet the following specifications:
  - G.711 PCM codec
  - 8 kHz, 8-bit sampling rate
  - Monaural
  - A-law or μ-law encoding
- 3. Select the desired WAV file.
- 4. Click Open to import the file.

#### 3. Click OK.

Name	Description	Value Range	Links
Group List No.	ist No. number is similar to a mailbox number Mailbox No. Max.	Feature Manual References	
	and is used to send a message to all subscribers of the group. It must be a unique number; no other group or mailbox can be assigned this number.	Length (3-8)] digits	3.2.2.17 Group Distribution Lists
Group Name	Specifies the group name.	Max. 32 characters	Feature Manual References
			3.2.2.17 Group Distribution Lists

# 24.2 UM Configuration—[5-2] System Parameters —Extension Group

An Extension Group is a group of extensions that share a common mailbox. Each group has an Extension Group number. If the group number is assigned as the owner of a mailbox, then all members cannot be assigned their own personal mailboxes.

Up to 20 Extension Groups can be created, and each group can consist of 100 extensions (members). You can add, delete, and review the extensions. Members of an Extension Group are able to share the same mailbox and be notified by the Message Waiting Notification feature when a message is received. Follow the steps below to edit an Extension Group.

#### Adding Extension Groups

- 1. Click the icon.
- 2. Specify the Group List No. and Group Name for the Extension Group.
- 3. Click OK.

#### **Editing Extension Groups**

To edit Extension Group settings, select the desired Group, then click the icon. You can also edit specific parameters directly from the Extension Group list.

#### **Deleting Extension Groups**

- 1. Select an Extension Group.
- 2. Click the iii icon.
- 3. Click Yes.

#### **Editing Extension Group Members**

- 1. In the Extension No. column, click the Click To Edit.. button to open the Group Members window.
- 2. Click the icon.
- 3. Enter the extension to add in **Extension**, and click **OK**.
- 4. Click OK.

The table on this screen will list any extensions that cannot be added, as well as the reason that extension cannot be added to the group (i.e. it is already in another extension group, etc.).

Name	Description	Value Range	Links
Group List No.	Note In order to configure an Extension Group, set a group number here, then assign the group number as the owner of a mailbox. The Extension Group number is effectively the extension number that is the owner of the group's mailbox.	2–8 digits	Feature Manual References 3.2.1.18 Extension Group
Group Name	Specifies the group name.	Max. 32 characters	Feature Manual References 3.2.1.18 Extension Group

# 24.3 UM Configuration—[5-3] System Parameters—System Caller Name Announcement

Allows the System Administrator to store a maximum of 200 telephone numbers and record a caller name for each telephone number. The caller name is announced when playing a message in their mailbox from one of the pre-programmed callers, when the system transfers a call to the subscriber from one of the pre-programmed callers (Caller ID Screening), and when the system pages the subscriber by intercom (Intercom Paging).

Caller ID Screening feature is only available when the **Caller ID Screen** parameter of the subscriber's Class of Service is set to "Yes". This feature is also enabled when subscribers select "Call screening" as the Call Transfer method (see "3.2.2 Subscriber Features—3.2.2.8 Call Transfer Status" in the Feature Manual). The Intercom Paging feature is enabled by selecting "Intercom Paging" as the Call Transfer method (see "3.2.2 Subscriber Features—3.2.2.8 Call Transfer Status" and/or "3.2.2 Subscriber Features—3.2.2.18 Incomplete Call Handling Service" in the Feature Manual).

Follow the steps below to edit System Caller Name Announcements.

#### Adding a Caller Extension and Description

- 1. Specify the Caller-ID No. and Description for each entry that will be used.
- 2. Click OK.

#### **Editing Caller ID Entries**

To edit an entry, select the desired mailbox group, then click the icon. You can also edit specific parameters directly from the list.

#### **Deleting Mailboxes**

- 1. Select an entry.
- 2. Click the iii icon.
- 3. Click Yes.

#### Recording a Name for the extension in the Caller Information dialogue box

1. Select the desired Caller ID number and click the **z** icon.

#### Note

Before you can record, confirm that you have clicked **Apply** since you added the Caller ID No.

2. Select "Record from extension" or "Import from recorded file".

When "Record from extension" is selected:

- 1. Specify the extension number of the telephone used for recording, then click **Connect**.
- 2. When the specified extension rings, go off-hook.
- 3. Click **Record**, **Play**, or **Stop** to record or play a voice label through the extension.
- 4. Click Disconnect.
- 5. Click OK.

When "Import from recorded file" is selected:

- 1. Click the folder icon.
  - The **Open** dialogue box appears.
- 2. Navigate to the folder containing the WAV files you want to open. WAV files must meet the following specifications:
  - G.711 PCM codec

- 8 kHz, 8-bit sampling rate
- Monaural
- A-law or μ-law encoding
- 3. Select the desired WAV file.
- 4. Click Open to import the file.

#### 3. Click OK.

Name	Description	Value Range	Links
Caller-ID No.	Assigns the telephone number for which the system announces the pre-recorded caller name to extension users.	Max. 20 digits consisting of 0–9	Feature Manual References 3.2.1.10 Caller Name Announcement
Description	Enters a name and/or description of the Caller ID number.	Max. 20 characters	Feature Manual References 3.2.1.10 Caller Name Announcement

## 24.4 UM Configuration—[5-4] System Parameters —Parameters

### **Daily Hours Setting**

Name	Description	Value Range	Links
Clock Format	Specifies the time format (12-hour or 24-hour).	12 H, 24 H	
	Note		
	The selected time format (12-hour or 24-hour) affects the time format of reports as well as the time that appears in e-mail notifications for new messages.		
Morning Hours Start Time	Specifies the starting time of the morning greeting.	ng HH:MM (HH: Hour, MM: Minute)	Feature Manual References
(HH:MM)			3.2.1.12 Company Greeting
Afternoon Hours Start Time	Specifies the starting time of the afternoon greeting.	HH:MM (HH: Hour, MM:	Feature Manual References
(HH:MM)		Minute)	3.2.1.12 Company Greeting
Evening Hours Start Time	rt Time greeting. Hour, MM:	Feature Manual References	
(HH:MM)		Minute)	3.2.1.12 Company Greeting

#### **Prompt Setting**

These settings are required when Multilingual Service is enabled.

Name	Description	Value Range	Links
Primary Language	Specifies the default language to be used when another language is not selected in the Multilingual Selection Menu.	Guidance No. 1–8	Feature Manual References 3.2.1.32 Multilingual Service 3.2.1.42 System Prompts

Name	Description	Value Range	Links
Language 1–5— Language (1–5)	Assigns a selection number (1–9) to each language. Callers use the numbers to select the desired languages for their message prompts. This setting is required when either one or both of the following parameters are set to "Selective":  a. Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt  b. External Message Delivery Prompt Mode For each selection of this setting, related items within "Language 1–5" can be set.	Language 1–5	PC Programming Manual References  22.1 UM Configuration —[3-1] UM Extension / Trunk Service—Service Group—Day, Night, Lunch, and Break Mode - Prompt for No DTMF Input Callers 24.4 UM Configuration —[5-4] System Parameters— Parameters—External Message Delivery  Feature Manual References 3.2.1.32 Multilingual Service 3.2.1.42 System Prompts
Language 1–5— Language	Specifies the language for the current language selection number.	None, Guidance No. 1–8	Feature Manual References 3.2.1.32 Multilingual Service 3.2.1.42 System Prompts
Language 1–5— DTMF	Specifies the number to be input to select the language set for the current language selection number.	None, 1–9	Feature Manual References 3.2.1.32 Multilingual Service 3.2.1.42 System Prompts
Selection Menu Wait Time (0-20 s)	Specifies the length of time that the system waits for the caller to select a language by pressing the appropriate dial key. If this time period expires without the selection number being entered, the system uses the Primary Language.	0–20 s	Feature Manual References 3.2.1.42 System Prompts
Selection Menu Repeat Cycle (1-3 times)	Specifies the number of times the system will play the Multilingual Selection Menu.	1–3	Feature Manual References 3.2.1.32 Multilingual Service

Name	Description	Value Range	Links
Delay Time After Connected Received for Incoming (0-10 s)	Specifies the length of time (in seconds) that the system waits after the line is connected for incoming calls before playing the prompt.	0–10 s	Feature Manual References 3.2.1.42 System Prompts
Delay Time After Connected Received for Outgoing (0-10 s)	Specifies the length of time (in seconds) that the system waits after the line is connected for outgoing calls before playing the prompt.	0–10 s	Feature Manual References 3.2.1.42 System Prompts
System Guidance— System Guidance	Specifies the parameters which vary depending on the language assigned as the System Guidance language. For each selection of this setting, related items within "System Guidance 1–8" can be set.	Guidance No. 1–8	PC Programming Manual References  24.4 UM Configuration —[5-4] System Parameters— Parameters—Prompt Setting—Primary Language
System Guidance— Select Language— Position of "AM/PM" in Time Stamp	Specifies the position of the "AM/PM" announcement.	Before: the system announces "AM/PM" before the time, such as P.M. 3:42.  After: the system announces "AM/PM" after the time, such as 3:42 P.M.  24-h: the system announces the time in 24-h format, such as 15:42.	
System Guidance— Select Language —"O'clock" Prompt	Specifies when and if "O'clock" is announced.	When at :00: the system announces "O'clock" only on the hour, such "one o'clock".  Always: the system announces "O'clock" always.  None: No announcement	
System Guidance— Select Language— Month/Day Prompt	Specifies the order of the month and day for date announcements.	MM:DD: Month and Day DD:MM: Day and Month	
System Guidance— Select Language— # Announcement Mode	Specifies the way of announcement for the "#" character when "US-English" or "English (UK)" is selected as System Guidance.	POUND, HASH	

#### **PBX Parameters**

Specifies how the system will initiate and control call transfers, setup outgoing calls, and control message waiting lamps on extensions.

Name	Description	Value Range	Links
PBX Environment— Operator Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;])	Specifies the sequence for transferring calls to an operator's extension.	Max. 16 digits consisting of 0–9, *, # and special codes  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause (default 1 s)  ;: Dial Pause (default 3 s)  X: Extension Dialling  0–9, *, #: Dial Code	
PBX Environment— Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;])	Specifies the sequence for transferring calls to any extension except an operator's extension.	Max. 16 digits consisting of 0–9, *, # and special codes D: Disconnecting F: Flash (Recall) R: Ringback Tone Detection T: Dial Tone Detection ,: Dial Pause (default 1 s) ;: Dial Pause (default 3 s) X: Extension Dialling 0–9, *, #: Dial Code	
PBX Environment— Alternate Extension Transfer Sequence (Up to 16 digits / [0-9 * # D R F T X , ;])	Specifies the sequence for transferring calls to extensions in the Alternate Extension Group.	Max. 16 digits consisting of 0–9, *, # and special codes  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause (default 1 s)  ;: Dial Pause (default 3 s)  X: Extension Dialling  0–9, *, #: Dial Code	Feature Manual References 3.2.1.1 Alternate Extension Group

### **Dialling Parameters/MSW Notification**

Name	Description	Value Range	Links
Dialling Parameters —Call Transfer No Answer Time (10-60 s)	Specifies the length of time that the system waits before retrieving the transferred call when there is no answer at the destination extension.  Note  Make sure that the duration of Call Transfer No Answer Time is longer than the duration of Call Forwarding No Answer Time at the PBX.  Otherwise, the PBX may forward the call immediately to the extension's Intercept Routing destination according to PBX programming, rather than return the call to the system.	10–60 s	PC Programming Manual References  12.1 PBX Configuration—[4-1] Extension—Wired Extension—FWD No Answer Time 12.2 PBX Configuration—[4-2] Extension—Portable Station—FWD No Answer Time
Dialling Parameters —Outgoing Call No Answer Time (10-90 s)	Specifies the length of time that the system waits before concluding that there is no answer at the outside number called.	10–90 s	
Dialling Parameters —Pause Time for "," (100-9900 ms, *100 ms)	Specifies the pause time for "," used in call sequences.	100–9900 ms, in units of 100 ms	
Dialling Parameters —Pause Time for ";" (100-9900 ms, *100 ms)	Specifies the pause time for ";" used in call sequences.	100–9900 ms, in units of 100 ms	
Message Waiting Notification— System Callback No. (Up to 32 digits)	Specifies a callback number to be displayed with text reports of messages waiting notifications. The system callback number is displayed when no Caller ID information was received when the message was recorded.	Max. 32 digits	Feature Manual References 3.2.1.31 Message Waiting Notification— Telephone Device

### **External Message Delivery**

Determines how essential External Message Delivery features are carried out.

Name	Description	Value Range	Links
Retry Times (times)	Specifies the number of times the system will attempt to deliver an external message when the destination is busy or does not answer.	0–3 times (E/NE: 0–4 times, NZ: 0–5 times, C: 0–9 times, Taiwan/ Malaysia: 0–2 times)	Feature Manual References 3.2.2.13 External Message Delivery Service

Name	Description	Value Range	Links
Busy Delay (min)	Specifies the length of time (in minutes) the system waits to try to deliver an external message again when the destination is busy.	1–60 min (Malaysia: 2– 120 min)	Feature Manual References 3.2.2.13 External Message Delivery Service
No Answer Delay (min)	Specifies the length of time (in minutes) the system waits to try to deliver an external message again when the destination is not answering.	60–120 min	Feature Manual References 3.2.2.13 External Message Delivery Service
Outgoing Call UM Extensions	Specifies the Unified Messaging extensions for the External Message Delivery feature. If not specifying the Unified Messaging extensions at Extension Number, this setting is not available.	On, Off	PC Programming Manual References 9.7 PBX Configuration— [1-1] Configuration—Slot —UM Port Property Feature Manual References 3.2.2.13 External Message Delivery Service
Message Length (1-6 min)	Specifies the maximum length (in minutes) of messages recorded for the External Delivery Message.	1–6 min	Feature Manual References 3.2.2.13 External Message Delivery Service
Max. Messages for Mailboxes (1-100 msgs)	Specifies the maximum number of External Delivery Messages that can be stored in one mailbox.	1–100	Feature Manual References 3.2.2.13 External Message Delivery Service
System External Message Delivery Duration Time (1-9 min)	Specifies the maximum length of External Message Delivery calls. The timer begins counting when the called party answers the call, and if the called party has not pressed the appropriate dial key to initiate message playback, the system terminates the call when this timer expires.	1–9 min	Feature Manual References 3.2.2.13 External Message Delivery Service
Company Telephone No. (Up to 32 digits)	Specifies the company's telephone number. When the recipient has failed to retrieve the sender's message because of he or she did not enter the correct password, the system announces the company's telephone number to the caller. The caller can later call the company for assistance or to speak to the message sender.	Max. 32 digits	

#### **Intercom Paging Parameters**

Unified Messaging Intercom Paging functions in conjunction with the Intercom Paging feature of the PBX. It allows the system to page the called party (announce the caller's name, line number, etc.) while the caller is placed on hold. To utilise this feature, Intercom Paging must be available for the PBX, and the Unified Messaging system must be properly programmed.

Name	Description	Value Range	Links
No Answer Time for Intercom Paging (1-30 s)	Specifies the length of time (in seconds) the system waits before concluding Intercom Paging when there is no answer. The system will return to the caller if the paged party does not respond before this timer expires.	1–30 s	Feature Manual References 3.2.1.24 Intercom Paging
Announcement Repeat Cycle (1-3 times)	Specifies the number of times the system announces the page.  Example: "I have a call for (name)".	1–3 times	Feature Manual References 3.2.1.24 Intercom Paging
Intercom Paging Retry (1-10 times)	Specifies the number of times to retry paging when the called subscriber has set Incomplete Call Handling for No Answer/ Incomplete Call Handling for Busy to "Page the mailbox owner by intercom paging" and the subscriber is busy or if there is no answer.	1–10 times	PC Programming Manual References  20.1.2 UM Configuration— [1-2] Mailbox Settings—Full Setting—Incomplete Call Handling for No Answer 20.1.2 UM Configuration— [1-2] Mailbox Settings—Full Setting—Incomplete Call Handling for Busy  Feature Manual References 3.2.1.24 Intercom Paging
Caller Recorded Name Announce Mode	Determines whether or not the system announces the caller's name during paging. (In order for the name to be announced, it must be recorded beforehand.)	Disable, Enable	Feature Manual References 3.2.1.24 Intercom Paging

#### **Fax Management**

You can programme the system to automatically detect incoming fax calls and forward those calls to a fax extension. You can specify a maximum of 2 fax extensions as the destination for faxes; if the main fax extension is not available to receive a fax, the system will forward the fax call to the alternate fax extension.

Name	Description	Value Range	Links
Automatic Transfer of Incoming Fax Call	Specifies the detection and destination of incoming fax calls.  Note	Disable, Transfer to Fax Extension, Receive Fax	Feature Manual References 3.1.3 Fax Server
	The system can detect incoming fax signals during the first 30 seconds after it answers incoming calls.		

Name	Description	Value Range	Links
Automatic Transfer of Incoming Fax Call—Mailbox Number	Specifies the mailbox to receive the fax if "Receive Fax" is selected for Automatic Transfer of Incoming Fax Call.	2–[the value set in Mailbox No. Max. Length (3-8)] digits	Feature Manual References 3.1.3 Fax Server
Main Fax Extension No. (1-8 digits)	Specifies the extension number of the main fax machine.	1–8 digits	Feature Manual References 3.1.3 Fax Server
Alternate Fax Extension No. (1-8 digits)	Specifies the extension number of the alternate fax machine. When the main fax extension is busy or does not answer within the time specified under Fax No Answer Time (5-60s), the system forwards the fax call to the alternate fax extension.	1–8 digits	Feature Manual References 3.1.3 Fax Server
Fax No Answer Time (5-60s)	Specifies the length of time (in seconds) that the system waits for the main or alternate fax extension to answer a fax call before taking other action, such as notifying the Fax Manager that the fax could not be received.	5–60 s	Feature Manual References 3.1.3 Fax Server
Fax Manager Mailbox No.	Specifies the mailbox number of the Fax Manager. The system will notify the Fax Manager of the status of fax calls depending upon the settings of the Fax No Answer Coverage Mode and Fax Notification Mode parameters.	2-[the value set in Mailbox No. Max. Length (3-8)] digits	Feature Manual References 3.1.3 Fax Server
Fax No Answer Coverage Mode	Determines what action the system takes when an incoming fax call could not be answered by the main or alternate fax extension. The system can announce to the Fax Manager the number of unanswered fax calls. The number announced is the number of unanswered fax calls since the last time the system notified the Fax Manager. This announcement is heard when the Fax Manager logs in to his or her mailbox.	No: The system will not notify the Fax Manager when fax calls were not answered.  Mbx: The system will announce the number of unanswered fax calls to the Fax Manager when the Fax Manager logs in to his or her mailbox.  Ext: The system will announce the number of unanswered fax calls to the Fax Manager by calling the Fax Manager's extension.	Feature Manual References 3.1.3 Fax Server

Name	Description	Value Range	Links
Fax Notification Mode	Determines what action the system takes when an incoming fax call is successfully received by the main or alternate fax extension. The system can announce to the Fax Manager the number of received fax calls. The number announced is the number of received fax calls since the last time the system notified the Fax Manager.	No: The system will not notify the Fax Manager when fax calls are answered.  Mbx: The system will announce the number of successfully received fax calls to the Fax Manager when the Fax Manager logs in to his or her mailbox.  Ext: The system will announce the number of successfully received fax calls to the Fax Manager by calling the Fax Manager's extension.	Feature Manual References 3.1.3 Fax Server
Mailbox for Fax Receiving	If a DISA line detects a fax tone and forwards the call to the UM group's floating extension number, the call is forwarded to the specified mailbox.	Mailbox no. (2–8 digits)	Feature Manual References 2.16.2 Automatic Fax Transfer 3.1.3 Fax Server
Fax Properties— System Name (Up to 25 characters)	Specifies the system name for the fax server. This name will appear on the cover page of fax messages sent by the fax server.	Max. 25 characters	Feature Manual References 3.1.3 Fax Server
Fax Properties— System Fax Number (Max. 20 digits)	Specifies the system fax number for the fax server. This number will appear on the cover page of fax messages sent by the fax server.	Max. 20 digits	Feature Manual References 3.1.3 Fax Server
Fax Properties— Number of Retries (0-99)	Specifies the number of times a fax will be re-sent if initial sending fails. If the fax cannot be sent within the set number of retries, a non-delivery notification voice message will be sent to the target mailbox.	0–99 times	Feature Manual References 3.1.3 Fax Server
Fax Properties— Retry Interval (1-60 min)	Specifies the interval between retries when the initial sending of a fax fails.	1–60 min	Feature Manual References 3.1.3 Fax Server
Fax Properties— Page Retransmission	Specifies if a document will be retransmitted if for any reason the fax transmission is interrupted.	Enable, Disable	Feature Manual References 3.1.3 Fax Server

Name	Description	Value Range	Links
Fax Properties— Page Retransmission— Retransmission Start Page	Specifies the starting page of a fax transmission that was interrupted and is being re-transmitted.	From First Page: The entire fax document is re-transmitted. From Error Page: The fax document is re-transmitted, starting from the page that was interrupted.	Feature Manual References 3.1.3 Fax Server
Fax Properties— Delayed Answer Time (0-255 s)	Specifies the amount of time the system waits before going off-hook when receiving a call.	0–255 s	Feature Manual References 3.1.3 Fax Server
Fax Properties— Response Wait Interval (s)	Specifies the amount of time the system will wait for an answer when trying to send a fax.	0–90 s	Feature Manual References 3.1.3 Fax Server
Fax Properties— Printed Information	Specifies the information printed on the cover page of sent faxes.	LOG ID: The cover page will include the time of sending, sender information, the sender's fax number (System Fax Number), and the number of pages. From/To: The cover page will include the time of sending, sender information, the receiver's name and/or fax number, and the number of pages.	Feature Manual References 3.1.3 Fax Server
Fax Properties— Printed Information Position	Specifies where the printed information for the fax is positioned	Inside: Printed information is positioned inside the print area of the fax document.  Outside: Printed information is positioned outside of the margins of the print area of the fax document.	Feature Manual References 3.1.3 Fax Server

Name	Description	Value Range	Links
Fax Properties— Cover Page	Specifies if sent faxes will have a cover page attached. If "Default Cover Page" is selected, the cover page includes the following information:  • Title: "FACSIMILE COVER SHEET"  • Sending start time.  • Receiver's name  • System name and system fax number of sender  • Number of pages sent	Default Cover Page, No Cover Page	Feature Manual References 3.1.3 Fax Server
Fax Properties—No Space for Receiving Coverage Mode	When the system's recording capacity is full and cannot receive faxes, the system can transfer incoming faxes to a fax extension, or not answer the incoming call (not go off-hook).	Transfer to Fax Extension, No Receiving	Feature Manual References 3.1.3 Fax Server
Fax Properties— Fax Busy Coverage Mode	When the system is busy and cannot receive faxes, the system can transfer incoming faxes to a fax extension, or not answer the incoming call (the extension will be busy).	Transfer to Fax Extension, No Receiving	Feature Manual References 3.1.3 Fax Server

#### **Disconnect Parameters**

Name	Description	Value Range	Links
Maximum Silence Time (0-60 s)	Specifies the length of silence detected by the system before the system disconnects the call.	0–60 s	
Maximum Continuous Tone Time (0-60 s)	Specifies the length of time the system waits when a continuous tone is detected before it disconnects the call.	0–60 s	
Maximum Cyclic Tone Time (0-60 s)	Specifies the length of time the system waits when a cyclic tone is detected before it disconnects the call.	0–60 s	
Maximum Call Duration (0-60 min)	Specifies the maximum duration of calls. If the system detects no DTMF signals for the specified amount of time, it terminates the call. Calls will not be terminated while playing or recording messages. If this setting is set to "0", calls will not be terminated.	0–60 min	

#### **Transfer to Outside**

These parameters determine how the system will transfer calls to a trunk via the following features: Call Transfer Service, Custom Service, Personal Custom Service, Caller ID Callback, Call-through Service.

Name	Description	Value Range	Links
Outside Transfer Sequence—Call Transfer to Outside Sequence (Up to 16 digits / [0-9 * # D F R T , ; N])	Specifies the sequence the system uses to transfer calls to trunks.	Max. 16 digits consisting of 0–9, *, # and special codes  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause for 1 s (default)  ;: Dial Pause for 3 s (default)  N: Telephone Number Dialling  0–9, *, #: Dial Code	Feature Manual References 3.2.1.7 Call Transfer to Outside
Outside Transfer Sequence—EFA Transfer Sequence (Up to 16 digits / [0-9 * # D F R T , ; N A])	Specifies the sequence the system uses to transfer calls to trunks using EFA (External Feature Access). This setting should match the settings of the PBX.	Max. 16 digits consisting of 0–9, *, # and special codes  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause for 1 s (default)  ;: Dial Pause for 3 s (default)  N: Telephone Number Dialling  A: Feature Access Code  0–9, *, #: Dial Code	
Outside Transfer Sequence—EFA Transfer Reconnect Sequence on Busy (Up to 16 digits / [0-9 * # D F R T , ; N A])	Specifies the sequence the system uses to reconnect the line when the party transferred with EFA (External Feature Access) is busy. This setting should match the settings of the PBX.	Max. 16 digits consisting of 0–9,   *, # and special codes D: Disconnecting F: Flash (Recall) R: Ringback Tone Detection T: Dial Tone Detection ,: Dial Pause for 1 s (default) ;: Dial Pause for 3 s (default) N: Telephone Number Dialling A: Feature Access Code 0–9, *, #: Dial Code	
Outside Transfer Sequence—EFA Transfer Reconnect Sequence on No Answer (Up to 16 digits / [0-9 * # D F R T , ; N A])	Specifies the sequence the system uses to reconnect the line when the party transferred with EFA (External Feature Access) does not answer. This setting should match the settings of the PBX.	Max. 16 digits consisting of 0–9, *, # and special codes  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause for 1 s (default)  ;: Dial Pause for 3 s (default)  N: Telephone Number Dialling  A: Feature Access Code  0–9, *, #: Dial Code	

Name	Description	Value Range	Links
Outside Transfer Sequence—Call Transfer to Outside Answer Mode	Specifies the answering method the system uses to detect whether the destination party has answered the transferred trunk call.	Guidance: The system plays the following guidance before connecting the line to the destination party: "You have a call. To answer the call, press [1]. Otherwise, press [2] and hang up." If the destination party presses "1", he or she will be able to answer the transferred trunk call. The system continues playing this guidance for the time specified in Dialling Parameters—Outgoing Call No Answer Time (10-90 s) in Dialling Parameters/MSW Notification. If the transferred party does not answer the call within this time, the system considers it as a No Answer call.  Analyze: The system monitors the status of the trunk, recognises that the destination party goes off-hook, and connects the line.	Feature Manual References 3.2.1.7 Call Transfer to Outside
Trunk Group (1– 96)—Trunk Group No.	Specifies a trunk group for making settings for EFA Transfer, Caller ID Callback, and Outside Line Access Sequence for Caller ID Callback. Selecting different trunk groups from this dropdown list allows settings to be made for each trunk group.	1–96	
Trunk Group (1– 96)—EFA Transfer	Specifies whether or not the system uses EFA (External Feature Access) when transferring incoming trunk calls to another trunk. If set to "Enable", the system transfers incoming trunk calls to another trunk according to "EFA Transfer Sequence" specified in "Transfer to Outside". If set to "Disable", the system transfers incoming trunks calls to another trunk according to Outside Transfer Sequence —Call Transfer to Outside Sequence (Up to 16 digits / [0-9 * # D F R T , ; N]) specified in Transfer to Outside.	Enable, Disable	

Name	Description	Value Range	Links
Trunk Group (1– 96)—Caller ID Callback	Specifies whether or not the system allows a subscriber to call back the party who left a message in his or her mailbox by using the caller ID information sent from the PBX. This setting applies to the trunk number used when the message with Caller ID information was left in his or her mailbox.	Enable, Disable	
Trunk Group (1– 96)—Outside Line Access Sequence for Caller ID Callback (Up to 16 digits / [0-9 * # D F R T , ; ])	Specifies the sequence of trunk access numbers for Caller ID Callback. This parameter is available when the system executes Caller ID Callback without using EFA.	Max. 16 digits consisting of 0–9, *, # and special codes  D: Disconnecting  F: Flash (Recall)  R: Ringback Tone Detection  T: Dial Tone Detection  ;: Dial Pause for 1 s (default)  ;: Dial Pause for 3 s (default)  0–9, *, #: Dial Code	
Number of Digits in Telephone Number (1-20)	Specifies the number of digits for local area telephone numbers. According to this parameter, telephone numbers dialled by the system can be distinguished as either local calls or long distance calls.	1–20	

### **E-mail Option**

E-mail Integration allows the system to send new message notification or to send recorded voice messages or fax message data as file attachments to subscribers via e-mail. The following settings must be made in order for the system to use E-mail Integration features.

Name	Description	Value Range	Links
Mail Address (Up to 128 ASCII	Specifies the mail address of the Unified Messaging system.	Max. 128 characters	Feature Manual References
characters)			3.2.1.29 Message Waiting Notification—E-mail Device
Full Name (Up to 64 ASCII	Specifies the full name that will appear in e-mail messages sent by	Max. 64 characters	Feature Manual References
characters)	the Unified Messaging system.		3.2.1.29 Message Waiting Notification—E-mail Device
Maximum Message Length	Specifies whether voice messages sent as e-mail attachments will have	Unlimited, Other	Feature Manual References
(Selection)	a limit to their length.	it to their length.	3.2.1.29 Message Waiting Notification—E-mail Device

Name	Description	Value Range	Links
Maximum Message Length (Other) (1-30 min)	Specifies the maximum length of voice messages sent as e-mail attachments.  Note  If you attach a voice message that is longer than this setting, surplus parts of the message may be discarded when sending the e-mail.	1–30 min	Feature Manual References 3.2.1.29 Message Waiting Notification—E-mail Device

### **Message Client**

Name	Description	Value Range	Links
Password Lockup Time (5-60 min)	Specifies the amount of time access will be locked after a password has been incorrectly entered 3 consecutive times.	5–60 min	

### **Mailbox**

Name	Description	Value Range	Links
Mailbox No. Max. Length (3-8)	Specifies the maximum allowed number of digits for a mailbox number.  Note  This setting cannot be changed to a smaller value if mailboxes exist with a number of digits greater than that smaller value. Those mailboxes must be re-numbered or deleted before this setting can be changed to a smaller value.	3–8 digits	

# Section 25 UM Configuration—[6] H/W Settings

This section serves as reference operating instructions for the H/W Settings menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

### 25.1 UM Configuration—[6] H/W Settings

#### **Global Parameters**

Global parameters define the settings that affect integration with other PBX operations.

Name	Description	Value Range	Links
Maximum Time to Wait for Dial Tone (500-20000 ms, *100 ms)	Specifies the length of time that the system waits for dial tone detection.	5–200 (× 100 ms)	
Delay After Dialling Before Onhook (0-250 s)	Specifies the length of time that the system waits for an answer when making an outside call. If no answer is detected, the system disconnects the call.	0–250 s	
DTMF Cut Length (0-500 ms)	Specifies the length of time for DTMF to be deleted when it is detected while recording.	0–500 ms	
Minimum Message Length (0-9 s)	Specifies the minimum message recording length. Messages shorter than the specified minimum recording length are discarded from the mailbox.	0-9 s	

### Section 26

### UM Configuration—[7] System Security

This section serves as reference operating instructions for the System Security menu of the UM Configuration menu of the Setup screen of Web Maintenance Console.

### 26.1 UM Configuration—[7] System Security

### Manager

Name	Description	Value Range	Links
Login Failures before Disconnection (1-99 times)	Specifies the number of times an invalid password can be entered, when the System Manager or Message Manager tries to log in to the system using a telephone, before the call is disconnected.	1–99 times	
System Manager Access from Telephone	Enables or disables access to the Unified Messaging system from the System Manager's telephone.	Disable, Enable	
Password for System Manager (Up to 16 numeric digits)	If "Enable" is selected in <b>System Manager Access from Telephone</b> , assign a numerical password here for the System Manager to login to the system.	Max. 16 digits	Feature Manual References 3.1.2.7 System Security
Password for System Manager (Message Client)	Specifies the password for the System Manager for accessing the Unified Messaging system from the messaging client.	4–16 characters (A–Z, a–z, 1–9)	Feature Manual References 3.1.2.7 System Security
Message Manager Access from Telephone	Enables or disables access to the system from the Message Manager's telephone.	Disable, Enable	Feature Manual References 3.1.2.7 System Security
Password for Message Manager (Up to 16 numeric digits)	If "Enable" is selected in <b>System Manager Access from Telephone</b> , assign a numerical password here for the Message Manager to login to the system.	Max. 16 digits	Feature Manual References 3.1.2.7 System Security
Password for Message Manager (Message Client)	Specifies the password for the Message Manager for accessing the Unified Messaging system from the messaging client.	4–16 characters (A–Z, a–z, 1–9)	Feature Manual References 3.1.2.7 System Security

### **Subscriber**

Name	Description	Value Range	Links
Minimum Password Length (0-16 digits)	Specifies the minimum length (number of digits) of mailbox passwords.	0–16	
Enable Login Failure Disconnection	Specifies whether the system disconnects a call when the subscriber enters an invalid password n times. (n=the value specified under Login Failures before Disconnection (1-99 times))	Disable, Enable	

Name	Description	Value Range	Links
Login Failures before Disconnection (1-99 times)	Specifies the number of times an invalid password can be entered before the system disconnects the call. In order to use this feature, <b>Enable Login Failure Disconnection</b> must be set to "Enable".	1–99 times	
Default Password for New Mailboxes	Specifies whether the default password is assigned to new mailboxes automatically when they are created.	Disable, Enable	Feature Manual References 3.1.2.7 System Security
Default Password— Fix digit (which length is minimum password length)	Select this option to specify a fixed password for all new mailboxes. The number of digits in the password must be equal or greater than the value specified in <b>Minimum Password Length</b> (0-16 digits).	Max. 16 digits	
Default Password— Prefix (1 or 2 digits) + Mailbox No	Select this option to specify default mailbox passwords using a prefix pattern. The value entered here will be combined with the mailbox number to become the default password. For example, if "55" is entered here, and then mailbox 101 is created, its default password will be "55101". 1 digit or 2 digits can be used as the prefix.	1 digit: 0–9 2 digits: 00– 99	

## Section 27 Router Configuration

This section serves as reference operating instructions for the Router Configuration menu of the Setup screen of Web Maintenance Console.

### 27.1 Router Configuration—Setup—[1-1] Router **Information**

### 27.1.1 Router Configuration—Setup—[1-1-1] Router Information —Connection Status

Name	Description	Value Range	Links
Connection Status	This screen shows the connection status of the built-in router function.		
Connection Mode	Indicates the connection mode of the WAN (reference only).	Disable, Static IP, DHCPc, PPPoE	
Router Status	Indicates the operation status of the router function (reference only).  If <b>Disable</b> is selected for <b>Connection Mode</b> ,  " <b>Out-of-Service</b> " is displayed.	In-Service, Out-of-Service, Fault	
WAN IP Address	Indicates the IP address of the WAN (reference only).  If <b>Disable</b> is selected for <b>Connection Mode</b> , information will not be displayed on this screen.	Blank, 1.0.0.1– 223.255.255.254	
Subnet Mask	Indicates the subnet mask of the LAN (reference only).  If <b>Disable</b> is selected for <b>Connection Mode</b> , information will not be displayed on this screen.	Blank, 0– 255.0-255.0-255.0–255 (except 0.0.0.0 and 255.255.255.255)	
Gateway	Indicates the IP address of the gateway on the LAN (reference only).  If <b>Disable</b> is selected for <b>Connection Mode</b> , information will not be displayed on this screen.	Blank, 1.0.0.1– 223.255.255.254	
Preferred DNS IP Address	Indicates the IP address of the primary DNS (reference only).  If <b>Disable</b> is selected for <b>Connection Mode</b> , information will not be displayed on this screen.	Blank, 1.0.0.1– 223.255.255.254	
Alternative DNS IP Address	Indicates the IP address of the secondary DNS (reference only).  If <b>Disable</b> is selected for <b>Connection Mode</b> , information will not be displayed on this screen.	Blank, 1.0.0.1– 223.255.255.254	

### 27.1.2 Router Configuration—Setup—[1-1-2] Router Information —PPPoE Status

Name	Description	Value Range	Links
PPPoE Session Name	Indicates the PPPoE session name (reference only).	Max. 20 characters	

Name	Description	Value Range	Links
Status	Indicates the PPPoE connection status (reference only).  To change the status, click the button next to the Status display (It will display Connect or Disconnect depending on the current status).  Note  If IP Address Configuration Mode shows "-", the button will be greyed out.  If Connection Mode (refer to 27.2.1 Router Configuration—Setup—[1-2-1] WAN—Connection Settings—Connection Mode) is PPPoE, and Session Enabled (refer to 27.2.1 Router Configuration—Setup—[1-2-1] WAN—Connection Settings—PPPoE—Session Enabled) is set to Disable, the button will be greyed out.  The button is available only for Installer	No Connect: The session is not connected. Connecting: The session is in the process of being connected (not yet connected with the server). Connected: The session is connected. Fault: A fault has occurred (before or during connection). Disconnected: The session was disconnected by the user.	
	level and User (Administrator) level accounts.		
IP Address Configuration Mode	Indicates the IP address configuration mode (reference only).	- (hyphen), Dynamic IP, Static IP, Unnumbered	
IP Address	Indicates the PPPoE IP address provided by the ISP (reference only). If <b>Connection Mode</b> (refer to 27.2.1 Router Configuration—Setup—[1-2-1] WAN—Connection Settings—Connection Mode) is not <b>PPPoE</b> , "-" is displayed.	0.0.0.0, 1.0.0.1– 223.255.255.254	
Elapsed Time	Indicates the time elapsed since this port acquired the link (reference only).	00:00:00–99:59:59	
Detail Information— Sent Packets	Indicates the number of packets sent from this port since the last reset or manual clear (reference only).	0-9999999	
Detail Information— Received Packets	Indicates the number of packets received on this port since the last reset or manual clear (reference only).	0-9999999	
Detail Information— MTU	Indicates the largest packet size permitted for network transmission (reference only).  If the MTU value range for PPPoE is outside of 256–1492, "-" is displayed.  If the MTU value range for PPP/Ethernet is outside of 256–1500, "-" is displayed.	256-1500, [hyphen]	

### 27.1.3 Router Configuration—Setup—[1-1-3] Router Information **—VPN Status**

Name	Description	Value Range	Links
VPN - Tunnel Connection Status	This screen indicates the status of VPN tunnel connections (reference only).		
Name	Indicates the SA (Security Association) Names (reference only).  When connected with VPSS, "VPSS_xx" is displayed, where "xx" is the VPN location number (00–16).  The SA names are displayed in the order of VPSS settings, IPsec settings and the ISAKMP configuration. If SA is not registered when the Remote IP Address of ISAKMP is static, the SA name is not displayed.	ASCII characters (Max. 20 characters)	
Туре	Indicates the configured VPN protocol mode (reference only).	Tunnel, Transport	
Client	Indicates the IP address of the VPN client (reference only).	0.0.0.0, 1.0.0.0– 223.255.255.255	
Status	Indicates the status of each VPN tunnel connection (reference only).	No Connect, Connected, Fault	
Action	Click this button and select Connect or Disconnect for VPN tunnel connection. If No Connect or Fault is indicated for Status, Connect is displayed. Otherwise Disconnect is displayed.  However, if Dynamic is selected for Remote IP Address Type in 27.10 Router Configuration—VPN—[3-2] IPSec—Remote IP Address Type, Disconnect is always displayed. This setting is available for the Installer level account and User (Administrator) level account.	Disconnect, Connect	
RCV	Indicates the number of packets received at this port since the last reset (reference only). This value will reset to zero after the maximum value is reached.	0-9999999	
SEND	Indicates the number of packets sent from this port since the last reset (reference only). This value will reset to zero after the maximum value is reached.	0–9999999	
Elapsed Time	Indicates the time elapsed since the last reset (reference only). This value will reset to zero after the maximum value is reached.	00:00:00–99:59:59	

### 27.2 Router Configuration—Setup—[1-2] WAN

### 27.2.1 Router Configuration—Setup—[1-2-1] WAN—Connection Settings

Name	Description	Value Range	Links
Connection Mode	Selects the connection mode of the WAN.	Static IP, DHCP, PPPoE, Disable	

#### **Static IP**

Allows the PBX to assign a specific IP address.

If Static IP is selected for Connection Mode, this screen is displayed.

Name	Description	Value Range	Links
WAN IP Address	Specifies the IP address of the WAN.	Blank, 1.0.0.1– 223.255.255.254	
Subnet Mask	Specifies the subnet mask of the WAN.	Blank, 0–255.0– 255.0–255.0–255 (except 0.0.0.0 and 255.255.255.255)	
Gateway	Specifies the IP address of the default gateway of the WAN.	Blank, 1.0.0.1– 223.255.255.254	
Preferred DNS IP Address	Specifies the IP address of the primary DNS server.  Note  Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.  If this setting is configured at the same time as the following setting, the following setting takes precedence.  28.1 Network Service—[1] IP Address/Ports—Basic Settings—DNS Setting—Preferred DNS IP Address	Blank, 1.0.0.1– 223.255.255.254	PC Programming Manual References 28.1 Network Service —[1] IP Address/ Ports—Basic Settings Installation Manual References 8.6.5 DNS Client

Name	Description	Value Range	Links
Alternative DNS IP Address	Specifies the IP address of the secondary DNS server.  Note	Blank, 1.0.0.1– 223.255.255.254	PC Programming Manual References
	<ul> <li>Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.</li> <li>If this setting is configured at the same time as the following setting, the following setting takes precedence.</li> <li>28.1 Network Service—[1] IP Address/Ports—Basic Settings—DNS Setting—Alternative DNS IP Address</li> </ul>		28.1 Network Service —[1] IP Address/ Ports—Basic Settings Installation Manual References 8.6.5 DNS Client

### **DHCP**

Allows the PBX to receive an IP address automatically from a DHCP server. If **DHCP** is selected for **Connection Mode**, this screen is displayed.

Name	Description	Value Range	Links
Host Name	Specifies the host name if a host name is assigned by the ISP.	1–63 characters	
Obtain Gateway address automatically	Selects whether to obtain the IP address of the default gateway assigned by the DHCP server.	Enable, Disable	
Gateway	Specifies the IP address of the default gateway of the WAN.	Blank, 1.0.0.1– 223.255.255.254	
DNS Setting	Selects the method of specifying the IP address of a DNS server.	Auto, Static	

Name	Description	Value Range	Links
Preferred DNS IP Address	Specifies the IP address of the primary DNS server.  If the DNS server address is set manually, that value takes priority over the value set by DHCP.  Note  Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.  If this setting is configured at the same time as the following setting, the following setting takes precedence.  28.1 Network Service—[1] IP Address/Ports—Basic Settings—DNS Setting—Preferred DNS IP Address	Blank, 1.0.0.1– 223.255.255.254	PC Programming Manual References 28.1 Network Service—[1] IP Address/Ports— Basic Settings Installation Manual References 8.6.5 DNS Client
Alternative DNS IP Address	Specifies the IP address of the secondary DNS server.  If the DNS server address is set manually, that value takes priority over the value set by DHCP.  Note  Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.  If this setting is configured at the same time as the following setting, the following setting takes precedence.  28.1 Network Service—[1] IP Address/Ports—Basic Settings—DNS Setting—Alternative DNS IP Address	Blank, 1.0.0.1– 223.255.255.254	PC Programming Manual References 28.1 Network Service—[1] IP Address/Ports— Basic Settings Installation Manual References 8.6.5 DNS Client

#### **PPPoE**

Allows the PBX to receive an IP address from a PPPoE server. If **PPPoE** is selected for **Connection Mode**, this screen is displayed.

Name	Description	Value Range	Links
PPPoE Session Name	If requested by the ISP, enter the PPPoE session name.	Max. 20 Characters	
Session Enabled	Selects whether to initiate the PPPoE session.	Enable, Disable	

Name	Description	Value Range	Links
User name	Specifies the user name provided by the ISP.	0-64 characters	
Password	Specifies the password provided by the ISP.	0-64 characters	
Service Name	If requested by the ISP, enter the PPPoE service name.	0–24 characters	
Authentication Method	Selects the authentication method. <b>Auto</b> means that <b>PAP</b> , <b>CHAP</b> or <b>None</b> is selected for the necessary authentication.	Auto, CHAP	
IP Address Configuration	Selects the IP address configuration mode.	Dynamic IP, Static IP, Unnumbered	
Mode	<ul> <li>Dynamic IP: Select this if the IP address is assigned by the ISP.</li> </ul>		
	<ul> <li>Static IP: Select this if the ISP requires you to use a single global IP address.</li> </ul>		
	<ul> <li>Unnumbered: Select this if the ISP requires you to use the multiple global IP addresses.</li> </ul>		
IP Address	Specifies the IP address when IP Address Configuration Mode is set to Static IP or Unnumbered. If Static IP is selected for IP Address Configuration Mode, enter the IP address assigned by the DHCP server. If Unnumbered is selected for IP Address Configuration Mode, enter one of the global IP addresses provided by the ISP.	Blank, 1.0.0.1– 223.255.255.254	
Subnet Mask	Specifies the subnet mask when IP Address Configuration Mode is set to Static IP or Unnumbered. If Static IP is selected for IP Address Configuration Mode, enter the subnet mask assigned by the DHCP server. If Unnumbered is selected for IP Address Configuration Mode, enter one of the subnet mask provided by the ISP.	0-255.0-255.0- 255.0-255 (except 0.0.0.0 and 255.255.255.255)	
DNS Setting	Selects the method of setting the DNS address.	Auto, Static	
	<ul> <li>Auto: Select this if the DNS IP address is assigned by the ISP.</li> </ul>		
	<ul> <li>Static: Select this to enter the DNS IP address manually.</li> </ul>		

Name	Description	Value Range	Links
Preferred DNS IP Address	Specifies the IP address of the primary DNS when <b>DNS Setting</b> is set to <b>Static</b> .  Note  Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.  If this setting is configured at the same time as the following setting, the following setting takes precedence.  28.1 Network Service—[1] IP Address/Ports—Basic Settings—DNS Setting—Preferred DNS IP Address	Blank, 1.0.0.1– 223.255.255.254	PC Programming Manual References 28.1 Network Service—[1] IP Address/Ports— Basic Settings Installation Manual References 8.6.5 DNS Client
Alternative DNS IP Address	Specifies the IP address of the secondary DNS when DNS Setting is set to Static.  Note  Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.  If this setting is configured at the same time as the following setting, the following setting takes precedence.  28.1 Network Service—[1] IP Address/Ports—Basic Settings—DNS Setting—Alternative DNS IP Address	Blank, 1.0.0.1– 223.255.255.254	PC Programming Manual References 28.1 Network Service—[1] IP Address/Ports— Basic Settings Installation Manual References 8.6.5 DNS Client
PPP Keep- Alive	Selects whether Keep-Alive is enabled or not. When the server of the ISP is disconnected for some reason, this function keeps the PPPoE Connection alive automatically.	LCP ECHO: Select to detect PPPoE link failures. ICMP: Select to detect network failures. Disable: Disables this setting.	
Advanced Setting	Click here to open the advanced setting menu for <b>PPPoE - Advanced</b> .		

### **PPPoE - Advanced**

Name	Description	Value Range	Links
MTU	If the MTU value is assigned by the ISP, set it here (1280–1492). If the MTU value is outside of the value range below, 1280 or 1492 is displayed.	1280– 1492	
Connection on Demand	When PPPoE for IPv6 is used to connect to the ISP, this setting is always set to <b>Enable</b> .	Enable, Disable	
Disconnect when Idle timeout	If Enable is selected, configure the Disconnect when Idle timeout—Max Idle Time (x60s) setting. If Disable is selected, Keep-Alive timer is not available.	Enable, Disable	
Disconnect when Idle timeout— Max Idle Time (x60s)	Specifies a maximum idle time for which the internet connection is maintained during inactivity.  If <b>Disable</b> is selected for <b>Connection on Demand</b> or <b>Disconnect when Idle timeout</b> , this setting is greyed out.	1–1440 min	
LCP ECHO	If LCP ECHO is selected for PPP Keep-Alive, configure the parameters below.		
LCP ECHO— LCP Echo Interval (s)	Specifies the LCP Echo Interval in seconds. This value sets the interval between LCP echo requests sent by the PBX to the ISP. If LCP ECHO is not selected for 27.2.1 Router Configuration —Setup—[1-2-1] WAN—Connection Settings—PPPoE — PPP Keep-Alive, this item is greyed out.	1–3600 s	
LCP ECHO— LCP Echo Retries	Specifies the number of times that the PBX tries to get a response to an LCP echo request before the PPPoE connection is considered inactive.  If LCP ECHO is not selected for 27.2.1 Router Configuration —Setup—[1-2-1] WAN—Connection Settings—PPPoE — PPP Keep-Alive, this item is greyed out.	1–255	
LCP ECHO— PPPoE Recovery Time	Specifies the number of times that the PBX is judged to be recovered after the PPPoE connection has been re-established. If LCP ECHO is not selected for 27.2.1 Router Configuration—Setup—[1-2-1] WAN—Connection Settings—PPPoE—PPP Keep-Alive, this item is greyed out.	1–255	
TCP MSS	Selects the setting method of the TCP MSS (Maximum Segment Size) value. This function is only available for IPv4 packets.	Auto, Fixed, Disable	
	- Auto: MTU-40 is specified.		
	<ul> <li>Fixed: Specifies the TCP MSS Value.</li> <li>If Auto is selected, MTU-40 is specified. However if MTU is smaller than MRU, MRU-40 is specified.</li> </ul>		
	Note  MTU: Maximum Transmission Unit, MRU: Maximum Receive Unit		

Name	Description	Value Range	Links
TCP MSS—TCP MSS Value (536–1452)	Specifies the TCP MSS—TCP MSS Value. If the TCP MSS value is outside of the value range below, 536 or 1452 is displayed.  If <b>Fixed</b> is not selected for <b>TCP MSS</b> , this item is greyed out.	536–1452	

### 27.2.2 Router Configuration—Setup—[1-2-2] WAN—Network Monitor

This screen is used to configure the network monitoring functions for the WAN.

### **Network Monitor (Basic)**

Name	Description	Value Range	Links
ICMP Keep-Alive Enabled	Specifies whether to keep the PPPoE connection alive automatically by using ICMP echo mechanism.	Enable, Disable	
Destination IP Address	Specifies the destination IP address for ICMP echo requests. If <b>Disable</b> is selected for <b>ICMP Keep-Alive Enabled</b> , this setting cannot be specified.	1.0.0.1– 223.255.255.254	
Advanced Setting	Click here to open the advanced setting menu for <b>Network Monitor (Advanced)</b> .		

### **Network Monitor (Advanced)**

Name	Description	Value Range	Links
ICMP Keep- Alive Enabled	Specifies whether to keep the PPPoE connection alive automatically by using the ICMP echo mechanism.	Enable, Disable	
Destination IP Address	Specifies the destination IP address for ICMP echo requests. If <b>Disable</b> is selected for <b>ICMP Keep-Alive Enabled</b> , this setting cannot be specified.	1.0.0.1– 223.255.255.254	
Interval (s)	Specifies the interval of the polling timer used for sending ICMP echo requests.	1–3600 s	
Fail Count	Specifies the maximum count of ICMP echo failures. If <b>Disable</b> is selected for <b>ICMP Keep-Alive Enabled</b> , this setting cannot be specified.	1–255	
Recovery Count	Specifies the number of ICMP echo replies received for ICMP recovery to be detected from the fault state. If <b>Disable</b> is selected for <b>ICMP Keep-Alive Enabled</b> , this setting cannot be specified.	1–255	

### 27.2.3 Router Configuration—Setup—[1-2-3] WAN—Protocol **Bridge**

Name	Description	Value Range	Links
IPv6 Bridge	Selects whether or not to enable IPv6 Pass Through. If the IPv6 function is enabled, this setting is disabled.	Enable, Disable	
PPPoE Bridge	Select whether or not to enable PPPoE Bridge.	Enable, Disable	

### 27.2.4 Router Configuration—Setup—[1-2-4] WAN—Dynamic **DNS**

Name	Description	Value Range	Links
Dynamic DNS	Selects whether to utilise a dynamic DNS service.	Disable, Enable	
DDNS Server	Selects the method of specifying a DDNS server. If <b>Disable</b> is selected for <b>Dynamic DNS</b> , the settings on this screen cannot be configured.	IP address, URL	
IP Address	Specifies the DDNS Server IP Address. If <b>Disable</b> is selected for <b>Dynamic DNS</b> or <b>URL</b> as <b>DDNS Server</b> , the settings on this screen cannot be configured.	Blank (0.0.0.0), 1.0.0.1– 223.255.255.254	
URL	Specifies the DDNS URL. If <b>Disable</b> is selected for <b>Dynamic DNS</b> or <b>IP Address</b> as <b>DDNS Server</b> , the settings on this screen cannot be configured.	Maximum 253 characters	
User Name	Specifies the use name for DDNS service.  If <b>Disable</b> is selected for <b>Dynamic DNS</b> , the settings on this screen cannot be configured.	Maximum 64 characters	
Password	Specifies the password for DDNS service.  If <b>Disable</b> is selected for <b>Dynamic DNS</b> , the settings on this screen cannot be configured.	Maximum 64 characters	
Domain Name	Specifies the domain name for DDNS service.  If <b>Disable</b> is selected for <b>Dynamic DNS</b> , the settings on this screen cannot be configured.	Maximum 128 characters	
Update Time	Specifies the update time for DDNS service.  If <b>Disable</b> is selected for <b>Dynamic DNS</b> , the settings on this screen cannot be configured.  Setting "0" specifies an unlimited update time.	0, 10–1440 min	

### 27.3 Router Configuration—Setup—[1-3] LAN

### 27.3.1 Router Configuration—Setup—[1-3-1] LAN—IPv4

Name	Description	Value Range	Links
LAN Setting—Host Name	Indicates the host name (reference only).	1–63 characters	
LAN Setting—IP Address	Indicates the IP address (reference only).	1.0.0.1– 223.255.255.254	
LAN Setting— Subnet Mask	Indicates the subnet mask (reference only).	0-255.0-255.0- 255.0-255 (except 0.0.0.0 and 255.255.255.255)	
LAN Setting— Default Gateway	Indicates the IP address of the default gateway (reference only).	1.0.0.1– 223.255.255.254	
LAN Setting—Local Domain	Indicates the local domain name for your network (reference only).	Max. 128 characters	
LAN Setting— Network Service LAN Setting	You can click the <b>Network</b> Service LAN Setting link to open the system network service settings screen for LAN.		PC Programming Manual References 28.1 Network Service—[1] IP Address/Ports— Basic Settings— LAN Setting
Dynamic NAPT— Dynamic NAPT Enabled	Selects whether to utilise a dynamic NAPT (Network Address Port Translation).	Enable, Disable	
Port Forward— Advanced Setting	Click here to open the advanced setting menu for port forward.		
Multicast—IGMP Proxy	Selects whether to use IGMP (Internet Group Management Protocol) which your multicasting server specifies over IPv4.	Disable, Enable	
Protocol— Advanced Setting	Click here to open the advanced setting menu for protocol.		

### **Port Forward Setting**

Name	Description	Value Range	Links
Port Forward	Specifies whether to set port forwarding for each entry. (Up to 64 entries)	Enable, Disable	
Protocol	Selects a protocol type to be used when sending/receiving data over the Internet.	TCP, UDP, TCP&UDP, ICMP	

Name	Description	Value Range	Links
WAN Port Start	Specifies the start port for the WAN port range.  If ICMP is selected for Protocol, this item is greyed out.	1–65535	
	Note		
	<ul> <li>If neither the start port nor the end port is set, any port can be used.</li> </ul>		
	<ul> <li>The user cannot reserve system ports for the WAN side.</li> </ul>		
	<ul> <li>If a range is set, ensure that the number of internal ports and external ports match each other.</li> </ul>		
WAN Port End	Specifies the end port for the WAN port range. If this setting is blank, only the port set for <b>WAN Port Start</b> is available for port forwarding.  If <b>ICMP</b> is selected for <b>Protocol</b> , this item is greyed out.	1–65535	
	Note		
	<ul> <li>If neither the start port nor the end port is set, any port can be used.</li> </ul>		
	<ul> <li>The user cannot reserve system ports for the WAN side.</li> </ul>		
	<ul> <li>If a range is set, ensure that the number of internal ports and external ports match each other.</li> </ul>		
	<ul> <li>Ensure that the end range value is greater than the start range value.</li> </ul>		
Local IP Address	Specifies the IP address of equipment on the LAN.	1.0.0.1– 223.255.255.254	
LAN Port Start	Specifies the start port for the LAN port range.  If <b>ICMP</b> is selected for <b>Protocol</b> , this item is greyed out.	1–65535	
	Note		
	<ul> <li>If neither the start port nor the end port is set, any port can be used.</li> </ul>		
	<ul> <li>The user cannot reserve system ports for the WAN side.</li> </ul>		
	<ul> <li>If a range is set, ensure that the number of internal ports and external ports match each other.</li> </ul>		

Name	Description	Value Range	Links
LAN Port End	Specifies the end port for the LAN port range. If this setting is blank, only the port set for LAN Port Start is available for port forwarding. If ICMP is selected for Protocol, this item is greyed out.	1–65535	
	Note		
	<ul> <li>If neither the start port nor the end port is set, any port can be used.</li> </ul>		
	<ul> <li>The user cannot reserve system ports for the WAN side.</li> </ul>		
	<ul> <li>If a range is set, ensure that the number of internal ports and external ports match each other.</li> </ul>		
	<ul> <li>Ensure that the end range value is greater than the start range value.</li> </ul>		

### **Protocol Setting**

Name	Description	Value Range	Links
ICMP (WAN/LAN)—Send ICMP Redirect	Selects whether to send ICMP redirect messages.	Enable, Disable	
ICMP (WAN/LAN)—Allow ICMP Redirect	Selects whether to enter a new IP address in the routing table in accordance with ICMP redirect message.	Enable, Disable	

### 27.3.2 Router Configuration—Setup—[1-3-2] LAN—DNS Server

Name	Description	Value Range	Links
DNS Server Enabled	Selects whether to enable the DNS server.	Enable, Disable	
DNS Port No.	Indicates the DNS port number (reference only).	53	
DNS Cache Timeout (s)	Specifies the DNS cache timeout which is the time-to-live (TTL) value.  If <b>Disable</b> is selected for <b>DNS Server Enabled</b> , this item is greyed out.	0–86400 s	
DNS Server— Advanced Setting	Click here to open the advanced setting menu for <b>DNS Server</b> .		

### **DNS Server—Advanced—A Record**

Name	Description	Value Range	Links
Enabled	Selects whether to enable the DNS server.	Enable, Disable	
Host Name	Specifies a DNS host name.	1–254 characters	

Name	Description	Value Range	Links
IP Address	Specifies the IPv4 IP address for the DNS host name.	1.0.0.1– 223.255.255. 254	

### DNS Server—Advanced—PTR(A) Record

Name	Description	Value Range	Links
Enabled	Selects whether to specify the PTR(A) record.	Enable, Disable	
IP Address	Specifies the IPv4 IP address.	1.0.0.1– 223.255.255. 254	
Host Name	Specifies the DNS host name for the DNS Server.	1–254 characters	

### **DNS Server—Advanced—CNAME Record**

Name	Description	Value Range	Links
Enabled	Selects whether to specify the CNAME record.	Enable, Disable	
CNAME	Specifies the CNAME for the DNS host name.	1–254 characters	
Host Name	Specifies the DNS host name.	1–254 characters	

### 27.4 Router Configuration—Setup—[1-4] Routing

Name	Description	Value Range	Links
Routing	Selects whether to enable static routing.	Enable, Disable	
Destination IP Address	Specifies the IP address of the destination host or network.	Blank, 1.0.0.0– 223.255.255.255	
Netmask	Specifies the netmask for the <b>Destination IP Address</b> .	Blank, 0-255.0-255.0- 255.0-255 (except 0.0.0.0)	
Interface or Gateway	Selects the method of specifying the <b>Destination IP Address</b> .	Gateway, PPPoE	
Gateway Address (Next Hop)	Specifies the IP address of the gateway.  If Interface or Gateway is set to PPPoE, this item is greyed out.	Blank, 1.0.0.1– 223.255.255.254	

### 27.5 Router Configuration—Setup—[1-5] DMZ

Name	Description	Value Range	Links
DMZ	Selects whether to enable the DMZ host function.	Enable, Disable	
DMZ Host IP Address (Only Local Host available)	Specifies the DMZ host IP address connected to the same segment as the LAN port. (Except IP address of the LAN port) If <b>Disable</b> is selected for <b>DMZ</b> , this item is greyed out.	1.0.0.1– 223.255.255.254	

### 27.6 Router Configuration—Setup—[1-6] MAC **Address**

Name	Description	Value Range	Links
MAC Address Clone	Selects whether to clone the MAC address of your PC's network adaptor onto this router.	Enable, Disable	
MAC Address (xx:xx:xx:xx:xx)	Specifies the MAC address of your PC's network adaptor. After specifying the MAC address, you must restart the PBX. It is recommended to use the System Reset command of the PBX. If Disable is selected for MAC Address Clone, this item is greyed out.	00:00:00:00:00:00— FF:FF:FF:FF:FF	PC Programming Manual References 5.4 System Control —System Reset

### 27.7 Router Configuration—Firewall—[2-1] One **Touch Security**

Name	Description	Value Range	Links
SPI—WAN/LAN Port	Selects whether to enable SPI (Stateful Packet Inspection). If a packet being received from the WAN/LAN sides is inspected, and judged to be a corrupt packet, it is intercepted. By comparing the packet to static filtering (packet filtering through header information), Internet data can be sent more safely. A detection record is noted in the log.	Disable, Enable	
SPI—Log Output	Selects whether to output logs.	Disable, Enable	
DoS Protection— WAN Port	Selects whether to enable DoS (Denial of Service) protection. If <b>Enable</b> is selected, harmful data from the WAN side is detected, and the packet is intercepted. A detection record is noted in the log.  The following types of scans are performed:	Disable, Enable	
	- TCP SYN Scan		
	- TCP FIN Scan		
	- TCP RST Scan		
	- TCP NULL Scan		
	- TCP XMAS Scan		
	- UDP Port Scan		
	- IP Spoofing Scan		
	- Land Attack Scan		
	- SYN Attack Scan		
	Ping of Death Scan "Smurf Attack" denial-of-service attacks can be always detected.  If an ICMP broadcast or multicast packet is received on the LAN or WAN side, it will not be answered.		
DoS Protection— Log Output	Selects whether to output logs.	Disable, Enable	

Name	Description	Value Range	Links
Private IP Address Filtering— WAN/LAN Port	Specifies whether to deny access to private IP addresses. If <b>Enable</b> is selected, the following types of packets can be intercepted:	Disable, Enable	
	<ul> <li>when the source IP address from LAN to WAN is a private address.</li> </ul>		
	<ul> <li>when the destination IP address from WAN to LAN is a private address.</li> <li>A detection record is noted in the log.</li> <li>If the IP address on the WAN side is private, this setting cannot be configured.</li> </ul>		
Private IP Address Filtering—Log Output	Selects whether to output logs.	Disable, Enable	
ICMP Echo Reply —WAN Port	Selects whether to reply to ICMP echo requests from the WAN. You can specify TCMP echo reply from the LAN settings at 28.4.1 Network Service—[4-1] Other—Security. A detection record is noted in the log.	Disable, Enable	
ICMP Echo Reply —Log Output	Selects whether to output the logs.	Disable, Enable	
NET BIOS Packet Filtering—LAN Port -> WAN Port	Selects whether to enable NET BIOS packet filtering. If <b>Enable</b> is selected, the following types of services (and port numbers) can be intercepted:	Disable, Enable	
	- microsoft-rpc (135)		
	- netbios-ns (137)		
	- netbios-dgm (138)		
	- netbios-ssn (139)		
	<ul><li>microsoft-ds (445)</li><li>A detection record is noted in the log.</li></ul>		
NET BIOS Packet Filtering—Log Output	Selects whether to output the logs.	Disable, Enable	

## 27.8 Router Configuration—Firewall—[2-2] Packet Filtering

By specifying the IP address, port and protocol parameters, it is possible to either pass or intercept IP packets that are being received. If the parameters are set effectively they can be used as a security measure.

Name	Description	Value Range	Links
LAN->WAN Basic Policy	Indicates whether to accept or discard packets as the basic policy from LAN to WAN (reference only).  If <b>Discard</b> is displayed, all packets from LAN to WAN are intercepted.	Accept, Discard	
WAN->LAN Basic Policy	Indicates whether to accept or discard packets as the basic policy from WAN to LAN (reference only).  If <b>Discard</b> is displayed, all packets from WAN to LAN are intercepted.	Accept, Discard	
Filter	Indicates whether to enable the packet filtering function (reference only).	Enable, Disable	
Protocol No.	Indicates the protocol type or the protocol number (0–255) (reference only).	ANY, ICMP, TCP, UDP, TCP&UDP, 0–255	
Source IP Address Start – End	Indicates the protocol name or the range of source IP address (reference only).	ANY, Protocol Name, Port Number Start-End	
		Note Protocol Name is specified at 27.8 Router Configuration— Firewall—[2-2] Packet Filtering—Packet Filtering - Advanced.	
Source Port	Indicates the port name or the port number (reference only).	ANY, Port Name, Port Number	
Destination IP Address Start - End	Indicates the protocol name or the range of destination IP addresses (reference only).	ANY, Protocol Name, Port Number Start-End  Note  Protocol Name is specified at	
		27.8 Router Configuration— Firewall—[2-2] Packet Filtering—Packet Filtering - Advanced.	
Destination Port	Indicates the port name or the port number (reference only).	ANY, Port Name, Port number	

Name	Description	Value Range	Links
ICMP Type	Indicates the ICMP type (reference only).	ANY, Echo Reply, Destination Unreachable, Source Quench, Redirect, Echo Request, Router Advertisement, Router Solicitation, Time Exceeded, Parameter Problem, Timestamp, Timestamp Reply, Information Request, Information Reply, Address Mask Request, Address Mask Reply	
Direction	Indicates the direction of IPv4 packets (reference only).	LAN->WAN, WAN->LAN	
Policy	Indicates the packet filtering policy (reference only).	Accept, Discard	
Logging	Selects whether to enable the packet filtering log. If <b>Accept</b> is selected for <b>Policy</b> , this setting is greyed out and disabled.	Enable, Disable	
Packet Filtering —Advanced Setting	Click here to open the advanced setting menu for Packet Filtering - Advanced.		

### Packet Filtering - Advanced

Name	Description	Value Range	Links
LAN->WAN Basic Policy	Selects whether to accept or discard packets as the basic policy from LAN to WAN or not.  If <b>Discard</b> is selected, all packets from LAN to WAN are intercepted.	Accept, Discard	
WAN->LAN Basic Policy	Selects whether to accept or discard packets as the basic policy from WAN to LAN or not.  If <b>Discard</b> is selected, all packets from WAN to LAN are intercepted.	Accept, Discard	
Filter—Entry No.	Selects the packet filter number. Once the <b>Entry No.</b> is selected, all following items on this screen can be programmed for that packet filter.	1–64	
Filter—Filter	Selects whether to specify the packet filtering function.	Enable, Disable	
Filter—Protocol Number	Selects the protocol type or the protocol number (0–255).	ANY, Protocol Name, Other ( 0 - 255 )	
Filter—Protocol Number— Protocol Name	Selects the protocol type. If you did not select <b>Protocol Name</b> as <b>Protocol Number</b> , this item is greyed out.	ICMP, TCP, UDP, TCP&UDP	

Name	Description	Value Range	Links
Filter—Protocol Number—Other ( 0 - 255 )	Specifies the protocol number.  If Other ( 0 - 255 ) is not selected for  Protocol Number, this item is greyed out.	Blank, 0–255	
Filter—TCP/UDP Source Port	Selects the method of specifying the TCP/UDP Source Port.  If ICMP is selected for Protocol Number —Protocol Name, this item is greyed out.	ANY, Protocol Name, Port Number	
Filter—TCP/UDP Source Port— Protocol Name	Selects the protocol type.  If ICMP is selected for Protocol Number —Protocol Name, this item is greyed out.  Note  If TCP or TCP&UDP is selected for Protocol Number—Protocol Name, default value is FTP.  If ICMP is selected for Protocol Number—Protocol Name or Protocol Name is not selected for TCP/UDP Source Port, this item is greyed out.	If TCP is selected for Protocol Number—Protocol Name, the following protocol types can be selected: FTP(20/21), SSH(22), Telnet(23), HTTP(80), HTTPS(443), POP3(110), POS3S(995), IMAP(143), SMTP(25)  If UDP is selected for Protocol Number—Protocol Number—Protocol types can be selected: DNS(53), DHCP(67/68), TFTP(69), SNMP(161/162)  If TCP&UDP is selected for Protocol Number—Protocol Number—Protocol Number—Protocol Name, the following protocol types can be selected: FTP(20/21), SSH(22), Telnet(23), HTTP(80), HTTPS(443), POP3(110), POS3S(995), IMAP(143), SMTP(25), DNS(53), DHCP(67/68), TFTP(69), SNMP(161/162)	
Filter—TCP/UDP Source Port— Port Number	Specifies the start and end port numbers.  If ICMP is selected for Protocol Number —Protocol Name, this item is greyed out.	0–65535	
Filter—TCP/UDP Destination Port	Selects the method of specifying the TCP/UDP Destination Port.  If ICMP is selected for Protocol Number —Protocol Name, this item is greyed out.	ANY, Protocol Name, Port Number	

Name	Description	Value Range	Links
Filter—TCP/UDP Destination Port —Protocol Name	Selects the protocol type.  If ICMP is selected for Protocol Name is selected for TCP/UDP Destination Port, this item is greyed out.  Note  If TCP or TCP&UDP is selected for Protocol Number—Protocol Name, the default value is FTP. If UDP is selected for Protocol Name, the default value is DNS.	If TCP is selected for Protocol Number—Protocol Name, the following protocol types can be selected: FTP(20/21), SSH(22), Telnet(23), HTTP(80), HTTPS(443), POP3(110), POS3S(995), IMAP(143), SMTP(25)  If UDP is selected for Protocol Number—Protocol Number—Protocol types can be selected: DNS(53), DHCP(67/68), TFTP(69), SNMP(161/162)  If TCP&UDP is selected for Protocol Number—Protocol Number—Protocol Name, the following protocol types can be selected: FTP(20/21), SSH(22), Telnet(23), HTTP(80), HTTPS(443), POP3(110), POS3S(995), IMAP(143), SMTP(25), DNS(53), DHCP(67/68), TFTP(69), SNMP(161/162)	
Filter—TCP/UDP Destination Port —Port Number	Specifies the start and end port number.  If ICMP is selected for Protocol Number  —Protocol Name, this item is greyed out.	0–65535	
Filter—Source	Selects the method of specifying the source packet.	ANY, Address, Subnet	
Filter—Source— IP Address	Specifies the IP address.  If <b>ANY</b> is selected for <b>Source</b> , this item is greyed out.	Blank, 1.0.0.1– 223.255.255.254	
Filter—Source— Subnet Mask	Specifies the subnet mask.  If <b>Subnet</b> is not selected for <b>Source</b> , this item is greyed out.	Blank, 0.0.0.0– 255.255.255.255	
Filter— Destination	Selects the method of specifying the destination packet.	ANY, Address, Subnet	
Filter— Destination—IP Address	Specifies the IP address. If <b>ANY</b> is selected for <b>Destination</b> , this item is greyed out.	Blank, 1.0.0.1– 223.255.255.254	
Filter— Destination— Subnet Mask	Specifies the subnet mask.  If <b>Subnet</b> is not selected for <b>Destination</b> , this item is greyed out.	Blank, 0.0.0.0– 255.255.255.255	

Name	Description	Value Range	Links
Filter—ICMP Type	Selects the ICMP type.	ANY, Echo Reply, Destination Unreachable, Source Quench, Redirect, Echo Request, Router Advertisement, Router Solicitation, Time Exceeded, Parameter Problem, Timestamp, Timestamp Reply, Information Request, Information Reply, Address Mask Request, Address Mask Reply	
Filter—Direction	Selects the direction of the IPv4 packet.	LAN->WAN, WAN->LAN	
Filter—Policy	Selects whether to enable the packet filtering policy.	Accept, Discard	
Filter—Logging	Specifies whether to enable the packet filtering log.	Enable, Disable	

# 27.9 Router Configuration—VPN—[3-1] VPSS

Name	Description	Value Range	Links
VPSS	Selects whether to enable VPSS (VPN Simple Setting).	Enable, Disable	
Master Site IP Address (WAN)	Specifies the IP address of the master site.  If <b>Disable</b> is selected for <b>VPSS</b> , this setting cannot be configured.  If <b>Enable</b> is selected for <b>VPSS</b> , this setting must be configured.  If setting from a Slave unit connected to a Master unit, this setting becomes reference only.  This setting must be made from a Slave unit (including a Backup master) that is not connected to a Master unit.	Blank, 1.0.0.1– 223.255.255.254	
Slave Site— Site No.	Selects the site number.  If <b>Disable</b> is selected for <b>VPSS</b> , this setting cannot be configured.	1–16	
Slave Site— Slave Site	Specifies whether to display/change the status of the slave site specified in <b>Site No.</b> . This setting is displayed only when programming the Master unit. Clicking the <b>Export</b> button for a Slave unit on the Master unit allows the VPSS setting file to be exported to the Slave unit. If <b>Disable</b> is selected, you cannot click the <b>Export</b> button.	Enable, Disable	
VPSS— Advanced Setting	Click here to open the advanced setting menu for <b>VPSS</b> .		

#### **VPSS - Advanced**

Name	Description	Value Range	Links
Additional LAN on VPN Tunnel sharing (MAX 4 Entries)— Local Network Address	Specifies the local IP address at an adjacent segment or satellite office for use in VPN tunnel sharing. Up to 4 addresses can be specified (#1–#4).	Blank, 1.0.0.0– 223.255.255.255	
Additional LAN on VPN Tunnel sharing (MAX 4 Entries)— Subnet Mask	Specifies the subnet mask at an adjacent segment or satellite office for use in VPN tunnel sharing. Up to 4 addresses can be specified (#1–#4).	Blank, 0.0.0.0– 255.255.255.255	
Timer Settings— VPSS Path Established Timer (s)	Specifies the maximum time for establishing a VPSS path. If the value set is outside of the value range below, 1 or 86400 is displayed. This setting is not displayed when connecting to the Slave unit directly, or if changing sites when connected to the Master unit.	1–86400 s	

Name	Description	Value Range	Links
Timer Settings— Creating Site Response Wait Timer (s)	Specifies the maximum waiting time to respond to the request for creating a VPN site.  If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	
Timer Settings— Tunnel Established Timer (s)	Specifies the maximum time to establish a VPN tunnel. If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	
Timer Settings— Creating Site Completion Wait Timer (s)	Specifies the maximum waiting time to finish creating a VPN site.  If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	
Timer Settings— Deleting Site Response Wait Timer (s)	Specifies the maximum waiting time to respond to the request for deleting a VPN site.  If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	
Timer Settings— Deleting Site Completion Wait Timer (s)	Specifies the maximum waiting time to finish deleting a VPN site.  If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	
Timer Settings— Changing Static IP Address Additional Timer (s)	Specifies the maximum time to finish creating a VPN site when changing the static IP address of the WAN port.  If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	
Timer Settings— VPSS Monitoring Timer (s)	Configure the maximum time to monitor the VPSS Information Path. If the value set is outside of the value range below, 1 or 86400 is displayed.	1–86400 s	

# 27.10 Router Configuration—VPN—[3-2] IPSec

#### Main

Name	Description	Value Range	Links
Mode	Selects whether to enable IPSec.	Enable, Disable	
Main—Advanced Setting	Click here to open the advanced setting menu for <b>IKE Settings</b> .		

## **IKE Settings**

Name	Description	Value Range	Links
IKE Settings—Version	Indicates the version of IKE (Internet Key Exchange) (reference only).	v1	
IKE Settings—Retry Count	Specifies the retry count number for the IKE Keep Alive.	1–50	
IKE Settings—Retry Interval (s)	Specifies the retry interval time for the IKE Keep Alive.	1–100 s	
IKE Settings—Phase1 - Timeout (s)	Specifies the IKE SA (Security Association) lifetime.	1–86400 s	
IKE Settings—Phase2 - Timeout (s)	Specifies the IPsec SA lifetime.	1–86400 s	
IKE Settings—Transmit Count	Specifies the number of packet to send.	1–65535	
IKE Settings—Auto Connection	Selects whether to enable Auto Connection.	Enable, Disable	

#### **Security Policy**

Name	Description	Value Range	Links
SPD Check	Click the <b>SPD Check</b> button on this screen to perform checks such as network address duplication on SPD (Security Policy Database) entries and display the results.		
SP Name	Specifies the SP (Security Policy) name.	1–16 characters	
Setting	Specifies whether to enable the security policy.	Enable, Disable	
SA Name	Selects an SA (Security Association) name from the drop down list. SA is a connection between VPN gateways.	SA Name	
Source Type	Selects the source type of the SA.	Any, IP Address	
Source IP Address	Specify the source IP Address of the SA. This setting is available only if <b>IP Address</b> is selected for <b>Source Type</b> . This setting can be set to blank only if <b>Any</b> is selected for <b>Source Type</b> .	Blank, 1.0.0.0– 223.255.255.255	

Name	Description	Value Range	Links
Subnet Mask	Specifies the subnet mask for the source IP Address of the SA. This setting can be set to blank only if <b>Any</b> is selected for <b>Source Type</b> .	Blank, 0.0.0.0– 255.255.255.255	
Destination Type	Selects the destination type of the SA.	Any, IP Address	
Destination IP Address	Specifies the destination IP Address of the SA. This setting is available only if <b>IP Address</b> is selected for <b>Destination Type</b> . This setting can be set to blank only if <b>Any</b> is selected for <b>Destination Type</b> .	Blank, 1.0.0.0– 223.255.255.255	
Subnet Mask	Specifies the subnet mask for the destination IP Address of the SA. This setting can be set to blank only if <b>Any</b> is selected for <b>Destination Type</b> .	Blank, 0.0.0.0– 255.255.255.255	
Advanced Setting	Click here to open the advanced setting menu for Security Policy—Advance.		

# **Security Policy—Advance**

Name	Description	Value Range	Links
SPD Check	Click the <b>SPD Check</b> button on this screen to perform checks such as network address duplication on SPD (Security Policy Database) entries and display the results.		
SP Name	Specifies the SP (Security Policy) name.	1–16 characters	
Setting	Selects whether to enable the security policy.	Enable, Disable	
SA Name	Selects an SA (Security Association) name from drop down list. SA is a connection between VPN gateways.	SA Name	
Protocol Type	Selects the protocol to be controlled by IPSec.	Any, TCP_UDP, TCP_UDP_ICMP_IGMP, Fixed Protocol No.	
Fixed Protocol Number (0-255)	Specifies the fixed protocol number to be controlled by IPSec. This setting is available only if <b>Fixed Protocol No.</b> is selected for <b>Protocol</b> .	0–255	
Source Type	Selects the source type of the SA.	Any, IP Address	
Source IP Address	Specifies the source IP Address of the SA. This setting is available only if <b>IP Address</b> is selected for <b>Source Type</b> . This setting can be set to blank only if <b>Any</b> is selected for <b>Source Type</b> .	Blank, 1.0.0.0– 223.255.255.255	

Name	Description	Value Range	Links
Subnet Mask	Specifies the subnet mask for the source IP Address of the SA. This setting can be set to blank only if <b>Any</b> is selected for <b>Source Type</b> .	Blank, 0.0.0.0– 255.255.255.255	
Source Port Type	Selects the method of specifying the source port number.	Any, Fixed	
Fixed Source Port Number	Specifies the source port number.	1–65535	
Destination Type	Selects the destination type of the SA.	Any, IP Address	
Destination IP Address	Specifies the destination IP Address of the SA. This setting is available only if IP Address is selected for Destination Type. This setting can be set to blank only if Any is selected for Destination Type.	Blank, 1.0.0.0– 223.255.255.255	
Subnet Mask	Specifies the subnet mask for destination IP Address of the SA. This setting can be set to blank only if <b>Any</b> is selected for <b>Destination Type</b> .	Blank, 0.0.0.0– 255.255.255.255	
Destination Port Type	Selects the method of specifying the destination port number.	Any, Fixed	
Destination Port Number	Specifies the destination port number.	1–65535	
TCP MSS	Selects the method of specifying the TCP MSS (Maximum Segment Size).	Auto, Fixed	
TCP MSS Value	Specifies the TCP MSS value. If <b>Auto</b> is selected for <b>TCP MSS</b> , this item is greyed out.	536–1460	

# SA (ISAKMP)

Name	Description	Value Range	Links
SA Name	Specifies the SA (Security Association) name.	1–16 characters	
Exchange Mode	Selects the IKE exchange mode.	Main, Aggressive, Both	
Remote Type	Selects the remote type for SA.	Terminal, Multi Site	
Remote IP Address Type	Selects the method of specifying the remote IP address type.	Static, Dynamic	
Remote IP Address	Specifies the remote IP address. If <b>Dynamic</b> is selected for <b>Remote IP Address Type</b> , this item is greyed out.	Blank, 1.0.0.1–223.255.255.254	
Remote Port Number Type	Selects the method of specifying the port number type.	Any, Fixed	

Name	Description	Value Range	Links
Fixed Port Number	Specifies the Fixed Port Number. If Any is selected for Remote Port Number Type, this item is greyed out.	1–65535	
My Identifier Type	Selects the method of specifying My Identifier Type.	FQDN, User FQDN, WAN IP Address	
My Identifier	Specifies My Identifier when FQDN or User FQDN is selected for My Identifier Type. If WAN IP Address is selected for My Identifier Type, this setting is greyed out.	1–255 characters	
Peer Identifier Type	Selects the method of specifying <b>Peer Identifier Type</b> .	FQDN, User FQDN, IP Address	
Peer Identifier	Specifies Peer Identifier.	If FQDN or User FQDN is selected for Peer Identifier Type, enter the Peer Identifier: 1–255 characters If IP Address is selected for Peer Identifier Type, enter the IP Address as the Peer Identifier: Blank, 1.0.0.1–223,255,255,254	
Nonce (byte)	Specifies the Nonce (Number used ONCE).	8–256	
Phase2 - Proposal Check	Selects the type of proposal check.	obey, strict, claim	
Initial - Contact	Selects whether to send an INITIAL-CONTACT message.	Enable, Disable	

# **SA Option**

Name	Description	Value Range	Links
SA Name	Specifies the SA (Security Association) name.	1–16 characters	
XAuth Mode	Selects whether to enable <b>XAuth Mode</b> .	Enable, Disable	
IPComp Mode	Selects whether to deflate when using IPComp (IP Payload Compression Protocol).	none, deflate	
Keepalive Mode	Selects the keep alive mode.	DPD (Dead Peer Protection), ICMP Echo, None	
Keepalive Timeout Action	Specifies the action the when keep alive timer expires. If <b>DPD</b> is selected for <b>Keepalive Mode</b> , this item is greyed out.	Alarm, Alarm & SA Delete	
DPD Interval (s)	Specifies the DPD interval in seconds.  If ICMP Echo is selected for Mode, this item is greyed out.	1–3600 s	

Name	Description	Value Range	Links
DPD Retry Interval (s)	Specifies the DPD retry interval in seconds. If <b>ICMP Echo</b> is selected for <b>Mode</b> , this item is greyed out.	1–3600 s	
DPD Fail Count	Specifies the maximum count of DPD failures. If <b>ICMP Echo</b> is selected for <b>Mode</b> , this item is greyed out.	1–255	
DPD Recovery Time (s)	Specifies the recovery time for DPD in seconds. If <b>ICMP Echo</b> is selected for <b>Mode</b> , this item is greyed out.	1–3600 s	

# **IKE Proposal**

Name	Description	Value Range	Links
SA Name	Specifies the SA (Session Announcement) name.	1–16 characters	
Authentication	Selects the authentication method.	Pre-Shared Key	
Pre-Shared Key	Specifies the <b>Pre-Shared Key</b> . Inputted characters are displayed as black circles.	8–63 characters	
Encryption Algorithm	Selects the encryption algorithm.	AES-CBC-128, AES- CBC-192, AES-CBC-256, DES-CBC, 3DES-CBC	
Hash Algorithm	Selects the hash algorithm.	HMAC-MD5, HMAC- SHA1	
Diffie-Hellman Group	Selects the Diffie-Hellman Group.	Group1 (modp768), Group2 (modp1024), Group5 (modp1536), Group14 (modp2048)	
Lifetime (s)	Selects the SA life time.	300–691200 s	
Perfect Forward Secrecy	Specifies whether to enable Perfect Forward Secrecy (PFS) in phase 2. When <b>Off</b> is selected, the secret shared key created in phase 1 is used in phase 2. Security is increased when PFS is enabled.	On, Off	

## **IPSec Proposal**

Name	Description	Value Range	Links
SA Name	Specifies the SA (Session Announcement) name.	1–16 characters	
Security Protocol	Selects the protocol for IPSec.	AH, ESP	
Lifetime (s)	Specifies the SA life time.	300–691200 s	
Capsulation	Selects the IPSec mode.	Transport, Tunnel	

Name	Description	Value Range	Links
Encryption Algorithm	Selects the encryption algorithm.	None, AES-CBC-128, AES- CBC-192, AES-CBC-256, DES- CBC, 3DES-CBC	
Hash Algorithm	Selects the Hash algorithm.	HMAC-MD5, HMAC-SHA1	
Diffie-Hellman Group	Selects the Diffie-Hellman Group.	None, Group1 (modp768), Group2 (modp1024), Group5 (modp1536), Group14 (modp2048)	

#### **XAuth ID**

Name	Description	Value Range	Links
User Name (8 - 32 characters)	Specifies the user name.	8–32 characters (a–z, 0–9, [hyphen], [underscore]) * The first character must be a letter.	
Password (Max 32 characters)	Specifies the password.	Maximum 32 characters (a–z, A–Z, 0–9, [hyphen], [underscore])	

# 27.11 Router Configuration—VPN—[3-3] Pass **Through**

Name	Description	Value Range	Links
IPSec Pass Through	Selects whether to enable IPSec Pass Through.	Enable, Disable	
IPSec Pass Through—IP Address	Specifies the IP address assigned from the IPSec server when connected.  If <b>Disable</b> is selected for <b>IPSec Pass Through</b> , this item is greyed out.	1.0.0.1– 223.255.255.254	
PPTP Pass Through	Selects whether to enable PPTP Pass Through.	Enable, Disable	
PPTP Pass Through—IP Address	Specifies the IP address assigned from the PPTP server when connected.  If <b>Disable</b> is selected for <b>PPTP Pass Through</b> , this item is greyed out.	1.0.0.1– 223.255.255.254	
L2TP Pass Through	Selects whether to enable L2TP Pass Through.	Enable, Disable	
L2TP Pass Through—IP Address	Specifies the IP address assigned from the L2TP server when connected.  If <b>Disable</b> is selected for <b>L2TP Pass Through</b> , this item is greyed out.	1.0.0.1– 223.255.255.254	

# 27.12 Router Configuration—QoS Settings—[4] **QoS Service**

Name	Description	Value Range	Links
QoS Service	Selects whether to enable QoS.	Enable, Disable	
Auto QoS VoIP— Enable	Specifies whether to enable the automatic QoS setting where VoIP packets are prioritised.	OFF, ON	
Auto QoS VoIP— Priority Queue/TOS (DSCP)	Selects the method of specifying the automatic QoS setting.  If <b>ON</b> is not checked for <b>Auto QoS VoIP—Enable</b> , this item is greyed out.	Priority Queue, TOS (DSCP)	
Auto QoS VoIP— Mode	Selects the kind of VoIP packets to be prioritised. If <b>ON</b> is not checked for <b>Auto QoS VoIP—Enable</b> , this item is greyed out.	VoIP (RTP Packet), VoIP (Signalling), VoIP (All)	
Upstream Bandwidth	Selects the method of specifying upstream bandwidth.  If <b>Fixed Bandwidth Size (Kbps)</b> is selected, specify the bandwidth.  If <b>Automatic</b> is selected, this item is greyed out.	Automatic, Fixed Bandwidth Size (Kbps) (64–100000)	
Advanced Setting	Click here to open the advanced setting menu for QoS Settings - Advanced.		

## **QoS Settings - Advanced**

Name	Description	Value Range	Links
WAN QoS—QoS Mode	Indicates the QoS mode (Reference Only).	Priority Queue	
WAN QoS—Entry No. (1-32)	Selects the entry number.	1–32	
WAN QoS—Priority Settings	Specifies whether to enable priority queue numbers.	On, Off	
WAN QoS—Priority Settings—Priority Queue No.	Selects which queue number is prioritised. If Enable is not checked as WAN QoS— Priority Settings, this item is greyed out.	0–3	
WAN QoS—Protocol No.	Selects the method of specifying protocols for which QoS is applied.  If ANY is selected for Protocol No., QoS is available for all protocols.  If Select Protocol is selected for Protocol No., specify the protocol type for Select Protocol below.  If Other ( 0 - 255 ) is selected for Protocol No., specify the protocol number for Other ( 0 - 255 ) below.	ANY, Select Protocol, Other (0 - 255)	

Name	Description	Value Range	Links
WAN QoS—Protocol No.—Select Protocol	Selects the protocol name for which QoS is applied. This setting is available only if <b>Select Protocol</b> is selected for <b>WAN QoS—Protocol No.</b> .	ICMP, TCP, UDP, TCP&UDP	
WAN QoS—Protocol No.—Other ( 0 - 255 )	Specifies the protocol number for which QoS is applied. This setting is available only if <b>Other</b> ( <b>0 - 255</b> ) is selected for <b>WAN QoS—Protocol No.</b> .	Blank, 0–255	
WAN QoS—Source	Selects the method of specifying a source. If ANY is selected for Source, QoS is available for all IP addresses. If Address is selected for Source, enter the IP address for IP Address below. If Subnet is selected for Source, enter the subnet mask for Subnet Mask below.	ANY, Address, Subnet	
WAN QoS—Source— IP Address	Specifies the <b>IP Address</b> to specify a source. If you did not select <b>Address</b> as <b>Source</b> , this item is greyed out.	Blank, 1.0.0.1– 223.255.255.254	
WAN QoS—Source— Subnet Mask	Specifies the subnet mask to specify a source. If you did not select <b>Subnet</b> as <b>Source</b> , this item is greyed out.	Blank, 0.0.0.0– 255.255.255.255	
WAN QoS— Destination	Selects the method of specifying a destination IP address. If ANY is selected for Destination, QoS is available for all IP addresses. If Address is selected for Destination, enter the IP address for IP Address below. If Subnet is selected for Destination, enter the subnet mask for Subnet Mask below.	ANY, Address, Subnet	
WAN QoS— Destination—IP Address	Specifies the <b>IP Address</b> to specify a destination. If you did not select <b>Address</b> as <b>Destination</b> , this item is greyed out.	Blank, 1.0.0.1– 223.255.255.254	
WAN QoS— Destination—Subnet Mask	Specifies the subnet mask to specify a destination. This setting is available only if <b>Subnet</b> is selected for <b>Destination</b> .	Blank, 0.0.0.0– 255.255.255.255	
WAN QoS—TOS (DSCP)—Enable	Specifies whether to enable QoS by using the DSCP value.	OFF, ON	
WAN QoS—TOS (DSCP)	Selects the method of specifying DSCP value.	ANY, TOS(DSCP) Value (0-63)	
WAN QoS—TOS (DSCP)—TOS(DSCP) Value (0-63)	Specifies the TOS (DSCP) value. If TOS(DSCP) Value (0-63) is not selected for TOS (DSCP), this item is greyed out.	0–63	
WAN QoS—TOS Mapping—Enable	Specifies whether to enable TOS mapping.	OFF, ON	

Name	Description	Value Range	Links
WAN QoS—TOS Mapping— TOS(DSCP) Value (0-63)	Specifies the <b>TOS (DSCP)</b> value. If above <b>Enable</b> is not checked, this item is greyed out.	0–63	
Bandwidth Control— Enable	Selects whether to enable bandwidth control. If Enable is not selected, Priority Queue 0(kbps), Priority Queue 1(kbps), Priority Queue 2(kbps) and Priority Queue 3(kbps) are greyed out.	OFF, ON	
Bandwidth Control— Upstream—Priority Queue 0(kbps)	Specifies the maximum bandwidth for this queue.  If you did not check <b>Enable</b> as Bandwidth Control, this item is greyed out.	Blank, 64–100000 Kbps	
Bandwidth Control— Upstream—Priority Queue 1(kbps)	Specifies the maximum bandwidth for this queue.  If you did not check <b>Enable</b> as Bandwidth Control, this item is greyed out.	Blank, 64–100000 Kbps	
Bandwidth Control— Upstream—Priority Queue 2(kbps)	Specifies the maximum bandwidth for this queue.  If you did not check <b>Enable</b> as Bandwidth Control, this item is greyed out.	Blank, 64–100000 Kbps	
Bandwidth Control— Upstream—Priority Queue 3(kbps)	Specifies the maximum bandwidth for this queue. If you did not check <b>Enable</b> as Bandwidth Control, this item is greyed out.	Blank, 64–100000 Kbps	

# Section 28 Network Service

This section serves as reference operating instructions for the Network Service menu of the Setup screen of Web Maintenance Console.

#### **Network Service—[1] IP Address/Ports** 28.1

#### **Basic Settings**

Name	Description	Value Range	Links
LAN Setting— DHCP Port Number	Specifies the port number of the DHCP client. This parameter is only available for entering values when <b>Obtain an IP address automatically</b> is selected.	68, 1024–65535	
LAN Setting— Obtain an IP address automatically/Use the following IP address	Specifies whether to enable the DHCP server to assign IP address information automatically to the mother board, or to enter the information manually.	Obtain an IP address automatically, Use the following IP address	Feature Manual References 5.6.6 Dynamic Host Configuration Protocol (DHCP) Assignment
LAN Setting—IP Address	Specifies the IP address of the mother board. This parameter is only available for entering values when <b>Use the following IP address</b> is selected.	1.0.0.0– 223.255.255.255	
LAN Setting— MAC Address	Indicates the MAC address of the mother board (reference only).	00:00:00:00:00:00- FF:FF:FF:FF:FF	
LAN Setting— Subnet Mask	Specifies the network mask address of the mother board. This parameter is only available for entering values when <b>Use the following IP address</b> is selected.	0-255.0-255.0- 255.0-255 (except 0.0.0.0 and 255.255.255.255)	
LAN Setting— Default Gateway	Specifies the IP address of the default gateway for the network. This parameter is only available for entering values when <b>Use the following IP address</b> is selected.	0.0.0.0– 223.255.255.255	
LAN Setting— Local Domain	Specifies the Local Domain for the network.	Max. 128 characters	
DNS Setting— Port Number	Specifies the port number of the DNS server. This parameter is only available for entering values when Obtain DNS server address automatically is selected.	53, 1024–65535	
DNS Setting— Obtain DNS server address automatically/Use the following DNS server address	Specifies whether to enable the DHCP server to assign DNS server address information automatically to the mother board, or to enter the information manually.	Obtain DNS server address automatically, Use the following DNS server address	Feature Manual References 5.6.6 Dynamic Host Configuration Protocol (DHCP) Assignment

Name	Description	Value Range	Links
DNS Setting— Preferred DNS IP Address	Specifies the preferred IP address for the DNS server. This parameter is only available for entering values when <b>Use the following DNS server address</b> is selected.	1.0.0.0– 223.255.255.255	PC Programming Manual References
	Note  • Since communication over a VPN will not be possible, do not		27.2.1 Router Configuration— Setup—[1-2-1] WAN— Connection
	set a destination IP address in the VPN for this setting.		Settings Installation
	<ul> <li>If this setting is configured at the same time as the following settings, this setting takes precedence.</li> </ul>		Manual References 8.6.5 DNS Client
	<ul> <li>27.2.1 Router Configuration</li> <li>—Setup—[1-2-1] WAN—</li> <li>Connection Settings—Static</li> <li>IP—Preferred DNS IP</li> <li>Address</li> </ul>		
	<ul> <li>27.2.1 Router Configuration</li> <li>—Setup—[1-2-1] WAN—</li> <li>Connection Settings—DHCP</li> <li>—Preferred DNS IP Address</li> </ul>		
	<ul> <li>27.2.1 Router Configuration</li> <li>—Setup—[1-2-1] WAN—</li> <li>Connection Settings—</li> <li>PPPoE—Preferred DNS IP</li> <li>Address</li> </ul>		

Name	Description	Value Range	Links
DNS Setting— Alternative DNS IP Address	Specifies the alternative IP address for the DNS server. This parameter is only available for entering values when Use the following DNS server address is selected.  Note  • Since communication over a VPN will not be possible, do not set a destination IP address in the VPN for this setting.  • If this setting is configured at the same time as the following settings, this setting takes precedence.  - 27.2.1 Router Configuration —Setup—[1-2-1] WAN— Connection Settings—Static IP—Alternative DNS IP Address  - 27.2.1 Router Configuration —Setup—[1-2-1] WAN— Connection Settings—DHCP —Alternative DNS IP Address  - 27.2.1 Router Configuration —Setup—[1-2-1] WAN— Connection Settings—DHCP —Alternative DNS IP Address  - 27.2.1 Router Configuration —Setup—[1-2-1] WAN— Connection Settings— PPPoE—Alternative DNS IP Address	1.0.0.0- 223.255.255.255	PC Programming Manual References 27.2.1 Router Configuration— Setup—[1-2-1] WAN— Connection Settings Installation Manual References 8.6.5 DNS Client
DSP IP Setting— Obtain DSP IP address automatically/Use the following DSP IP address	Specifies whether the DHCP server assigns IP address information automatically to the DSP card(s), or to enter the information manually.	Obtain DSP IP address automatically, Use the following DSP IP address	
DSP IP Setting— DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2 —IP Address	Specifies the IP address of the DSP card. This parameter is only available for entering values when <b>Use the following DSP IP address</b> is selected.	1.0.0.0– 223.255.255.255	
DSP IP Setting— DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2 —MAC Address	Indicates the MAC address of the DSP card (reference only).	00:00:00:00:00- FF:FF:FF:FF:FF	

# **Advanced Settings**

Name	Description	Value Range	Links
LAN Port—Speed & Duplex	Specifies the connection mode of the main port. The connection is made in 100 Mbps/half duplex when Auto negotiation fails.	Auto: Automatic mode selection 1000M-Full: 1000 Mbps/full duplex 100M-Full: 100 Mbps/full duplex 100M-Half: 100 Mbps/half duplex 10M-Full: 10 Mbps/full duplex 10M-Half: 10 Mbps/half duplex	
LAN Port—MDI/ MDIX	Specifies the cable type connected to the LAN port.	Auto, MDI, MDIX	
WAN Port—Speed & Duplex	Specifies the connection mode of the WAN port. The connection is made in 100 Mbps/half duplex when Auto negotiation fails.	Auto: Automatic mode selection 1000M-Full: 1000 Mbps/full duplex 100M-Full: 100 Mbps/full duplex 100M-Half: 100 Mbps/half duplex 10M-Full: 10 Mbps/full duplex 10M-Half: 10 Mbps/half duplex	
WAN Port—MDI/ MDIX	Specifies the cable type connected to the WAN port.	Auto, MDI, MDIX	
WAN Port—Uplink	Specifies whether the WAN port data uplink is enabled.	Enable, Disable	
Maintenance Port— Speed & Duplex	Specifies the connection mode of the maintenance port. The connection is made in 100Mbps/half duplex when Auto negotiation fails. This setting is available at Installer level only.	Auto: Automatic mode selection 1000M-Full: 1000 Mbps/full duplex 100M-Full: 100 Mbps/full duplex 100M-Half: 100 Mbps/half duplex 10M-Full: 10 Mbps/full duplex 10M-Half: 10 Mbps/half duplex	
Port Mirroring— Packet kind for mirroring	Specifies the types of packets used for port mirroring. This setting is available at Installer level only.	Disable LAN (All packets) LAN (Data packets PBX) LAN (Voice packets) WAN (All packets) WAN/LAN (All packets)	

#### Reference

The items displayed in this tab are the settings obtained from a DHCP server by the DHCP client of the PBX. They are for reference only.

Name	Description	Value Range	Links
Assigned IP Address—IP Address	Indicates the assigned IP address of the mother board (reference only).		
Assigned IP Address—MAC Address	Indicates the MAC address of the mother board (reference only).		
Assigned IP Address—Subnet Mask	Indicates the network mask address of the mother board (reference only).		
Assigned IP Address—Default Gateway	Indicates the assigned IP address of the default gateway for the network (reference only).		

Name	Description	Value Range	Links
Assigned WAN IP Address—IP Address	Indicates the assigned WAN IP address of the mother board (reference only).		
Assigned WAN IP Address—MAC Address	Indicates the MAC address of the mother board (reference only).		
Assigned WAN IP Address—Subnet Mask	Indicates the network mask address of the mother board (reference only).		
Assigned WAN IP Address—Default Gateway	Indicates the assigned WAN IP address of the default gateway for the network (reference only).		
Assigned DNS Server Address— Preferred DNS IP Address	Indicates the assigned IP address for the preferred DNS server (reference only).		
Assigned DNS Server Address— Alternative DNS IP Address	Indicates the assigned IP address for the alternative DNS server (reference only).		
DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2—IP Address	Indicates the IP address assigned for an installed optional DSP card (reference only).		
DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2—MAC Address	Indicates the MAC address of the DSP card (reference only).		
DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2—Subnet Mask	Indicates the Subnet Mask address of the DSP card (reference only).		
DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2—Default Gateway	Indicates the Default Gateway address of the DSP card (reference only).		

# 28.2 Network Service—[2] Server Feature

#### **Network Service—[2-1] Server Feature—DHCP** 28.2.1

Settings for the DHCP Server can be programmed.

#### **Basic Settings**

Name	Description	Value Range	Links
DHCP Server	Specifies if the DHCP server functions of the PBX are enabled or not.	Disable, DHCP Server, DHCP Relay Agent	
	Note  If the PBX is in Backup Master mode of network survivability, it is recommended that an external		
	DHCP server is used instead of the PBX's DHCP server.		
Port number	Specifies the port number used for the DHCP server.	67, 1024–65535	
Server IP address for Relay	Specifies the IP address for the DHCP server for DHCP Relay. This setting is only available when <b>DHCP Relay Agent</b> is checked.	1.0.0.1– 255.255.255.255	

## IP address auto assignment

Name	Description	Value Range	Links
Starting IP address	Specifies the starting IP address for the assignable range of IP addresses.	1.0.0.0– 223.255.255.255	
Ending IP address	Specifies the ending IP address for the assignable range of IP addresses.	1.0.0.0– 223.255.255.255	
Lease interval (h)	Specifies the duration in hours of the DHCP allocation lease. Setting "0" specifies an unlimited lease duration.	1–168 (hours)	
Auto assignment exclusions	Up to 16 IP Addresses can be specified that will not be automatically assigned.	1.0.0.0– 223.255.255.255	

#### **IP Address Static Assignment**

Name	Description	Value Range	Links
MAC Address	Specifies the MAC addresses of the MAC address/IP address pairs to be subject to static DHCP allocation.	00:00:00:00:00- FF:FF:FF:FF:FF	
IP Address	Specifies the IP addresses of the MAC address/IP address pairs to be subject to static DHCP allocation.	1.0.0.0–223.255.255.255	

## **IP Address Assignment List**

Name	Description	Value Range	Links
MAC Address	Specifies MAC addresses currently specified by the system.	00:00:00:00:00- FF:FF:FF:FF:FF	
IP Address	Specifies IP addresses currently assigned by the system.	1.0.0.0–223.255.255.255	
Remaining lease time	Specifies the remaining lease time for the MAC address/IP address pair.	1–85777 s	

# 28.2.2 Network Service—[2-2] Server Feature—FTP

Settings for FTP server connections can be programmed.

Name	Description	Value Range	Links
Connection Control —Control Port number	Specifies the port number for connecting to the PBX's FTP server.	21, 990, 1024–65535	
Data Transfer Port —Port number (Minimum)	Specifies the minimum port number for FTP data transfer.	1024–65535	
Data Transfer Port —Port number (Maximum)	Specifies the maximum port number for FTP data transfer.	1024–65535	
User Information— User Name	Specifies the user name for the PBX's FTP server authentication.	Max. 24 characters (a–z, 0–9, [hyphen], [underscore])	
	Note	Note	
	Be sure to change the user name from its initial, default value. Also, for security reasons, change the user name regularly.	The first character must be a letter (a–z).	
User Information— Password	Specifies the password for the PBX's FTP server authentication.	Max. 24 characters (A–Z, a–z, 0–9, [hyphen], [underscore])	
	Note	Note	
	Be sure to change the password from its initial, default value. Also, for security reasons, change the password regularly.	The first character must be a letter or number.	

# 28.2.3 Network Service—[2-4] Server Feature—HTTP

HTTP server settings can be programmed.

Name	Description	Value Range	Links
HTTP (LAN / MNT) —Port number	Specifies the port number for HTTP connections using the LAN or MNT ports. This port is used for accessing the PBX for Web Maintenance Console programming.	80, 1024–65535	

Name	Description	Value Range	Links
HTTPs (LAN / MNT) —HTTPs server	Enables or disables HTTPs for connections to the LAN or MNT ports using the PBX's HTTP server function.	Disable, Enable	
HTTPs (LAN / MNT) —Port number	Specifies the port number for HTTPs connections. This port is used for accessing the PBX for Web Maintenance Console programming when using a TLS connection.	443, 1024– 65535	
HTTPs (WAN)— HTTPs server	Enables or disables HTTPs for connections to the WAN port using the PBX's HTTP server function.	Disable, Enable	
HTTPs (WAN)— Port number	Specifies the port number for HTTPs connections to the WAN port using the PBX's HTTP server function.	443, 1024– 65535	
HTTPs (WAN)— Port Close Control	Specifies how HTTPs (WAN) is disabled. If you enabled the HTTPs (WAN) port and select Automatic (24H), it will be disabled automatically after 24 hours for security purposes.	Automatic (24H), Manual	
Automatic logout Timer (min)	Specifies the amount of time required to elapse before logging off an inactive connection from the HTTP server.	5, 10, 30, 60×n (n=1–24) (minutes)	

# 28.2.4 Network Service—[2-5] Server Feature—NTP

NTP server settings for use with KX-UT series SIP phones can be programmed.

Name	Description	Value Range	Links
NTP server	Enables or disables NTP service with the PBX's NTP server for connected KX-UT series SIP phones. When this feature is enabled, the PBX will report to connected KX-UT series SIP phones the information obtained from the SNTP server specified in 10.1.2 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving. If this feature is disabled, connected KX-UT series SIP phones will use their individually programmed time settings.	Disable, Enable	PC Programming Manual References  10.1.2 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—SNTP—SNTP Server—IP Address  10.1.2 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—SNTP—SNTP Server—Port Number  10.1.2 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—SNTP—Time Zone—Time Zone

# 28.2.5 Network Service—[2-6] Server Feature—SMTP

Name	Description	Value Range	Links
Mail Receiving—SMTP Authentication	Specifies if SMTP authentication is enabled for mail receiving.	Enable, Disable	
Mail Receiving—SMTP over TLS	Specifies whether mail receiving uses Transport Layer Security for SMTP.	Enable, Disable	

Name	Description	Value Range	Links
Mail Receiving—Receive Port number (SMTPs)	Specifies the receiving port number when using SMTPs.	25, 465, 587, 1024–65535	
Mail Receiving—Receive Port number (SMTP)	Specifies the receiving port number when using SMTP.	25, 465, 587, 1024–65535	

# 28.2.6 Network Service—[2-7] Server Feature—IMAP4

Settings for IMAP4 server functions for the PBX can be programmed.

Name	Description	Value Range	Links
IMAP4—IMAP4 server	Specifies whether to enable the IMAP4 server functions of the PBX.	Enable, Disable	
IMAP4—Port number	Specifies a port number for the IMAP server. The default value is 143.	143, 1024– 65535	
IMAP4 over TLS—IMAP4 over TLS	Specifies whether to enable TLS encryption for the IMAP4 server functions of the PBX.	Enable, Disable	
IMAP4 over TLS—Port number	Specifies a port number for the IMAP server when using TLS encryption. The default value is 993.	993, 1024– 65535	
CAPABILITY command— Supporting IDLE response	Specifies whether the IMAP4 server will respond to IDLE commands sent by clients.	Enable, Disable	
Authenticated Connection Timeout—Authenticated Connection Timeout (min)	Specifies the amount of time of no activity that is required before an authenticated connection to the IMAP4 server will be disconnected.	1, 2, 3, 5, 10, 15, 20, 25, 30, 60 (min)	

# 28.2.7 Network Service—[2-8] Server Feature—TELNET

Settings for TELNET server functions for the PBX can be programmed. This option is available for the Installer level account.

Name	Description	Value Range	Links
TELNET Server	Specifies whether to enable the TELNET server functions of the PBX.	Enable, Disable	
Port number	Specifies a port number for the TELNET server.	23, 1024–65535	
User name	Specifies a user name for the TELNET server to log in.	Max. 24 characters (a–z, 0–9, \$, [hyphen], [underscore])	
Password	Specifies a password for the TELNET server to log in.	Max. 24 characters (a–z, 0–9, \$, [hyphen], [underscore])	

# 28.3 Network Service—[3] Client Feature

# 28.3.1 Network Service—[3-1] Client Feature—FTP

FTP client connection settings can be programmed. Up to 5 FTP sites can be specified for connections.

#### **Connection 1—Connection 5**

Name	Description	Value Range	Links
Connection Name	Specifies the name of the connection to use for programming in other items.	Max. 64 characters	
IP Address	Specifies the IP address of the FTP site. Click the <b>IP Address</b> radio button when this is used.	1.0.0.0–223.255.255.255	
Name	Specifies the name of the FTP site. Click the <b>Name</b> radio button when this is used.	FTP site name (max. 253 characters)	
Server Port Number	Specifies the port number used to connect to the FTP site.	21, 990, 1024–65535	
User name	Specifies the user name required to log in to the FTP site.	Max. 24 characters (a–z, 0–9, \$, [hyphen], [underscore])	
		Note	
		The first character must be a letter or number.	
		<ul> <li>\$ may only be used as the final character.</li> </ul>	
Password	Specifies the password for the user name required to log in to the FTP site.	Max. 24 characters (A–Z, a–z, 0–9, =, [hyphen], [underscore])	
		Note	
		The first character must be a letter, number, or =.	
Protocol	Specifies the communication protocol for the FTP connection.	FTP, FTPS (Explicit), FTPS (Implicit)	

## 28.3.2 Network Service—[3-2] Client Feature—Syslog

Settings can be programmed for a Syslog client connection.

Name	Description	Value Range	Links
Remote Syslog	Specifies whether an external Syslog server will be used with the PBX.	Enable, Disable	
Remote Syslog server—IP address / Host name	Specifies the IP address or host name of the external Syslog server.	1.0.0.0–223.255.255.255 (IP address), Max. 253 characters (host name)	

Name	Description	Value Range	Links
Port	Specifies the connection port for the remote Syslog server.	514, 1024–65535	

## 28.3.3 Network Service—[3-3] Client Feature—SNMP Agent

Using SNMP (Simple Network Management Protocol), it is possible for a PC assigned as an SNMP manager to manage and receive PBX system status information, such as alarm information and general system activity. The related PBX system settings can be programmed. This option is only available at Installer level.

Name	Description	Value Range	Links
SNMP agent	Enables the PBX to use its SNMP agent function.	Disable, Enable	Feature Manual References 5.6.5 Simple Network Management Protocol (SNMP) System Monitor
SNMP version	Specifies the version of the SNMP protocol to use.	SNMP V1, SNMP V2c	Feature Manual References 5.6.5 Simple Network Management Protocol (SNMP) System Monitor
SNMP manager	Specifies the SNMP	161, 1024–	Feature Manual References
port	manager port. 65535	5.6.5 Simple Network Management Protocol (SNMP) System Monitor	
MIB info—	Specifies the name and	Max. 255	Feature Manual References
SysContact	contact information of the system administrator.	characters	5.6.5 Simple Network Management Protocol (SNMP) System Monitor
MIB info—	Specifies the administrative	Max. 255	Feature Manual References
SysName	name for the system.	characters	5.6.5 Simple Network Management Protocol (SNMP) System Monitor
MIB info—	Specifies the physical	Max. 255	Feature Manual References
SysLocation	location for the system.	characters	5.6.5 Simple Network Management Protocol (SNMP) System Monitor

### SNMP Manager #1 / SNMP Manager #2

It is possible to assign up to two PCs as SNMP managers. The settings related to SNMP manager activity can be programmed for each SNMP manager, indicated as No.1 and No.2 on the screen. This option is only available at Installer level.

Name	Description	Value Range	Links
IP address	Specifies the IP address of an SNMP manager. Click the button next to IP Address and enter the address.	1.0.0.0– 223.255.255.255	Feature Manual References 5.6.5 Simple Network Management Protocol (SNMP) System Monitor

Name	Description	Value Range	Links
Host name	Specifies the host name of an SNMP manager. Click the button next to <b>Host</b> Name and enter a name.	Max. 253 characters (host name)	Installation Manual References 8.6.5 DNS Client
	Name and enter a name.		Feature Manual References 5.6.5 Simple Network
			Management Protocol (SNMP) System Monitor
Trap port	Specifies a port number used to send trap messages	162, 1024–65535	Feature Manual References
	from the agent to an SNMP manager.		5.6.5 Simple Network Management Protocol (SNMP) System Monitor
Community name	Specifies a community name of an SNMP	Max. 32 characters	Feature Manual References
	manager.		5.6.5 Simple Network Management Protocol (SNMP) System Monitor
TRAP filtering— Standard TRAP	Selects whether the PBX sends standard trap	Disable, Enable	Feature Manual References
	messages to an SNMP manager or not.		5.6.5 Simple Network Management Protocol (SNMP) System Monitor
TRAP filtering— enterpriseSpecific	Selects whether the PBX sends Major Alarm trap	Disable, Enable	Feature Manual References
(Major)	messages to an SNMP manager or not.		5.6.5 Simple Network Management Protocol (SNMP) System Monitor
TRAP filtering— enterpriseSpecific	Selects whether the PBX sends Minor Alarm trap	Disable, Enable	Feature Manual References
(Minor)	messages to an SNMP manager or not.		5.6.5 Simple Network Management Protocol (SNMP) System Monitor

# 28.3.4 Network Service—[3-4] Client Feature—HTTP

Proxy server settings for the HTTP client can be programmed.

Name	Description	Value Range	Links
Proxy Connection	Selects whether to enable connection to a proxy server.	Disable, Enable	
Proxy Address	Selects the type of proxy address.	IP Address, Name	
Proxy Address—IP Address	Specifies the IP address of the proxy server.	Valid IP address	
Proxy Address—Name	Specifies the host name of the proxy server.	Valid host name	

Name	Description	Value Range	Links
Port Number	Specifies the port number for the proxy connection.	1–65535	
Authentication	Selects whether to enable authentication to the proxy server.	Disable, Enable	
Authentication User name	Specifies the user name for authentication for the proxy connection.	Max. 64 characters	
Authentication Password	Specifies the password for authentication for the proxy connection.	Max. 64 characters	

# 28.3.5 Network Service—[3-5] Client Feature—Remote **Maintenance**

Remote maintenance settings can be programmed.

Name	Description	Value Range	Links
Remote Maintenance Server Connection Status	Displays the connection status with the remote maintenance server.	No Connect: In standby mode Connecting (try N times)*1: Attempting connection (N times) Connected: Connection is normal Failed (Authentication Error): Connection authentication failed in client certificate authentication system Failed (Password Error): Connection authentication failed in password authentication failed in password authentication system Failed (Proxy Error): Proxy server connection failed Disconnected: Connection is stopped Unexpected Error: Other, unexpected error	
Update Client Certification—File for Client Certification	Install a client certificate file for client certification.		
	Click <b>Browse</b> to open the file dialogue.		
	2. Select a client certificate file.		
	3. Click <b>Import</b> to import the file.		
Update Client Certification—CSR file for Client Certification	Click <b>Export</b> to create a CSR file for client certification.		
Remote Access Acceptance— INSTALLER	Displays whether permission for remote access is granted for the INSTALLER account.	Selected: Accepted Not selected: Not Accepted	

<sup>&</sup>quot;(try N times)" is displayed only from the second attempted connection.

# 28.3.6 Network Service—[3-6] Client Feature—SMTP

Settings for SMTP for sending e-mail for PBX functions can be programmed.

Name	Description	Value Range	Links
Mail sender information name	Specifies the name to be used as the sender of the e-mails from the PBX.	Max. 64 characters	
Mail address	Specifies the sending e-mail address for messages sent from the PBX. This address, for example, could be set as the e-mail address of an administrator.	Max. 128 characters	
SMTP server for relay— SMTP server address— IP Address	Specifies the IP address of the SMTP server to be used to send e-mails.	1.0.0.0— 223.255.255.255	Installation Manual References 8.6.5 DNS Client
SMTP server for relay— SMTP server address— Name	Specifies the host name of the SMTP server to be used to send e-mails.	Max. 128 characters	Installation Manual References 8.6.5 DNS Client
SMTP server for relay— SMTP server Port number	Specifies the port number of the SMTP server to be used to send emails.	1–65535	
SMTP server for relay— SMTP over TLS	Specifies whether the SMTP server uses Transport Layer Security.	Note When Enable is selected, the encryption method used is STARTTLS.	
SMTP Authentication— SMTP Authentication	Specifies whether authentication on the SMTP server is enabled.	Enable, Disable	
SMTP Authentication— User Name	Specifies the user name required to access the SMTP server.	Max. 64 characters	
SMTP Authentication— Password	Specifies the password required to access the SMTP server.	Max. 64 characters	
POP Before SMTP— POP before SMTP	Specifies whether POP before SMTP is enabled on the SMTP server.	Enable, Disable	
POP Before SMTP— POP server address—IP Address	Specifies the IP address of the POP server when POP before SMTP is enabled.	1.0.0.0– 223.255.255.255	

Name	Description	Value Range	Links
POP Before SMTP— POP server address— Name	Specifies the host name of the POP server when POP before SMTP is enabled.	Max. 128 characters	
POP Before SMTP— POP server Port number	Specifies the port number of the POP server when POP before SMTP is enabled.	1–65535	
POP Before SMTP— User Name	Specifies the user name for the POP server when POP before SMTP is enabled.	Max. 64 characters	
POP Before SMTP— Password	Specifies the password for the POP server when POP before SMTP is enabled.	Max. 64 characters	

# 28.4 Network Service—[4] Other

#### Network Service—[4-1] Other—Security 28.4.1

Network security settings can be programmed.

Name	Description	Value Range	Links
ICMP Echo Reply—LAN Port	Specifies if the LAN port will send ICMP echo-replies to incoming ICMP echo-requests.	Enable, Disable	
ICMP Echo Reply—Log Output	Specifies if the PBX logs ICMP echoreplies.	Enable, Disable	
TLS—Encryption Suite	Specifies the method of encryption used for TLS.	AES256-SHA, DES- CBC3-SHA, AES128- SHA, DES-CBC-SHA, AES128-SHA2, AES256- SHA2	

# 28.4.2 Network Service—[4-2] Other—NAS

NAS settings can be programmed.

Name	Description	Value Range	Links
NAS Status	Displays/changes the connection status of the NAS.	Connected, Disconnected To change the connection status of the NAS, perform the following:	
		Click <b>Disconnect</b> to set the NAS to disconnect status.	
		Click <b>Connect</b> to set the NAS to connect status.	
NAS Setting— Protocol	Specifies the communication protocol for the NAS connection.	NFS, CIFS	
NAS Setting—NAS Address—IP Address	Specifies the IP address of the NAS.	1.0.0.1–223.255.255.254	
NAS Setting—NAS Address—Name	Specifies the Name of the NAS.	Max. 253 characters	
NAS Setting—Port No.	Specifies the NAS using port number.	445, 1024–65535	
NAS Setting—Mount directory	Specifies the NAS mount directory.	Max. 128 characters (multi-byte characters allowed)	
CIFS Setting—User Name	Specifies the NAS connection user name when NAS Setting— Protocol is set to CIFS.	Max. 24 characters (multi-byte characters allowed)	
CIFS Setting— Password	Specifies the NAS connection password when NAS Setting—Protocol is set to CIFS.	Max. 24 characters (multi-byte characters allowed)	

# Section 29 Appendix

# 29.1 Revision History

#### 29.1.1 KX-NS1000 PCMPR Software File Version 002.0xxxx

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- 1.2.3.1 One-look Networking Survivability
- 6.12 Tool—DXDP All OUS
- 6.15 Tool—URL Information
- 7.1.1 Utility—Diagnosis—Card Diagnosis—Pair Port Test
- 7.4.9 Utility—Monitor/Trace—T1/E1 Signalling Bit Monitor
- 7.4.10 Utility—Monitor/Trace—T1/E1 Line Trace
- 7.12 Utility—CS-Web Connection
- · 8.2.1 Users—Add User—Single User
  - Unified Messaging Plug in
  - Fax Driver Tool
- 9.1 PBX Configuration—[1-1] Configuration—Slot
  - To pre-install PBXs connected to the STACK-M card
  - Common Programming Reference Items
- 9.2 PBX Configuration—[1-1] Configuration—Slot—Summary—Legacy Gateway 1 Shelf/Legacy Gateway 2 Shelf
- 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—Multisite—Multisite startup monitoring time
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
  - Main-Isolated Mode
  - Port Number—CWMP (HTTP) Port No. for SIP-MLT
  - Port Number—CWMP (HTTPS) Port No. for SIP-MLT
  - Port Number—Data Transmission Protocol (HTTP) Port No. for SIP-MLT
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  - SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT CWMP Server IP Address
  - SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT CWMP Server (HTTP) Port No.

- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT CWMP Server (HTTPS) Port No.
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT SIP-MLT Data Download Server (HTTP) Port No.
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT SIP-MLT Data Download Server (HTTPS) Port No.
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT SIP Proxy Server IP Address
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT SIP Proxy Server Port No.
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT NTP Server IP Address
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT NTP Server Port No.
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT Keep Alive Packet Type
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT Keep Alive Packet Sending Interval Time (s)
- SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT SIP Register Expire Time (s)
- SIP Extension—Setting parameters for Networking Survivability, assigned to Remote SIP-MLT—NAT -CWMP Server IP Address
- SIP Extension—Setting parameters for Networking Survivability, assigned to Remote SIP-MLT—NAT -CWMP Server (HTTP) Port No.
- SIP Extension—Setting parameters for Networking Survivability, assigned to Remote SIP-MLT—NAT -CWMP Server (HTTPS) Port No.
- SIP Extension—Control Condition of Remote SIP-MLT—PERIODIC Ability
- SIP Extension—Control Condition of Remote SIP-MLT—PERIODIC Packet Sending Interval Time (s)
- 9.8 PBX Configuration—[1-1] Configuration—Slot—Port Property—Port Type View
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property—Trunk Adaptor
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property—Main—Backup
- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property—Secondary Setting
- 9.13 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16—Port Property—Trunk Adaptor
- 9.20 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Card Property—Main—INFORM retransmission counter
- 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property
  - Secondary Setting
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- 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—KX-T7710

- 11.7.2 PBX Configuration—[3-7-2] Group—UM Group—Unit Settings—Fail Over Site Name
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- 5.1.2 System Control—Program Update—Update Program File
- 6.5 Tool—Extension List View
- 6.9 Tool—UM Data Backup
- 6.10 Tool—UM Data Restore
- 7.3.1 Utility—Log—Error Log
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- 20.1.1 UM Configuration—[1-1] Mailbox Settings—Quick Setting
- 20.1.3 UM Configuration—[1-3] Mailbox Settings—Auto Configuration

#### **Changed Contents**

- 1.2.1 Starting Web Maintenance Console
- 1.2.2 PC Programming Using Off-line Mode
- 2.1.4 Easy Setup Wizard
- · 2.3 Frequently Asked Questions (FAQ)
- 7.3.1 Utility—Log—Error Log
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
- 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message

- 19.1 PBX Configuration—[11-1] Maintenance—Main
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting
- 24.4 UM Configuration—[5-4] System Parameters—Parameters

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- 12.1.7 PBX Configuration—[4-1-7] Extension—Wired Extension—CLIP ID Table
- 12.2.5 PBX Configuration—[4-2-5] Extension—Portable Station—CLIP ID Table
- 27 Router Configuration
- 28.4.2 Network Service—[4-2] Other—NAS

#### **Changed Contents**

- Introduction
- 1.2.2 PC Programming Using Off-line Mode
- · 2.1.2 Access Levels
- 2.1.4 Easy Setup Wizard
- · 2.1.5 Software Interface
- 3.1 Home Screen
- 5.1.1 System Control—Program Update—Download Program File
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- 6.1 Tool—System Data Backup
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- 7.8.2 Utility—Command—Router Command
- 9.1 PBX Configuration—[1-1] Configuration—Slot
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- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
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- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property—FAX/T.38
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property—Main
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property—Option
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property—Remote Place

- 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property—Remote Place— Phone Location
- 9.24 PBX Configuration—[1-1] Configuration—Slot—Card Property LCO type
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings
- 10.7.3 PBX Configuration—[2-7-3] System—Class of Service—Internal Call Block
- 10.9 PBX Configuration—[2-9] System—System Options
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings
- 11.2 PBX Configuration—[3-2] Group—User Group
- 11.3.1 PBX Configuration—[3-3] Group—Call Pickup Group—All Setting
- 11.4 PBX Configuration—[3-4] Group—Paging Group
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings
- 11.9 PBX Configuration—[3-9] Group—Conference Group—Automatic Answer w/o Extension Setting
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
- 13.1 PBX Configuration—[5-1] Optional Device—Doorphone
- 13.4 PBX Configuration—[5-4] Optional Device—External Relay
- 13.5 PBX Configuration—[5-5] Optional Device—External Sensor
- 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
- 14.3 PBX Configuration—[6-3] Feature—Verification Code
- 14.6 PBX Configuration—[6-6] Feature—Tenant
- 16.4 PBX Configuration—[8-4] ARS—Routing Plan Priority
- 16.5 PBX Configuration—[8-5] ARS—Carrier
- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings
- 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
- 18.4 PBX Configuration—[10-4] CO & Incoming Call—MSN Table
- · 28.1 Network Service-[1] IP Address/Ports
- 28.1 Network Service—[1] IP Address/Ports—Advanced Settings
- 28.1 Network Service—[1] IP Address/Ports—Basic Settings—LAN Setting—Local Domain
- 28.2.1 Network Service—[2-1] Server Feature—DHCP
- 28.2.3 Network Service—[2-4] Server Feature—HTTP
- 28.2.5 Network Service—[2-6] Server Feature—SMTP—SMTP server for relay—SMTP over TLS
- 28.2.7 Network Service—[2-8] Server Feature—TELNET
- Feature Programming References—Last Number Redial

#### 29.1.4 PCMPR Software File Version 003.2xxxx

#### **Changed Contents**

• 1.2.1 Starting Web Maintenance Console

- 1.2.2 PC Programming Using Off-line Mode
- 5.1 System Control—Program Update
- 5.1.2 System Control—Program Update—Update Program File
- 6.1.2 Tool—System Data Backup—Backup to NAS
- · 6.14 Tool—UT Option Setting
- 7.2.3 Utility—File—File View
- 7.4.1 Utility—Monitor/Trace—ISDN/QSIG Protocol Trace
- 7.4.9 Utility—Monitor/Trace—T1/E1 Signalling Bit Monitor
- 7.4.10 Utility—Monitor/Trace—T1/E1 Line Trace
- 7.7.1 Utility—Email Notification—Alert
- 8.1 Users—User Profiles
- 8.2.1 Users—Add User—Single User
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status
- 9.8 PBX Configuration—[1-1] Configuration—Slot—Port Property—Port Type View
- 10.3 PBX Configuration—[2-3] System—Timers & Counters
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting
- 27.1.2 Router Configuration—Setup—[1-1-2] Router Information—PPPoE Status
- 27.1.3 Router Configuration—Setup—[1-1-3] Router Information—VPN Status
- 27.10 Router Configuration—VPN—[3-2] IPSec—SA Option
- 28.2.3 Network Service—[2-4] Server Feature—HTTP—HTTPs (WAN)—HTTPs server
- · Feature Programming References

# 29.1.5 PCMPR Software File Version 004.00xxx

# **New Contents**

- 7.4.5 Utility—Monitor/Trace—CS Status Monitor—LAN Sync Group
- 7.5.5 Utility—Report—IP-CS Information
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property—Secondary Setting
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property—Remote Place
- 19.2.2 PBX Configuration—[11-2-2] Maintenance—CS Synchronisation—LAN Synchronisation
- 19.2.3 PBX Configuration—[11-2-3] Maintenance—CS Synchronisation—LAN Sync Group Setting

- 1.2.1 Starting Web Maintenance Console
- 1.2.2 PC Programming Using Off-line Mode
- 2.1.2 Access Levels
- 4.1.3 Status—Equipment Status—PS Information
- 5.1 System Control—Program Update
- 5.1.2 System Control—Program Update—Update Program File
- 5.1.3 System Control—Program Update—Plug and Update

- 7.3.1 Utility—Log—Error Log
- 7.4.4 Utility—Monitor/Trace—CS Status Monitor—Air Sync Group
- 7.5.2 Utility—Report—IP Extension Statistical Information
- 7.7.1 Utility—Email Notification—Alert
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property
- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property
- 9.18 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Card Property
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property
- 9.24 PBX Configuration—[1-1] Configuration—Slot—Card Property LCO type
- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port
- 9.32 PBX Configuration—[1-3] Configuration—Option
- 10.3 PBX Configuration—[2-3] System—Timers & Counters
- 10.9 PBX Configuration—[2-9] System—System Options
- 11.3.1 PBX Configuration—[3-3] Group—Call Pickup Group—All Setting
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings
- 11.9 PBX Configuration—[3-9] Group—Conference Group
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
- 19.2 PBX Configuration—[11-2] Maintenance—CS Synchronisation
- 25.1 UM Configuration—[6] H/W Settings
- 27.10 Router Configuration—VPN—[3-2] IPSec
- 28.2.3 Network Service—[2-4] Server Feature—HTTP
- · Feature Programming References

# 29.1.6 PCMPR Software File Version 004.01xxx

- 2.1.2 Access Levels
- 4.1.3 Status—Equipment Status—PS Information
- 5.1.2 System Control—Program Update—Update Program File
- 5.1.3 System Control—Program Update—Plug and Update
- 7.4.4 Utility—Monitor/Trace—CS Status Monitor—Air Sync Group
- 7.4.5 Utility—Monitor/Trace—CS Status Monitor—LAN Sync Group
- 7.5.5.3 Utility—Report—IP-CS Information—PS Call Disconnect Log
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
- 19.2.1 PBX Configuration—[11-2-1] Maintenance—CS Synchronisation—Air Synchronisation
- 19.2.2 PBX Configuration—[11-2-2] Maintenance—CS Synchronisation—LAN Synchronisation
- 19.2.3 PBX Configuration—[11-2-3] Maintenance—CS Synchronisation—LAN Sync Group Setting

# 29.1.7 PCMPR Software File Version 004.1xxxx

## **New Contents**

- 7.3.5 Utility—Log—Call Control Log
- 8.4.1 Users—ICDG Management—Group Monitor—Options—Highlighted Display Settings—Full Screen Display (pixels)
- 8.4.3 Users—ICDG Management—ACD Scheduled Export
- 8.4.4 Users—ICDG Management—ACD Export History
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main—Area ID for logical partition
- 10.9 PBX Configuration—[2-9] System—System Options—Option 2—Applying logical partitioning
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4—Display Information from Mobile Extension (MEX)—when using Automatic Walking COS
- 13.5 PBX Configuration—[5-5] Optional Device—External Sensor
  - Sensor Alarm—Email notification
  - Sensor Alarm—Email Address
  - Sensor Alarm-Email Comment

- · 1.2.3 PBX Configuration Types
- · 2.1.5 Software Interface
- 3.1 Home Screen
- 3.1.1 Home Screen—Add Site Wizard
- 5.1.2 System Control—Program Update—Update Program File
- 5.2.1 System Control—MOH—Install
- 7.3.1 Utility—Log—Error Log
- 7.5.5 Utility—Report—IP-CS Information
- 7.6 Utility—Activation Key Installation
- 8.4.2 Users—ICDG Management—ACD Report—Option
- 8.4.2 Users—ICDG Management—ACD Report—Group—Group—View Report
- 8.4.2 Users—ICDG Management—ACD Report—Agent—Agent—View Report
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main
- 9.8 PBX Configuration—[1-1] Configuration—Slot—Port Property—Port Type View
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property—Called Party

- 9.34.1 PBX Configuration—[1-5-1] Configuration—DSP Resource—Setting
- 10.9 PBX Configuration—[2-9] System—System Options—Option 9
- 10.11 PBX Configuration—[2-11] System—Audio Gain
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous
- 17.3 PBX Configuration—[9-3] Private Network—Network Operator (VoIP)
- 23.4 UM Configuration—[4-4] Service Settings—Holiday Table
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—External Message Delivery
- 28.2.2 Network Service—[2-2] Server Feature—FTP
- 28.2.5 Network Service—[2-6] Server Feature—SMTP

# 29.1.8 PCMPR Software File Version 004.2xxxx

#### **New Contents**

- 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—Multisite—Master Suspend if Backup Master Detected
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main—Switch Time Service to "Break" in Isolated Mode
- 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial
  - Use Quick Dial for CO rerouting during Break Mode.
  - Use quick dial for rerouting to public CO when TIE line does not work.
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous—Options— Call Log for Built-in ACD Report—ICD Group Unanswered Call Log

# **Changed Contents**

- 5.4 System Control—System Reset
- 8.4.2 Users—ICDG Management—ACD Report—Call—Call—View Report
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status—Activated Feature
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—Telephone Type

# 29.1.9 PCMPR Software File Version 004.3xxxx

- 3.1 Home Screen
- 5.1.2 System Control—Program Update—Update Program File
- 7.3.1 Utility—Log—Error Log
- 7.7.1 Utility—Email Notification—Alert
- 8.4.1 Users—ICDG Management—Group Monitor—Start Monitor
- 8.4.2 Users—ICDG Management—ACD Report
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status—Activated Feature
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status—Trial Activation Keys
- 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—Multisite

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Media Relay—SIP Extension / UT Extension—NAT - SIP Proxy Server Port No.
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—SIP Extension—Setting parameters assigned to Remote SIP-MLT—NAT - SIP Proxy Server Port No.
- 9.13 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16—Port Property
- 9.20 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Card Property—Main
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—SIP Refer(Blind)
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
- Feature Programming References—Backup Master Mode and Isolated Mode

# 29.1.10 PCMPR Software File Version 004.4xxxx

# **Changed Contents**

- 2.3 Frequently Asked Questions (FAQ)
- 5.1.2 System Control—Program Update—Update Program File
- 8.2.2 Users—Add User—Multiple Users
- 8.4.2 Users—ICDG Management—ACD Report
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting
- 24.4 UM Configuration—[5-4] System Parameters—Parameters
- 28.2.2 Network Service—[2-2] Server Feature—FTP
- · Feature Programming References

# 29.1.11 PCMPR Software File Version 004.6xxxx

## **New Contents**

- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property
  - Forced De-registration
  - Main-SIP Phone Type
  - Remote Place—Panasonic SIP Phone only
- 10.5 PBX Configuration—[2-5] System—Holiday Table
  - Holiday Table—Start Time
  - Holiday Table—End Time
  - Holiday Table—Retain Holiday

- 1.2.2 PC Programming Using Off-line Mode
- 6.1.2 Tool—System Data Backup—Backup to NAS
- · 7.7.1 Utility—Email Notification—Alert
- 8.2.1 Users—Add User—Single User

- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
  - Port number—CTI Port Number
  - Port number—Built-in Communication Assistant Server
  - Media Relay—SIP Extension / UT Extension—NAT SIP Proxy Server Port No.
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property
  - Extension Number (SIP Username)
- 10.9 PBX Configuration—[2-9] System—System Options—Option 5—SLT—Message Waiting Lamp Pattern
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 8—SLT MW Mode
- 23.3 UM Configuration—[4-3] Service Settings—Custom Service
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting
- 26.1 UM Configuration—[7] System Security
- 28.4.1 Network Service—[4-1] Other—Security—TLS—Encryption Suite

# 29.1.12 PCMPR Software File Version 006.xxxxx

- Introduction—NOTES
- 1.2.1 Starting Web Maintenance Console
- 1.2.2 PC Programming Using Off-line Mode
- · 2.1.4 Easy Setup Wizard
- 5.4 System Control—System Reset
- 6.16 Tool—P-SIP Option
- 7.1.1 Utility—Diagnosis—Card Diagnosis
- 7.2.2 Utility—File—File Transfer PBX to PC
- 8.4 Users—Call Management
- 8.4.1 Users—Call Management—Group Monitor
- 8.4.2 Users—Call Management—ACD Report
- 8.4.3 Users—Call Management—ACD Scheduled Export
- 8.4.4 Users—Call Management—ACD Export History
- 9.3 PBX Configuration—[1-1] Configuration—Slot—Activation Key Status
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property—Remote Place
- 9.22 PBX Configuration—[1-1] Configuration—Slot— SLC2 Card Property
- 11.1.4 PBX Configuration—[3-1-4] Group—Trunk Group—Dialling Plan
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous
- 11.5.4 PBX Configuration—[3-5-4] Group—Incoming Call Distribution Group—ACD Supervisor

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Main
- 19.1 PBX Configuration—[11-1] Maintenance—Main—SMDR Options
- 20.1.3 UM Configuration—[1-3] Mailbox Settings—Auto Configuration
- 28.2.5 Network Service—[2-6] Server Feature—SMTP
- 28.3.4 Network Service—[3-4] Client Feature—HTTP
- 28.3.5 Network Service—[3-5] Client Feature—Remote Maintenance
- 28.3.6 Network Service—[3-6] Client Feature—SMTP
- Feature Programming References—Supervisory Feature (ACD)

# 29.1.13 PCMPR Software File Version 007.xxxxx

- 5.1 System Control—Program Update
- 5.4 System Control—System Reset
- 7.3.1 Utility—Log—Error Log
- 7.7.3 Utility—Email Notification—Test Email
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
- 9.9 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Shelf Property
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property—NAT
- 9.14 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Card Property
- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property
- 10.9 PBX Configuration—[2-9] System—System Options
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings

# Feature Programming References

## **Absent Message**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Absent Message Set / Cancel
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Absent Message
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Absent Message
- 14.5 PBX Configuration—[6-5] Feature—Absent Message

#### **Feature Manual References**

2.20.2 Absent Message

## **Account Code Entry**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Account Code Entry
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CO & SMDR—Account Code Mode

#### **Feature Manual References**

2.5.4.3 Account Code Entry

## **Advice of Charge (AOC)**

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY

#### **Feature Manual References**

4.1.2.3 Advice of Charge (AOC)

#### **Automatic Callback Busy (Camp-on)**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Automatic Callback Busy Cancel
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature—Automatic Callback Busy

## **Feature Manual References**

2.10.1 Automatic Callback Busy (Camp-on)

#### **Automatic Extension Release**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone
  - Dial-Extension First Digit
  - Dial-Extension Inter-digit
  - Tone Length—Reorder Tone for PT Handset
  - Tone Length—Reorder Tone for PT Hands-free

#### **Feature Manual References**

#### 2.5.2 Automatic Extension Release

## **Automatic Fax Delivery**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Fax Options
  - Automatic Delivery Status
  - Automatic Delivery Status Default Fax Number [0-9 \* # T , ; ]
  - Automatic Delivery Status Printed Fax Message

## **Feature Manual References**

3.2.2.2 Automatic Fax Delivery

#### **Automatic Fax Transfer**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf—DISA—Intercept Timer—Day, Lunch, Break, Night
- 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message—Fax Extension

#### **Feature Manual References**

2.16.2 Automatic Fax Transfer

## **Automatic Rerouting to Secondary PBX**

- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property—Secondary Setting
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property—Secondary Setting
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property—Option—Announce Mode
- 9.20 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Card Property—Main—Failover Timer (For S-PS/SIP-CS)
- 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property—Secondary Setting

# **Feature Manual References**

4.2.3.2 Automatic Rerouting to Secondary PBX

## **Automatic Route Selection (ARS)**

- 6.6 Tool—Import
  - ARS Leading Digit
  - ARS Except Code
  - ARS Routing Plan
- 6.7 Tool—Export
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Extension Inter-digit
- 10.9 PBX Configuration—[2-9] System—System Options—Option 3—Dial Tone—Dial Tone for ARS
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 1—ARS Itemised Code
- 12.1.7 PBX Configuration—[4-1-7] Extension—Wired Extension—CLIP ID Table
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 1—ARS Itemised Code

- 12.2.5 PBX Configuration—[4-2-5] Extension—Portable Station—CLIP ID Table
- 14.3 PBX Configuration—[6-3] Feature—Verification Code—Itemised Billing Code for ARS
- 16 PBX Configuration—[8] ARS
- 19.1 PBX Configuration—[11-1] Maintenance—Main—SMDR Options—Option—ARS Dial

2.8.1 Automatic Route Selection (ARS)

## **Automatic Setup**

- 6.2 Tool—BRI Automatic Configuration
- 10.1.1 PBX Configuration—[2-1-1] System—Date & Time—Date & Time Setting
- 10.1.2 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—Automatic Time Adjustment—Automatic Time Correction on Stand-alone mode
- 10.1.2.1 PBX Configuration—[2-1-2] System—Date & Time—SNTP / Daylight Saving—Daylight Saving
- 28.2.4 Network Service—[2-5] Server Feature—NTP—NTP server

## **Feature Manual References**

5.5.5 Automatic Setup

#### **Background Music (BGM)**

- 10.2 PBX Configuration—[2-2] System—Operator & BGM
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - External BGM On / Off
  - BGM Set / Cancel
- 10.11.1 PBX Configuration—[2-11-1] System—Audio Gain—Paging/MOH
  - External MOH—MOH 1-8 (Music On Hold 1-8)
- 13.2 PBX Configuration—[5-2] Optional Device—External Pager

## **Feature Manual References**

2.28.1 Background Music (BGM)

## **Backup Master Mode and Isolated Mode**

- · 3.1 Home Screen
- 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—Multisite—Master Suspend if Backup Master Detected
- 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—Multisite—Multisite Keepalive time for Isolated Mode
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main
  - Isolated Mode
  - Switch Time Service to "Break" in Isolated Mode
  - Normal Mode Auto Recovery
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property—Main—Backup
- 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial

4.2.3.1 Backup Master Mode and Isolated Mode

## **Budget Management**

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Charge Limit
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Charge Limit
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Charge—Charge Options—Action at Charge Limit
- 14.3 PBX Configuration—[6-3] Feature—Verification Code—Budget Management

#### **Feature Manual References**

2.7.2 Budget Management

## **CA (Communication Assistant)**

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Port Number—Built-in Communication Assistant Server
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CA
- 10.9 PBX Configuration—[2-9] System—System Options—Option 6 (CTI)
  - →Built-in Communication Assistant—System status retry interval timer
  - →Built-in Communication Assistant—System status retry counter
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 9—Built-in Communication Assistant
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 9—Built-in Communication Assistant

#### **Feature Manual References**

2.26.2 CA (Communication Assistant)

## **Call Billing for Guest Room**

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—Extension
  PIN
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Bill—Checkout Billing—LCD for "Telephone"
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Charge
  - Margin & Tax—Margin Rate for "Telephone" (%)
  - Margin & Tax—Tax Rate for "Telephone" (%)
  - Margin & Tax—Tax Rate for "Minibar" (%)
  - Margin & Tax—Tax Rate for "Others" (%)

### **Feature Manual References**

2.23.3 Call Billing for Guest Room

## **Call Charge Services**

11.1.5 PBX Configuration—[3-1-5] Group—Trunk Group—Charge Rate

- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Charge
  - Margin & Tax—Margin Rate for "Telephone" (%)
  - Margin & Tax—Tax Rate for "Telephone" (%)
  - Charge Options-Digits After Decimal Point
  - Charge Options—Currency
  - Charge Options—Currency Display Position
  - Charge Options—Action at Charge Limit
  - Charge Options—Meter Start on Answer Detection

2.22.3 Call Charge Services

## **Call Distribution Port Group**

- 9.12.2 PBX Configuration—[1-1] Configuration—Slot—Shelf Property Virtual IP Gateway—Hunt Pattern
  —Hunt Pattern 1–16—Leading Number
- 9.12.2 PBX Configuration—[1-1] Configuration—Slot—Shelf Property Virtual IP Gateway—Hunt Pattern
   —Hunt Pattern 1–16—Call Distribution Port Group—1st–16th
- 9.13 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16—Port Property—Call Distribution Port Group

#### **Feature Manual References**

4.3.2.3 Call Distribution Port Group

## Call Forwarding (CF)—by ISDN (P-MP)

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—ISDN-FWD (MSN) Set / Cancel / Confirm
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CO & SMDR—CF (MSN)

#### **Feature Manual References**

4.1.2.4 Call Forwarding (CF)—by ISDN (P-MP)

# Call Forwarding (CF)—by ISDN (P-P)

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—ISDN-FWD (MSN) Set / Cancel / Confirm
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CO & SMDR—CF (MSN)

#### **Feature Manual References**

4.1.2.5 Call Forwarding (CF)—by ISDN (P-P)

## Call Forwarding (CF)—by QSIG

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY

#### **Feature Manual References**

4.3.4.3 Call Forwarding (CF)—by QSIG

## **Call Forwarding (FWD)**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—FWD No Answer Timer Set
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings
  - CO & SMDR-Call Forward to CO
  - Manager-Group Forward Set
  - Optional Device & Other Extensions—Remote Operation by Other Extension
- 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT Fwd / DND—Extension Status of Mobile Integration (FWD NA to CO)
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Main
  - CO-CO Duration Time (\*60s)
  - Extension-CO Duration Time (\*60s)
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Miscellaneous—Status of FWD for Virtual PS
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Group Log / Group FWD
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous—Options— 2nd line LCD display information for ICD Group redirected call
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—FWD / DND
- 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension—FWD/DND
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—FWD / DND
- 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station—FWD/DND

## **Feature Manual References**

2.3.2 Call Forwarding (FWD)

#### **Call Hold**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone
  - Recall—Hold Recall
  - Recall—Disconnect after Recall
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Call Hold / Call Hold Retrieve
  - Call Hold Retrieve: Specified with a Holding Extension Number

- Hold Retrieve: Specified with a Held CO Line Number
- 10.9 PBX Configuration—[2-9] System—System Options
  - Option 1—PT Operation—Automatic Hold by ICM / CO / ICD Group Key
  - Option 1—PT Operation—Hold key mode
  - Option 5—SLT—SLT Hold Mode

2.13.1 Call Hold

## Call Hold (HOLD)—by ISDN

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—ISDN Hold
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type

#### **Feature Manual References**

4.1.2.6 Call Hold (HOLD)-by ISDN

## **Call Monitor**

- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature—Call Monitor
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Executive—Call Monitor
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 2-Data Mode
  - Option 3—Executive Override Deny
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3— Executive Override Deny

#### **Feature Manual References**

2.10.3 Call Monitor

#### **Call Park**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters
  - Recall-Call Park Recall
  - Recall—Disconnect after Recall
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Call Park / Call Park Retrieve
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for Call Park)
  - Optional Parameter (Ringing Tone Type Number) (for Call Park)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for Call Park)
  - Optional Parameter (or Ringing Tone Type Number) (for Call Park)

2.13.2 Call Park

#### **Call Pickup**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Group Call Pickup
  - Directed Call Pickup
  - Call Pickup Deny Set / Cancel
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4
- 11.3 PBX Configuration—[3-3] Group—Call Pickup Group
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3—Call Pickup Deny
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3—Call Pickup Deny

#### **Feature Manual References**

2.4.3 Call Pickup

#### **Call Transfer**

- 10.2 PBX Configuration—[2-2] System—Operator & BGM—BGM and Music on Hold—Sound on Transfer
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Recall— Transfer Recall
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings
  - CO & SMDR—Transfer to CO
  - Assistant—Transfer to busy Extension w/o BSS Operation
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4—DSS Key—Automatic Transfer for Extension Call
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 1— Transfer Recall Destination
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 1— Transfer Recall Destination

## **Feature Manual References**

2.12.1 Call Transfer

## Call Transfer (CT)—by ISDN

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY

#### **Feature Manual References**

4.1.2.7 Call Transfer (CT)—by ISDN

## Call Transfer (CT)—by QSIG

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY

#### **Feature Manual References**

4.3.4.4 Call Transfer (CT)—by QSIG

## **Call Waiting**

- 9.24 PBX Configuration—[1-1] Configuration—Slot—Card Property LCO type—Caller ID—Caller ID Signalling
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Manual Call Waiting for Extension Call
  - Automatic Call Waiting
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature
  - BSS / OHCA / Whisper OHCA / DND Override
  - BSS / OHCA / Whisper OHCA / DND Override-2
- 10.9 PBX Configuration—[2-9] System—System Options—Option 5—Call Waiting—Automatic Call Waiting for Extension Call
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 2—Manual C. Waiting for Extension Call
  - Option 2—Automatic C. Waiting
  - Option 4—Call Waiting Tone Type
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
  - Option 2—Manual C. Waiting for Extension Call
  - Option 2—Automatic C. Waiting
  - Option 4—Call Waiting Tone Type

## **Feature Manual References**

2.1.3.3 Call Waiting

## **Call Waiting Tone**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Caller ID—Visual Caller ID
  Display
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature
  - BSS / OHCA / Whisper OHCA / DND Override
  - BSS / OHCA / Whisper OHCA / DND Override-2
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 2-Manual C. Waiting for Extension Call
  - Option 2—Automatic C. Waiting
  - Option 4—Call Waiting Tone Type

- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
  - Option 2—Manual C. Waiting for Extension Call
  - Option 2-Automatic C. Waiting
  - Option 4—Call Waiting Tone Type

2.10.4.2 Call Waiting Tone

#### **Caller ID**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous
  - Caller ID-Waiting to receive
  - Caller ID—Visual Caller ID Display
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4—Private Network—Public Call through Private Network—Minimum Public Caller ID Digits
- 10.10 PBX Configuration—[2-10] System—Extension CID Settings
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Main—Caller ID Modification Table
- 11.1.3 PBX Configuration—[3-1-3] Group—Trunk Group—Caller ID Modification
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 8
  - Extension Caller ID Sending
  - Incoming Call Wait Timer for Extension Caller ID
- 14.1 PBX Configuration—[6-1] Feature—System Speed Dial

#### **Feature Manual References**

2.19.1 Caller ID

#### Calling Line Identification (CLI) Distribution

- 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
  - Name
  - CO Line Access Number + Telephone Number
  - CLI Destination
- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings—CLI for DIL—CLI Ring for DIL—Day, Lunch, Break, Night
- 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table—CLI Ring for DDI/DID—Day, Lunch, Break, Night
- 18.4 PBX Configuration—[10-4] CO & Incoming Call—MSN Table—CLI Ring for MSN—Day, Lunch, Break, Night

## **Feature Manual References**

2.1.1.5 Calling Line Identification (CLI) Distribution

# **Calling Party Control (CPC) Signal Detection**

 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property - LCO Port—CPC Signal Detection Time—Outgoing, Incoming

2.11.9 Calling Party Control (CPC) Signal Detection

## Calling/Connected Line Identification Presentation (CLIP/COLP)

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port
  - ISDN CO-Subscriber Number
  - Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port
  - CO Setting—Subscriber Number
  - Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - COLR Set / Cancel
  - CLIR Set / Cancel
  - Switch CLIP of CO Line / Extension
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4
  - Send CLIP of CO Caller—when call is transferred to CO (CLIP of Held Party)
  - Send CLIP of CO Caller—when call is forwarded to CO
  - Send CLIP of Extension Caller—when call is forwarded to CO
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Main— CLIP on ICD Group Button
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Main-Extension Number
  - CLIP-CLIP ID
  - CLIP-CLIP on Extension/CO
  - CLIP-CLIR
  - CLIP-COLR
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
  - CLIP-CLIP ID
  - CLIP-CLIP on Extension/CO
  - CLIP-CLIR
  - CLIP-COLR
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type

## **Feature Manual References**

4.1.2.2 Calling/Connected Line Identification Presentation (CLIP/COLP)

# Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/Connected Name Identification Presentation (CNIP/CONP)—by QSIG

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - COLR Set / Cancel
  - CLIR Set / Cancel
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main
  - Extension Number
  - Extension Name
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main
  - Extension Number
  - Extension Name

#### **Feature Manual References**

4.3.4.2 Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/Connected Name Identification Presentation (CNIP/CONP)—by QSIG

#### **Centralised Voice Mail**

- 9.32 PBX Configuration—[1-3] Configuration—Option—New Card Installation—ISDN Standard Mode for PRI23 Card
- 17.1 PBX Configuration—[9-1] Private Network—TIE Table—Enhanced QSIG
- 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission
  - Network MSW Data Transmission for Centralised VM Feature—Data Re-transmission: Repeat Counter
  - Network MSW Data Transmission for Centralised VM Feature—Data Re-transmission: Repeat Timer
- 19.1 PBX Configuration—[11-1] Maintenance—Main—Maintenance
  - Error Log for Centralised VM—Network MSW Transmission (Counter)
  - Error Log for Centralised VM—Network MSW Transmission (Buffer)

## **Feature Manual References**

4.3.5.2 Centralised Voice Mail

## Class of Service (COS)

- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS

## **Feature Manual References**

5.1.1 Class of Service (COS)

## **Common Extension Numbering for 2 PBXs**

17.1 PBX Configuration—[9-1] Private Network—TIE Table

#### **Feature Manual References**

4.3.1.4 Common Extension Numbering for 2 PBXs

## **Common Extension Numbering for Multiple PBXs**

- 17.1 PBX Configuration—[9-1] Private Network—TIE Table
- 18.5 PBX Configuration—[10-5] CO & Incoming Call—Miscellaneous—Intercept—Routing to Operator -No Destination (Destination is not programmed.)

#### **Feature Manual References**

4.3.2.2 Common Extension Numbering for Multiple PBXs

## **Completion of Calls to Busy Subscriber (CCBS)**

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—CCBS Option
  - CCBS Type
  - CCBS Delete Digits
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service
  - COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY
  - CCBS Type
  - CCBS Delete Digits

#### **Feature Manual References**

4.1.2.10 Completion of Calls to Busy Subscriber (CCBS)

## Completion of Calls to Busy Subscriber (CCBS)—by QSIG

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY

## **Feature Manual References**

4.3.4.5 Completion of Calls to Busy Subscriber (CCBS)—by QSIG

# **Computer Telephony Integration (CTI)**

- 9.5 PBX Configuration—[1-1] Configuration—Slot—Site Property
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Dial Information (CTI)
- 10.9 PBX Configuration—[2-9] System—System Options—Option 6 (CTI)

#### **Feature Manual References**

2.26.1 Computer Telephony Integration (CTI)

#### **Conference**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf
  - Unattended Conference—Recall Start Timer
  - Unattended Conference—Warning Tone Start Timer
  - Unattended Conference—Disconnect Timer
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CO & SMDR—Transfer to CO
- 10.9 PBX Configuration—[2-9] System—System Options—Option 2—CO CO Call Limitation—After Conference
- 10.9 PBX Configuration—[2-9] System—System Options—Option 3
  - Confirmation Tone—Tone 4-1: Start Conference
  - Confirmation Tone—Tone 4-2: Finish Conference
  - Echo Cancel-Conference
- 10.9 PBX Configuration—[2-9] System—System Options—Option 8—Conference Group—Maximum Number of Speakers During a Conference Group Call
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type

## **Feature Manual References**

2.14.2 Conference

## **Conference Group Call**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Conference Group Call— Ring Duration
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Conference Group Call Operation
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Miscellaneous— Conference Group Call Operation
- 10.9 PBX Configuration—[2-9] System—System Options—Option 8—Conference Group—Maximum Number of Speakers During a Conference Group Call
- 11.9 PBX Configuration—[3-9] Group—Conference Group
- 11.9.1 PBX Configuration—[3-9] Group—Conference Group—Member List

#### **Feature Manual References**

2.15.1 Conference Group Call

## **Confirmation Tone**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 3
  - Confirmation Tone—Tone 1: Called by Voice
  - Confirmation Tone—Tone 2: Paged / Automatic Answer
  - Confirmation Tone—Tone 3-1: Start Talking after Making Call / Call from DOORPHONE
  - Confirmation Tone—Tone 3-2: Start Talking after Answering Call
  - Confirmation Tone-Tone 4-1: Start Conference

- Confirmation Tone—Tone 4-2: Finish Conference
- Confirmation Tone—Tone 5: Hold

2.25.2 Confirmation Tone

## **Data Line Security**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Data Line Security Set / Cancel
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 2—Data Mode

## **Feature Manual References**

2.11.5 Data Line Security

## **Dial Tone**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 3
  - Dial Tone-Distinctive Dial Tone
  - Dial Tone—Dial Tone for Extension
  - Dial Tone-Dial Tone for ARS

#### **Feature Manual References**

2.25.1 Dial Tone

## **Dial Tone Transfer**

- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for TRS Level Change)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for TRS Level Change)

#### **Feature Manual References**

2.7.4 Dial Tone Transfer

## **Dial Type Selection**

- 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port
  - Dialling Mode
  - DTMF Width
  - Pulse Speed

#### **Feature Manual References**

2.5.4.4 Dial Type Selection

## **Direct In Line (DIL)**

- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings—DIL
  - DIL Destination-Day, Lunch, Break, Night
  - Tenant Number
  - UM Service Group No.
  - VM Trunk Group No.

#### **Feature Manual References**

2.1.1.2 Direct In Line (DIL)

## **Direct Inward Dialling (DID)/Direct Dialling In (DDI)**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Incoming Call Inter-digit Timer—DDI / DID
- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings—DDI / DID / TIE / MSN
  - Distribution Method
  - DDI/DID/TIE/MSN—Remove Digit
  - DDI/DID/TIE/MSN—Additional Dial
- 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table

#### **Feature Manual References**

2.1.1.3 Direct Inward Dialling (DID)/Direct Dialling In (DDI)

## **Direct Inward System Access (DISA)**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf
  - DISA—Delayed Answer Timer
  - DISA-Mute & OGM Start Timer after answering
  - DISA-No Dial Intercept Timer
  - DISA-2nd Dial Timer for AA
  - DISA—Intercept Timer—Day, Lunch, Break, Night
  - DISA-Disconnect Timer after Intercept
  - DISA-CO-to-CO Call Prolong Counter
  - DISA—CO-to-CO Call Prolong Time (x60s)
  - DISA—Progress Tone Continuation Time before Recording Message
  - DISA—Reorder Tone Duration
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Extension PIN—Lock Counter
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Optional Device & Other Extensions—Accept the Call from DISA
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Tone Detection
  - DISA Tone Detection—Silence
  - DISA Tone Detection—Continuous
  - DISA Tone Detection-Cyclic

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Intercept Destination—Intercept Destination—When called party does not answer—Day, Lunch, Break, Night
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Intercept Destination—Intercept Destination—When called party does not answer—Day, Lunch, Break, Night
- 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message—DISA System
- 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message

2.16.1 Direct Inward System Access (DISA)

## **Direct SIP Connection**

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main
- 9.9 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Shelf Property
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property

#### **Feature Manual References**

· 4.1.1.2 Direct SIP Connection

## **Display Information**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 5—PT Feature Access—No. 1–8
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 5
  - Display Language
  - Incoming Call Display
  - Automatic LCD Switch when Start Talking
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 5
  - Display Language
  - Incoming Call Display
  - Automatic LCD Switch when Start Talking
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Charge
  - Charge Options—Digits After Decimal Point
  - Charge Options—Currency
  - Charge Options—Currency Display Position
- 18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings—CO Name

#### **Feature Manual References**

2.21.4 Display Information

#### **Distribution Order**

11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous—Options—ICD Group Distribution order

#### **Feature Manual References**

2.2.2.5 Distribution Order

## Do Not Disturb (DND)

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Tone Length— Busy Tone / DND Tone
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature
  - BSS / OHCA / Whisper OHCA / DND Override
  - BSS / OHCA / Whisper OHCA / DND Override-2
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Assistant—DND Override
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—FWD / DND
- 12.1.2 PBX Configuration—[4-1-2] Extension—Wired Extension—FWD/DND
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—FWD / DND
- 12.2.2 PBX Configuration—[4-2-2] Extension—Portable Station—FWD/DND

#### **Feature Manual References**

2.3.3 Do Not Disturb (DND)

## **Door Open**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf—Doorphone—Open Duration
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Door Open
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Optional Device & Other Extensions—Door Unlock

#### **Feature Manual References**

2.18.2 Door Open

#### **Doorphone Call**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf
  - Doorphone-Call Ring Duration
  - Doorphone-Call Duration
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—DOORPHONE Call
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—TRS—TRS Level—Day, Lunch, Break, Night
- 10.8.2 PBX Configuration—[2-8-2] System—Ring Tone Patterns—Call from DOORPHONE
- 10.9 PBX Configuration—[2-9] System—System Options—Option 3—Confirmation Tone—Tone 1: Called by Voice
- 13.1 PBX Configuration—[5-1] Optional Device—Doorphone

## **Feature Manual References**

2.18.1 Doorphone Call

#### **DSP Resource Reservation**

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—DSP Conference—DSP Conference Priority
- 9.34 PBX Configuration—[1-5] Configuration—DSP Resource

5.5.4.1 DSP Resource Reservation

## **Dynamic Host Configuration Protocol (DHCP) Assignment**

28.2.1 Network Service—[2-1] Server Feature—DHCP

#### **Feature Manual References**

5.6.6 Dynamic Host Configuration Protocol (DHCP) Assignment

#### **E-mail Notification for Extension Users**

- · 8.2.1 Users—Add User—Single User
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters—E-mail/Text Message Device—Device No. 1, 2, 3—E-mail Address
- 28.3.6 Network Service—[3-6] Client Feature—SMTP

#### **Feature Manual References**

5.4.1 E-mail Notification for Extension Users

## **E-mail Notification for Manager**

- 7.5.4 Utility—Report—E-mail Report
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters
  - E-mail/Text Message Device—Device No. 1, 2, 3—User Name
  - E-mail/Text Message Device—Device No. 1, 2, 3—E-mail Address
  - E-mail/Text Message Device—Device No. 1, 2, 3—Only Urgent Messages
  - E-mail/Text Message Device—Device No. 1, 2, 3—Title Order
  - E-mail/Text Message Device—Device No. 1, 2, 3—Title String
  - E-mail/Text Message Device—Device No. 1, 2, 3—Callback Number
  - E-mail/Text Message Device—Device No. 1, 2, 3—Send Wait Time [0-120 min]
  - E-mail/Text Message Device—Device No. 1, 2, 3—Attach Voice File
  - E-mail/Text Message Device—Device No. 1, 2, 3—Use Mode
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—E-mail Option

## **Feature Manual References**

5.4.4 E-mail Notification for Manager

#### E-mail Notification of Sensor Alarm

• 13.5 PBX Configuration—[5-5] Optional Device—External Sensor

#### **Feature Manual References**

5.4.3 E-mail Notification of Sensor Alarm

## E-mail Notification of System-level Events

- 5.1 System Control—Program Update
- 7.7 Utility—Email Notification

- 8.2.1 Users—Add User—Single User
- 28.3.6 Network Service—[3-6] Client Feature—SMTP

5.4.2 E-mail Notification of System-level Events

## **Emergency Call**

• 15.4 PBX Configuration—[7-4] TRS—Emergency Dial

#### **Feature Manual References**

2.5.4.2 Emergency Call

## **Enhanced Walking Extension**

• 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Walking Extension

#### **Feature Manual References**

2.24.3.2 Enhanced Walking Extension

# **Executive Busy Override**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Executive Override Deny Set / Cancel
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature—Executive Busy Override
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Executive
  - Executive Busy Override
  - Executive Busy Override Deny
- 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT Operation—One-touch Busy Override by SCO key
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 3— Executive Override Deny
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 3— Executive Override Deny

#### **Feature Manual References**

2.10.2 Executive Busy Override

#### **Extension Dial Lock**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Extension Dial Lock Set / Cancel
  - Remote Extension Dial Lock Off
  - Remote Extension Dial Lock On
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—TRS—TRS Level on Extension Lock

#### **Feature Manual References**

2.7.3 Extension Dial Lock

#### **Extension Feature Clear**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Extension Feature Clear
- 10.9 PBX Configuration—[2-9] System—System Options—Option 2
  - Extension Clear—Call Waiting
  - Extension Clear—Fwd/DND
  - Extension Clear—Hot Line (Pick-up Dial)

#### **Feature Manual References**

2.24.2 Extension Feature Clear

## **Extension Personal Identification Number (PIN)**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Extension PIN—Lock Counter
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Extension PIN Set / Cancel
- 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT LCD—Password / PIN Display
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—Extension
  PIN
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—Extension PIN

#### **Feature Manual References**

2.24.1 Extension Personal Identification Number (PIN)

# **External Feature Access (EFA)**

- 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port—Flash Time
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—External Feature Access
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 7—Flash Mode during CO Conversation
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 7—Flash Mode during CO Conversation
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type
- 15.5 PBX Configuration—[7-5] TRS—Miscellaneous—TRS Check after EFA

## **Feature Manual References**

2.11.7 External Feature Access (EFA)

## **External Relay Control**

- 9.30 PBX Configuration—[1-1] Configuration—Slot—DOORPHONE Card—Card Property
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—External Relay Access
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Optional Device & Other Extensions—External Relay Access

• 13.4 PBX Configuration—[5-4] Optional Device—External Relay

#### **Feature Manual References**

2.18.4 External Relay Control

#### **External Sensor**

- 9.30 PBX Configuration—[1-1] Configuration—Slot—DOORPHONE Card—Card Property
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—External Sensor—Ring Duration
- 10.8.3 PBX Configuration—[2-8-3] System—Ring Tone Patterns—Call from Others—External Sensor— Ring Tone Pattern Plan 1–8
- 13.5 PBX Configuration—[5-5] Optional Device—External Sensor

#### **Feature Manual References**

2.18.3 External Sensor

## **Fax Cover Page**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Fax Options—Cover Page Language
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Fax Management
  - Fax Properties—System Name (Up to 25 characters)
  - Fax Properties—System Fax Number (Max. 20 digits)
  - Fax Properties—Printed Information
  - Fax Properties—Printed Information Position
  - Fax Properties—Cover Page

## **Feature Manual References**

3.2.2.14 Fax Cover Page

#### Flash/Recall/Terminate

- 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port—Disconnect Time
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 7—Flash Mode during CO Conversation
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 7—Flash Mode during CO Conversation
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type

#### **Feature Manual References**

2.11.6 Flash/Recall/Terminate

## **Flexible Buttons**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—PT Display—PT Last Display Duration in Idle Mode
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button

- 12.1.4.1 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Flexible button data copy
- 12.1.5 PBX Configuration—[4-1-5] Extension—Wired Extension—PF Button
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button

2.21.2 Flexible Buttons

## Flexible Numbering/Fixed Numbering

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main
  - Extension
  - Features
  - Other PBX Extension
- 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature

#### **Feature Manual References**

5.5.7 Flexible Numbering/Fixed Numbering

## **Floating Extension**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Extension
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Main
  - Floating Extension Number
  - Group Name
- 11.7.2 PBX Configuration—[3-7-2] Group—UM Group—Unit Settings—Floating Extension No.
- 11.8 PBX Configuration—[3-8] Group—PS Ring Group—Floating Extension Number
- 13.2 PBX Configuration—[5-2] Optional Device—External Pager—Floating Extension Number
- 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message—Floating Extension Number

## **Feature Manual References**

5.5.8 Floating Extension

## **FWD/DND Button, Group FWD Button**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - FWD/DND Set / Cancel: Call from CO & Extension
  - FWD/DND Set / Cancel: Call from CO
  - FWD/DND Set / Cancel: Call from Extension
  - Group FWD Set / Cancel: Call from CO & Extension
  - Group FWD Set / Cancel: Call from CO
  - Group FWD Set / Cancel: Call from Extension
- 10.9 PBX Configuration—[2-9] System—System Options—Option 1
  - PT Fwd / DND—Fwd LED

- PT Fwd / DND-DND LED
- PT Fwd / DND-Fwd/DND key mode when Idle
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—FWD / DND
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Extension Number (for Group Fwd (Both))
  - Extension Number (for Group Fwd (External))
  - Extension Number (for Group Fwd (Internal))
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—FWD / DND
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Extension Number (for Group Fwd (Both))
  - Extension Number (for Group Fwd (External))
  - Extension Number (for Group Fwd (Internal))

2.3.4 FWD/DND Button, Group FWD Button

## **Group**

• 11 PBX Configuration—[3] Group

#### **Feature Manual References**

5.1.2 Group

# **Group Call Distribution**

- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Main—Line Hunting Order
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings
  - Main-Distribution Method
  - Main—Call Waiting Distribution
  - Miscellaneous—Extension No Answer Redirection Time
  - Miscellaneous-Maximum No. of Busy Extension
- 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Member List—Delayed Ring
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous
  - Options-Wrap-up Timer based on
  - Options—Longest Idle Distribution
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 8—Wrapup Timer
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 8—Wrapup Timer

## **Feature Manual References**

2.2.2.2 Group Call Distribution

#### **Hands-free Answerback**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Tone Length— Reorder Tone for PT Hands-free
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Assistant—Automatic Answer (Caller)
- 10.9 PBX Configuration—[2-9] System—System Options
  - Option 1—PT Operation—Automatic Answer for Call from CO after
  - Option 3—Confirmation Tone—Tone 2: Paged / Automatic Answer
  - Option 4—Transfer—Automatic Answer for Transferred Call
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 5—Automatic Answer for CO Call
  - Option 6—Forced Automatic Answer

#### **Feature Manual References**

2.4.4 Hands-free Answerback

## **Hands-free Operation**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Tone Length— Reorder Tone for PT Hands-free
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 4—LCS Answer Mode

#### **Feature Manual References**

2.11.1 Hands-free Operation

#### **Headset Operation**

• 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type

#### **Feature Manual References**

2.11.4 Headset Operation

## Host PBX Access Code (Access Code to the Telephone Company from a Host PBX)

- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Host PBX Access Code
- 19.1 PBX Configuration—[11-1] Maintenance—Main—SMDR Options—Option—ARS Dial

## **Feature Manual References**

2.5.4.8 Host PBX Access Code (Access Code to the Telephone Company from a Host PBX)

## **Hot Line**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial—Hot Line (Pickup Dial) Start
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Hot Line (Pickup Dial) Program Set / Cancel
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 2
  - Pickup Dial Set

- Pickup Dial No.
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 2
  - Pickup Dial Set
  - Pickup Dial No.

2.6.6 Hot Line

## **Idle Extension Hunting**

- 11.6 PBX Configuration—[3-6] Group—Extension Hunting Group
- 11.6.1 PBX Configuration—[3-6] Group—Extension Hunting Group—Member List

#### **Feature Manual References**

2.2.1 Idle Extension Hunting

## **Incoming Call Distribution Group Features**

- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings
  - Main
  - Overflow Queuing Busy
  - Overflow No Answer
  - Miscellaneous
- 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Member List
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous

#### **Feature Manual References**

2.2.2 Incoming Call Distribution Group Features

#### **Incoming Call Log**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 7
  - Incoming Call Log—Busy/Intercept (when Called Party is Busy)
  - Incoming Call Log-Fwd All/Fwd Busy
  - Incoming Call Log-Call Pickup
  - Incoming Call Log—Extension / TIE Call
  - Outgoing Call Log—Extension Call
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Miscellaneous—Supervisor Extension Number
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 5—Incoming Call Display
  - Option 6-Display Lock
  - Option 7—Incoming Call Log Memory
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings

- Option 5—Incoming Call Display
- Option 7—Incoming Call Log Memory

2.19.2 Incoming Call Log

## **Integrated Services Digital Network (ISDN) Service Features**

- · 6.2 Tool—BRI Automatic Configuration
- 9.26 PBX Configuration—[1-1] Configuration—Slot—Card Property BRI type/PRI type
- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Extension Inter-digit
- 10.9 PBX Configuration—[2-9] System—System Options—Option 2—ISDN en Bloc Dial—[#] as End of Dial for en Bloc mode
- 11.1.4.1 PBX Configuration—[3-1-4] Group—Trunk Group—Dialling Plan—Auto Assign
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Main-Extension Number
  - Option 7—ISDN Bearer
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 7—ISDN Bearer

#### **Feature Manual References**

4.1.2 Integrated Services Digital Network (ISDN) Service Features

## **Intercept Routing**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Intercept Routing No Answer (IRNA)—Day, Lunch, Break, Night
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf—DISA—Intercept Timer—Day, Lunch, Break, Night
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Overflow No Answer—Time out & Manual Queue Redirection—Destination-Day, Lunch, Break, Night
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Intercept Destination
  - Intercept No Answer Time
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
  - Intercept Destination
  - Intercept No Answer Time
- 18.5 PBX Configuration—[10-5] CO & Incoming Call—Miscellaneous

## **Feature Manual References**

2.1.1.6 Intercept Routing

### **Intercept Routing—No Destination**

- 10.2 PBX Configuration—[2-2] System—Operator & BGM—PBX Operator—Day, Lunch, Break, Night
- 18.5 PBX Configuration—[10-5] CO & Incoming Call—Miscellaneous—Intercept—Routing to Operator -No Destination (Destination is not programmed.)

#### **Feature Manual References**

2.1.1.7 Intercept Routing—No Destination

# **Intercom Call**

- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature—Alternate Calling - Ring / Voice
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Main-Extension Number
  - Main—Extension Name
  - Option 3-Intercom Call by Voice
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main
  - Extension Number
  - Extension Name

### **Feature Manual References**

2.5.3 Intercom Call

### **Internal Call Block**

- 10.7.3 PBX Configuration—[2-7-3] System—Class of Service—Internal Call Block—COS Number of the Extension Which Receive the Call from Other Extension 1–512
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Main—COS
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS
- 13.1 PBX Configuration—[5-1] Optional Device—Doorphone—COS
- 13.4 PBX Configuration—[5-4] Optional Device—External Relay—COS Number

### **Feature Manual References**

2.1.2.2 Internal Call Block

# **Internal Call Features**

13.1 PBX Configuration—[5-1] Optional Device—Doorphone—Destination—Day, Lunch, Break, Night

#### **Feature Manual References**

2.1.2 Internal Call Features

### **IP Proprietary Telephone (IP-PT)**

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main—IP Terminal Registration Mode
- 9.14 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Card Property

• 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property

#### **Feature Manual References**

5.2.1 IP Proprietary Telephone (IP-PT)

### IP-CS (KX-NS0154)

- 7.4.4 Utility—Monitor/Trace—CS Status Monitor—Air Sync Group
- 7.4.5 Utility—Monitor/Trace—CS Status Monitor—LAN Sync Group
- 7.5.5 Utility—Report—IP-CS Information
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main
  - LLDP Packet Sending Ability
  - IP-CS Registration Mode
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Port Number—Firmware Update Port No. for IP-PT/IP-CS (Media Relay)
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Media Relay
  - IP Extension / IP-CS-NAT MGCP Server Port No. for IP-CS
  - IP Extension / IP-CS—Keep Alive Packet Type for IP-CS
  - IP Extension / IP-CS-NAT FTP Server Port No.
- 9.18 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Card Property
- 9.19 PBX Configuration—[1-1] Configuration—Slot—V-IPCS4—Port Property
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Air Synchronisation— Watching Degeneracy (x60s)
- 19.2 PBX Configuration—[11-2] Maintenance—CS Synchronisation

#### **Feature Manual References**

5.2.6 IP-CS (KX-NS0154)

#### **ISDN Extension**

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—ISDN Extension
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Extension Setting

#### **Feature Manual References**

5.2.5.1 ISDN Extension

# **ISDN Service Access by Keypad Protocol**

- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Dial (for ISDN Service)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Dial (for ISDN Service)

#### **Feature Manual References**

4.1.2.11 ISDN Service Access by Keypad Protocol

### **ISDN Virtual Private Network (ISDN-VPN)**

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Network Numbering Plan

  —Trunk Property
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Network Numbering Plan
  —Trunk Property
- 16.2 PBX Configuration—[8-2] ARS—Leading Number—Leading Number
- 17.1 PBX Configuration—[9-1] Private Network—TIE Table
  - Leading Number
  - Removed Number of Digits
  - Added Number

#### **Feature Manual References**

4.3.3 ISDN Virtual Private Network (ISDN-VPN)

#### **KX-UT Series SIP Phones**

- 9.4 PBX Configuration—[1-1] Configuration—Slot—System Property—Main—System Speed Dial Download For UT Extensions
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main—IP Terminal Registration Mode
- 9.20 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Card Property
- 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button

#### **Feature Manual References**

5.2.2.1 KX-UT Series SIP Phones

### **Last Number Redial**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone
  - Automatic Redial—Repeat Counter
  - Automatic Redial—Repeat Interval
  - Automatic Redial—Redial Call Ring Duration
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Redial
- 10.9 PBX Configuration—[2-9] System—System Options—Option 2
  - Redial—Automatic Redial when No Answer (ISDN)
  - Redial—Save Dial After Connection to Redial Memory
- 10.9 PBX Configuration—[2-9] System—System Options—Option 7
  - Outgoing Call Log-Extension Call
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 7— Outgoing Call Log Memory
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 7— Outgoing Call Log Memory

### **Feature Manual References**

2.6.3 Last Number Redial

#### **LED** Indication

- 10.9 PBX Configuration—[2-9] System—System Options
  - Option 1—PT Fwd / DND—Fwd LED
  - Option 1-PT Fwd / DND-DND LED

#### **Feature Manual References**

2.21.3 LED Indication

### **Legacy Device Connection**

- 9.2 PBX Configuration—[1-1] Configuration—Slot—Summary—Legacy Gateway 1 Shelf/Legacy Gateway 2 Shelf
- 9.29 PBX Configuration—[1-1] Configuration—Slot—Legacy-GW1/Legacy-GW2

#### **Feature Manual References**

5.3 Legacy Device Connection

# Line Preference—Incoming

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 4— Incoming Preferred Line
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 4— Incoming Preferred Line

#### **Feature Manual References**

2.4.2 Line Preference—Incoming

#### Line Preference—Outgoing

- 10.7.2 PBX Configuration—[2-7-2] System—Class of Service—External Call Block
- 11.1.2 PBX Configuration—[3-1-2] Group—Trunk Group—Local Access Priority
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 4— Outgoing Preferred Line
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 4— Outgoing Preferred Line

#### **Feature Manual References**

2.5.5.2 Line Preference—Outgoing

#### **Local Alarm Information**

- 7.3.1 Utility—Log—Error Log
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type
- 19.1 PBX Configuration—[11-1] Maintenance—Main
  - SMDR—Print Information—Error Log
  - Maintenance—Local Alarm Display—Extension 1, Extension 2
  - Maintenance—Daily Test Start Time—Set
  - Maintenance—Daily Test Start Time—Hour

- Maintenance—Daily Test Start Time—Minute

#### **Feature Manual References**

5.6.4 Local Alarm Information

# Log-in/Log-out

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Log-in / Log-out
  - Not Ready (Manual Wrap-up) Mode On / Off
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Miscellaneous
  - No. of Unanswered Calls for Automatic Log-out
  - Last Extension Log-out
- 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Member List—Wrap-up Timer
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous—Options—Wrap-up Timer based on
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 8—Wrapup Timer
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for Log-in/Log-out)
  - Extension Number (for Log-in/Log-out)
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 8—Wrapup Timer
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for Log-in/Log-out)
  - Extension Number (for Log-in/Log-out)
- 19.1 PBX Configuration—[11-1] Maintenance—Main—SMDR—Print Information—Log-in / Log-out

#### **Feature Manual References**

2.2.2.8 Log-in/Log-out

# Making a TIE Line Call

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—TIE Line Access
- 17.1 PBX Configuration—[9-1] Private Network—TIE Table—Own PBX Code

# **Feature Manual References**

4.3.1.1 Making a TIE Line Call

# **Malicious Call Identification (MCID)**

10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—MCID

4.1.2.9 Malicious Call Identification (MCID)

### **Manager Features**

- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Manager—Manager
- 19.1 PBX Configuration—[11-1] Maintenance—Main—Password—Manager Password PT Programming
   —Prog \*1

#### **Feature Manual References**

5.1.6 Manager Features

# **Message Waiting**

- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Message Waiting Set / Cancel / Call Back
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature—Message Waiting Set
- 10.9 PBX Configuration—[2-9] System—System Options
  - Option 3—Dial Tone—Distinctive Dial Tone
  - Option 5—SLT—Message Waiting Lamp Pattern
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type

#### **Feature Manual References**

2.20.1 Message Waiting

### Multiple Subscriber Number (MSN) Ringing Service

- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings—DDI / DID / TIE / MSN
  - Distribution Method
  - DDI/DID/TIE/MSN—Remove Digit
  - DDI/DID/TIE/MSN-Additional Dial
- 18.4 PBX Configuration—[10-4] CO & Incoming Call—MSN Table

### **Feature Manual References**

2.1.1.4 Multiple Subscriber Number (MSN) Ringing Service

#### **Music on Hold**

- 10.2 PBX Configuration—[2-2] System—Operator & BGM
- 10.11.1 PBX Configuration—[2-11-1] System—Audio Gain—Paging/MOH
  - External MOH—MOH 1-8 (Music On Hold 1-8)

#### **Feature Manual References**

2.13.4 Music on Hold

### **Network Direct Station Selection (NDSS)**

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—ISDN CO—Networking Data Transfer
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—CO Setting—Networking Data Transfer
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Manager—Manager
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Dial (for NDSS)
- 12.1.6 PBX Configuration—[4-1-6] Extension—Wired Extension—NDSS Link Data Send
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Dial (for NDSS)
- 12.2.4 PBX Configuration—[4-2-4] Extension—Portable Station—NDSS Link Data Send
- 17.2 PBX Configuration—[9-2] Private Network—Network Data Transmission
- 17.3 PBX Configuration—[9-3] Private Network—Network Operator (VoIP)
- 17.4 PBX Configuration—[9-4] Private Network—NDSS Key Table

#### **Feature Manual References**

4.3.5.1 Network Direct Station Selection (NDSS)

# **Network ICD Group**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 4
  - Send CLIP of CO Caller—when call is forwarded to CO
  - Send CLIP of Extension Caller—when call is forwarded to CO

# **Feature Manual References**

4.3.6 Network ICD Group

# Off-hook Call Announcement (OHCA)

- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature
  - BSS / OHCA / Whisper OHCA / DND Override
  - BSS / OHCA / Whisper OHCA / DND Override-2
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Assistant—OHCA / Whisper OHCA

#### **Feature Manual References**

2.10.4.3 Off-hook Call Announcement (OHCA)

#### **Off-hook Monitor**

• 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT Operation—Off Hook Monitor

#### **Feature Manual References**

2.11.2 Off-hook Monitor

# **One-look Networking**

- 1.2.3 PBX Configuration Types
- · 3.1.1 Home Screen—Add Site Wizard
- · 2.1.4 Easy Setup Wizard

#### **Feature Manual References**

4.2 One-look Networking

### **One-numbered Extension**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Parallel Telephone (Ring) Mode Set / Cancel
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 1—Wireless XDP / Shared Extension
  - Option 1—Ring Pattern Table
  - Option 5—Automatic Answer for CO Call
  - Option 6—Forced Automatic Answer
  - Option 7—ISDN Bearer

### **Feature Manual References**

2.11.10 One-numbered Extension

# **One-touch Dialling**

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 6— Flexible Button Programming Mode
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Dial (for One-touch)
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 6—Flexible Button Programming Mode
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Dial (for One-touch)

#### **Feature Manual References**

2.6.2 One-touch Dialling

# **Operator Features**

- 10.2 PBX Configuration—[2-2] System—Operator & BGM—PBX Operator—Day, Lunch, Break, Night
- 14.6 PBX Configuration—[6-6] Feature—Tenant—Operator (Extension Number)

#### **Feature Manual References**

5.1.5 Operator Features

# **Outgoing Message (OGM)**

- 7.2.5 Utility—File—Message File Transfer PC to PBX
- 7.2.6 Utility—File—Message File Transfer PBX to PC
- 10.2 PBX Configuration—[2-2] System—Operator & BGM
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf—DISA— Progress Tone Continuation Time before Recording Message
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—OGM Record / Clear / Playback
- 11.5.1.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Member List—Delayed Ring
- 11.5.2 PBX Configuration—[3-5-2] Group—Incoming Call Distribution Group—Queuing Time Table— Queuing Sequence—Sequence 01–16
- 13.3.2 PBX Configuration—[5-3-2] Optional Device—Voice Message—DISA Message—Floating Extension Number

#### **Feature Manual References**

2.28.2 Outgoing Message (OGM)

### **Outside Destinations in Incoming Call Distribution Group**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 4
  - Send CLIP of CO Caller—when call is forwarded to CO
  - Send CLIP of Extension Caller—when call is forwarded to CO

#### **Feature Manual References**

2.2.2.3 Outside Destinations in Incoming Call Distribution Group

# **Overflow Feature**

- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings
  - Overflow Queuing Busy
  - Overflow No Answer
- 11.5.2 PBX Configuration—[3-5-2] Group—Incoming Call Distribution Group—Queuing Time Table
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous—Options— Overflow immediately when All Logout

#### **Feature Manual References**

2.2.2.7 Overflow Feature

#### **Paging**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Group Paging
  - Group Paging Answer
  - Paging Deny Set / Cancel
- 10.9 PBX Configuration—[2-9] System—System Options
  - Option 1—PT Fwd / DND—Paging to DND Extension

- Option 3—Confirmation Tone—Tone 2: Paged / Automatic Answer
- 10.11.1 PBX Configuration—[2-11-1] System—Audio Gain—Paging/MOH
  - Paging—EPG 1-6 (External Pager 1-6)
  - Paging-Paging Level from PT Speaker
- 11.4 PBX Configuration—[3-4] Group—Paging Group
- 11.4.1 PBX Configuration—[3-4] Group—Paging Group—All Setting
- 11.4.2 PBX Configuration—[3-4] Group—Paging Group—External Pager
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 6—Paging Deny

2.17.1 Paging

# Panasonic SIP Phones (P-SIP)

- 9.16 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Card Property
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property

#### **Feature Manual References**

5.2.2.4 Panasonic SIP Phones (P-SIP)

# **Pause Insertion**

- 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port—Pause Time
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—During Conversation— Pause Signal Time
- 14.4 PBX Configuration—[6-4] Feature—Second Dial Tone

### **Feature Manual References**

2.5.4.7 Pause Insertion

# PDN (Primary Directory Number)/SDN (Secondary Directory Number) Extension

- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—PDN/SDN
- 10.9 PBX Configuration—[2-9] System—System Options
  - Option 4—System Wireless—SDN Delayed Ringing with LCD
  - Option 6 (CTI)—CTI Hold—Forced Idle when Hold by PDN/SDN Key
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for SDN)
  - Extension Number (for SDN)
  - Optional Parameter (Ringing Tone Type Number) (for Loop CO, Single CO, Group CO, ICD Group, SDN)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for SDN)

- Extension Number (for SDN)
- 12.3 PBX Configuration—[4-3] Extension—DSS Console

2.9.1 Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension

### Peer-to-Peer (P2P) Connection

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—P2P Group
- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property—P2P Group
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property
- 10.9 PBX Configuration—[2-9] System—System Options—Option 8
  - P2P Group—Priority Voice 1/Priority Voice 2/Priority Voice 3
  - P2P Group-Video Conference
- 11.10 PBX Configuration—[3-10] Group—P2P Group

#### **Feature Manual References**

5.2.3 Peer-to-Peer (P2P) Connection

### **Ping**

7.1.2 Utility—Diagnosis—Ping

#### **Feature Manual References**

5.6.7 PING Confirmation

### **Portable Station (PS) Connection**

• 9.31 PBX Configuration—[1-2] Configuration—Portable Station

# **Feature Manual References**

5.2.4.1 Portable Station (PS) Connection

### **Power Failure Transfer**

19.3 PBX Configuration—[11-3] Maintenance—Power Failure Transfer

#### **Feature Manual References**

5.6.2 Power Failure Transfer

### **Printing Message**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Printing Message
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Main—SMDR for External Hotel Application 2
  —Printing Message 1–8

# **Feature Manual References**

2.22.2 Printing Message

### **Privacy Release**

 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT Operation—Privacy Release by SCO key

- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Type

2.14.3 Privacy Release

# **PS Directory**

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—Extension
  Name
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—Extension
   Name
- 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
  - Name
  - CO Line Access Number + Telephone Number

#### **Feature Manual References**

5.2.4.3 PS Directory

### **PS Ring Group**

- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Main— Distribution Method
- 11.8 PBX Configuration—[3-8] Group—PS Ring Group
- 11.8.1 PBX Configuration—[3-8] Group—PS Ring Group—Member List

#### **Feature Manual References**

5.2.4.2 PS Ring Group

# **PS Roaming by Network ICD Group**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—System Wireless—PS Out of Range Timer
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4—System Wireless—Out of Range Registration

#### **Feature Manual References**

4.3.6.1 PS Roaming by Network ICD Group

# **PT Programming**

- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Manager—PT Programming Mode
- 19.1 PBX Configuration—[11-1] Maintenance—Main—Password
  - Manager Password PT Programming—Prog \*1

# **Feature Manual References**

5.5.3 PT Programming

### **QSIG Enhanced Features**

- 10.9 PBX Configuration—[2-9] System—System Options—Option 2—CO CO Call Limitation—After Conference
- 17.1 PBX Configuration—[9-1] Private Network—TIE Table—Enhanced QSIG

#### **Feature Manual References**

4.3.5 QSIG Enhanced Features

# **Queuing Feature**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Incoming Call Queue Monitor
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings
  - Overflow Queuing Busy
  - Overflow No Answer
  - Queuing Time Table
  - Miscellaneous-Extension No Answer Redirection Time
  - Miscellaneous-Maximum No. of Busy Extension
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous
- 11.7.1 PBX Configuration—[3-7-1] Group—UM Group—System Settings—Call Waiting on VM Group
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Extension Number (for Hurry-up)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Extension Number (for Hurry-up)

# **Feature Manual References**

2.2.2.4 Queuing Feature

# **Quick Dialling**

• 10.6.2 PBX Configuration—[2-6-2] System—Numbering Plan—Quick Dial

#### **Feature Manual References**

2.6.5 Quick Dialling

### **Reverse Circuit**

• 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property - LCO Port—Reverse Detection

# **Feature Manual References**

2.5.4.5 Reverse Circuit

# **Ring Tone Pattern Selection**

 10.8.1 PBX Configuration—[2-8-1] System—Ring Tone Patterns—Call from CO—Ring Tone Pattern Plan 1–8

- 10.8.2 PBX Configuration—[2-8-2] System—Ring Tone Patterns—Call from DOORPHONE—Ring Tone Pattern Plan 1–8
- 10.8.3 PBX Configuration—[2-8-3] System—Ring Tone Patterns—Call from Others—Extension—Ring Tone Pattern Plan 1–8
- 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT Operation—PT Ring Off Setting
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 1—Ring Pattern Table
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 1—Ring Pattern Table

2.1.3.2 Ring Tone Pattern Selection

# **Room Status Control**

- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Type
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge
  - Main—Hotel Operator—Extension 1-4
  - Bill—Checkout Billing—Billing for Guest

#### **Feature Manual References**

2.23.2 Room Status Control

#### **Send to Fax Machine**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—External MSG Delivery/Auto FWD/ Personal Custom Serv—Auto Forwarding Message Type
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Fax Options
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Fax Management

#### **Feature Manual References**

3.2.2.30 Send to Fax Machine

### Simple Network Management Protocol (SNMP) System Monitor

• 28.3.3 Network Service—[3-3] Client Feature—SNMP Agent

#### **Feature Manual References**

5.6.5 Simple Network Management Protocol (SNMP) System Monitor

# **Simple Remote Connection**

- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—SIP Extension
  - Setting parameters assigned to Remote SIP-MLT—NAT CWMP Server IP Address
  - Setting parameters assigned to Remote SIP-MLT—NAT CWMP Server (HTTP) Port No.
  - Setting parameters assigned to Remote SIP-MLT—NAT CWMP Server (HTTPS) Port No.
  - Setting parameters assigned to Remote SIP-MLT—NAT SIP-MLT Data Download Server (HTTP) Port No.
  - Setting parameters assigned to Remote SIP-MLT—NAT SIP-MLT Data Download Server (HTTPS)
     Port No.

- Setting parameters assigned to Remote SIP-MLT—NAT SIP Proxy Server IP Address
- Setting parameters assigned to Remote SIP-MLT—NAT SIP Proxy Server Port No.
- Setting parameters assigned to Remote SIP-MLT—NAT NTP Server IP Address
- Setting parameters assigned to Remote SIP-MLT—NAT NTP Server Port No.
- Setting parameters assigned to Remote SIP-MLT—NAT Keep Alive Packet Type
- Setting parameters assigned to Remote SIP-MLT—NAT Keep Alive Packet Sending Interval Time (s)
- Setting parameters assigned to Remote SIP-MLT—NAT SIP Register Expire Time (s)
- Setting parameters for Networking Survivability, assigned to Remote SIP-MLT—NAT CWMP Server IP Address
- Setting parameters for Networking Survivability, assigned to Remote SIP-MLT—NAT CWMP Server (HTTP) Port No.
- Setting parameters for Networking Survivability, assigned to Remote SIP-MLT—NAT CWMP Server (HTTPS) Port No.
- Control Condition of Remote SIP-MLT—PERIODIC Ability
- Control Condition of Remote SIP-MLT—PERIODIC Packet Sending Interval Time (s)
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Port Number—Firmware Update Port No. for IP-PT/IP-CS (Media Relay)
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Media Relay
  - Common—NAT External IP Address
  - IP Extension / IP-CS-NAT MGCP Server Port No.
  - IP Extension / IP-CS-NAT MGCP Server Port No. for IP-CS
  - IP Extension / IP-CS—Keep Alive Packet Type
  - IP Extension / IP-CS—Keep Alive Packet Type for IP-CS
  - IP Extension / IP-CS—Keep Alive Packet Sending Interval Time (s)
  - IP Extension / IP-CS-NAT FTP Server Port No.
  - SIP Extension / UT Extension—NAT SIP Proxy Server Port No.
  - UT Extension—NAT CWMP Server (HTTP) Port No.
  - UT Extension—NAT CWMP Server (HTTPS) Port No.
  - UT Extension—NAT CWMP Server (HTTP) Port No. for Network Survivability
  - UT Extension—NAT CWMP Server (HTTPS) Port No. for Network Survivability
  - UT Extension—NAT SIP-MLT Data Download Server (HTTP) Port No.
  - UT Extension—NAT SIP-MLT Data Download Server (HTTPS) Port No.
  - UT Extension-NAT NTP Server Port No.
  - UT Extension—Keep Alive Packet Type
  - UT Extension—Keep Alive Packet Sending Interval Time (s)
  - UT Extension—SIP Register Expire Time (s)
  - UT Extension—PERIODIC Ability
  - UT Extension—PERIODIC Packet Sending Interval Time (s)
  - Option-NAT RTP IP Address

- Option-NAT SIP Proxy Server IP Address
- Option—NAT CWMP Server IP Address
- Option—NAT CWMP Server IP Address for Network Survivability
- Option-NAT NTP Server IP Address
- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property—Remote Place (Location / P2P)
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property—Remote Place (Location / P2P)
- 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property—Remote Place

5.2.2.3 Simple Remote Connection

# **SIP (Session Initiation Protocol) Extension**

- 9.16 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Card Property
- 9.17 PBX Configuration—[1-1] Configuration—Slot—V-SIPEXT32—Port Property

#### **Feature Manual References**

5.2.2 SIP (Session Initiation Protocol) Extension

### **SIP (Session Initiation Protocol) Trunk**

- 9.9 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Shelf Property
- 9.10 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Card Property
- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property

#### **Feature Manual References**

4.1.1 SIP (Session Initiation Protocol) Trunk

# SIP Portable Station (S-PS) and SIP Cell Station (SIP-CS)

- 7.12 Utility—CS-Web Connection
- 9.21 PBX Configuration—[1-1] Configuration—Slot—V-UTEXT32—Port Property—Main— Telephone Type
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main— Telephone Type
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button

# **Feature Manual References**

5.2.2.2 SIP Portable Station (S-PS) and SIP Cell Station (SIP-CS)

### **SIP Refer Transfer**

- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property—Supplementary Service
  - Blind Transfer(REFER)
  - Attended Transfer(REFER)

#### **Feature Manual References**

2.12.2 SIP Refer Transfer

# **Software Upgrading**

5.1 System Control—Program Update

### **Feature Manual References**

5.5.9 Software Upgrading

### **Special Carrier Access Code**

• 15.3 PBX Configuration—[7-3] TRS—Special Carrier

#### **Feature Manual References**

2.5.4.9 Special Carrier Access Code

# Speed Dialling—Personal/System

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - System Speed Dialling / Personal Speed Dialling
  - Personal Speed Dialling Programming
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—TRS—TRS Level for System Speed Dialling
- 12.1.3 PBX Configuration—[4-1-3] Extension—Wired Extension—Speed Dial
- 14.1 PBX Configuration—[6-1] Feature—System Speed Dial
- 14.6 PBX Configuration—[6-6] Feature—Tenant
  - Extension Directory
  - System Speed Dial

#### **Feature Manual References**

2.6.4 Speed Dialling—Personal/System

#### Station Message Detail Recording (SMDR)

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Dial— Analogue CO Call Duration Start
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CO & SMDR—Outgoing CO Call Printout (SMDR)
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge
  - Main—SMDR for External Hotel Application 2—Printing Message 1-8
  - Charge—Charge Options—Currency
- 19.1 PBX Configuration—[11-1] Maintenance—Main
  - SMDR
  - SMDR Options
  - RS-232C

#### **Feature Manual References**

2.22.1.1 Station Message Detail Recording (SMDR)

### **Supervisory Feature**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Incoming Call Queue Monitor
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Miscellaneous—Supervisor Extension Number

#### **Feature Manual References**

2.2.2.9 Supervisory Feature

# **Supervisory Feature (ACD)**

- 8.4 Users—Call Management
- 11.5.3 PBX Configuration—[3-5-3] Group—Incoming Call Distribution Group—Miscellaneous
- 11.5.4 PBX Configuration-[3-5-4] Group-Incoming Call Distribution Group-ACD Supervisor

#### **Feature Manual References**

2.2.2.10 Supervisory Feature (ACD)

### Syslog Record Management

28.3.2 Network Service—[3-2] Client Feature—Syslog

#### **Feature Manual References**

2.22.1.2 Syslog Record Management

#### **Tenant Service**

- 10.2 PBX Configuration—[2-2] System—Operator & BGM
  - PBX Operator—Day, Lunch, Break, Night
  - BGM and Music on Hold—Music on Hold
- 10.4 PBX Configuration—[2-4] System—Week Table
- 10.5 PBX Configuration—[2-5] System—Holiday Table
- 10.7.3 PBX Configuration—[2-7-3] System—Class of Service—Internal Call Block
- 11.2 PBX Configuration—[3-2] Group—User Group
- 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings—Main— Tenant Number
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—User Group
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—User Group
- 13.1 PBX Configuration—[5-1] Optional Device—Doorphone—Tenant Number
- 13.5 PBX Configuration—[5-5] Optional Device—External Sensor—Tenant No.
- 14.6 PBX Configuration—[6-6] Feature—Tenant
- 16 PBX Configuration—[8] ARS
- 16.5 PBX Configuration—[8-5] ARS—Carrier—Authorisation Code for Tenant
- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings—DIL—Tenant Number
- 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table—Tenant Number

• 18.4 PBX Configuration—[10-4] CO & Incoming Call—MSN Table—MSN—Tenant Number

#### **Feature Manual References**

5.1.3 Tenant Service

# Three-party Conference (3PTY)—by ISDN

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, 3PTY
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Supplementary Service—COLP, CLIR, COLR, CNIP, CONP, CNIR, CONR, CF (Rerouting), CT, CCBS, AOC-D, AOC-E, E911, 3PTY

#### **Feature Manual References**

4.1.2.8 Three-party Conference (3PTY)—by ISDN

### **TIE Line Service**

- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Network Numbering Plan

  —Trunk Property
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Network Numbering Plan
   —Trunk Property
- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Incoming Call Inter-digit Timer—TIE
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Idle Line Access (Local Access)
  - Trunk Group Access
  - TIE Line Access
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Other PBX Extension
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—TRS—TRS Level—Day, Lunch, Break, Night
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4—Private Network—TIE Call by Extension Numbering
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Main—COS
- 17.1 PBX Configuration—[9-1] Private Network—TIE Table
- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings
  - DIL—Trunk Property
  - DIL-DIL Destination-Day, Lunch, Break, Night
  - DDI / DID / TIE / MSN
- 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table—DDI / DID Destination—Day, Lunch, Break, Night

### **Feature Manual References**

4.3.1 TIE Line Service

### **Time Service**

10.4 PBX Configuration—[2-4] System—Week Table

- 10.5 PBX Configuration—[2-5] System—Holiday Table
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Time Service (Day / Lunch / Break / Night) Switch
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Manager—Time Service Switch
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for Time Service)
  - Parameter Selection (for Time Service Automatic/Manual)
  - Optional Parameter (Ringing Tone Type Number) (for Time Service)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for Time Service)
  - Parameter Selection (for Time Service Automatic/Manual)
  - Optional Parameter (or Ringing Tone Type Number) (for Time Service)

5.1.4 Time Service

#### **Timed Reminder**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—DISA / Door / Reminder / U. Conf
  - Timed Reminder—Repeat Counter
  - Timed Reminder—Interval Time
  - Timed Reminder—Alarm Ringing Duration
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Remote Timed Reminder (Remote Wakeup Call)
  - Timed Reminder Set / Cancel
- 10.8.3 PBX Configuration—[2-8-3] System—Ring Tone Patterns—Call from Others—Timed Reminder— Ring Tone Pattern Plan 1–8
- 10.9 PBX Configuration—[2-9] System—System Options—Option 1—PT LCD—Time Display
- 13.3.1 PBX Configuration—[5-3-1] Optional Device—Voice Message—DISA System—Option 2
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Main—SMDR for External Hotel Application 1
  —Timed Reminder (Wake-up Call)
- 14.2 PBX Configuration—[6-2] Feature—Hotel & Charge—Main—Timed Reminder Message for SIP-MLT / Standard SIP Phone—Message
- 19.1 PBX Configuration—[11-1] Maintenance—Main—SMDR—Print Information—Timed Reminder (Wake-up Call)

#### **Feature Manual References**

2.24.4 Timed Reminder

### Toll Restriction (TRS)/Call Barring (Barring)

10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—TRS

- TRS Level-Day, Lunch, Break, Night
- TRS Level for System Speed Dialling
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—COS
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for TRS Level Change)
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main—COS
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for TRS Level Change)
- 15.1 PBX Configuration—[7-1] TRS—Denied Code
- 15.2 PBX Configuration—[7-2] TRS—Exception Code
- 15.3 PBX Configuration—[7-3] TRS—Special Carrier
- 15.5 PBX Configuration—[7-5] TRS—Miscellaneous

2.7.1 Toll Restriction (TRS)/Call Barring (Barring)

#### **Trunk Access**

- 9.23 PBX Configuration—[1-1] Configuration—Slot—SLC2 Port Property—Connection
- 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port—Connection
- 9.27 PBX Configuration—[1-1] Configuration—Slot—Port Property BRI Port—Connection
- 9.28 PBX Configuration—[1-1] Configuration—Slot—Port Property PRI Port—Connection
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features
  - Idle Line Access (Local Access)
  - Trunk Group Access
  - Single CO Line Access
- 10.7.2 PBX Configuration—[2-7-2] System—Class of Service—External Call Block
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Main—Line Hunting Order
- 11.1.2 PBX Configuration—[3-1-2] Group—Trunk Group—Local Access Priority
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Parameter Selection (for Single CO)
  - Parameter Selection (for Group CO)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Parameter Selection (for Single CO)
  - Parameter Selection (for Group CO)
- 16.1 PBX Configuration—[8-1] ARS—System Setting—ARS Mode

18.1 PBX Configuration—[10-1] CO & Incoming Call—CO Line Settings—CO Name

#### **Feature Manual References**

2.5.5.3 Trunk Access

### **Trunk Adaptor Connection**

- 9.11 PBX Configuration—[1-1] Configuration—Slot—V-SIPGW—Port Property
  - Trunk Adaptor
  - Connection Attribute
  - Channel Attribute
- 9.13 PBX Configuration—[1-1] Configuration—Slot—V-IPGW16—Port Property
  - Trunk Adaptor
  - Connection Attribute

#### **Feature Manual References**

5.3.2 Trunk Adaptor Connection

# Trunk Answer From Any Station (TAFAS)

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—TAFAS Answer
- 10.11.1 PBX Configuration—[2-11-1] System—Audio Gain—Paging/MOH
  - Paging—EPG 1–6 (External Pager 1–6)
- 13.2 PBX Configuration—[5-2] Optional Device—External Pager

#### **Feature Manual References**

2.17.2 Trunk Answer From Any Station (TAFAS)

### **Trunk Busy Out**

- 9.25 PBX Configuration—[1-1] Configuration—Slot—Port Property LCO Port—Busy Out Status
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Busy Out Cancel
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Manager—Manager
- 10.9 PBX Configuration—[2-9] System—System Options—Option 4—Busy Out—Busy Out for Analogue CO

#### **Feature Manual References**

2.5.4.6 Trunk Busy Out

### **Trunk Call Limitation**

- 7.3.5 Utility—Log—Call Control Log
- 9.5.1 PBX Configuration—[1-1] Configuration—Slot—Site Property—Main—Main—Area ID for logical partition
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—CO & SMDR—Extension—CO Line Call Duration Limit
- 10.9 PBX Configuration—[2-9] System—System Options—Option 2
  - Extension CO Call Limitation—For Incoming Call

- Applying logical partitioning
- 11.1.1 PBX Configuration—[3-1-1] Group—Trunk Group—TRG Settings—Main
  - CO-CO Duration Time (\*60s)
  - Extension-CO Duration Time (\*60s)
- 15.5 PBX Configuration—[7-5] TRS—Miscellaneous—Dial Digits Limitation After Answering—Dial Digits

2.11.8 Trunk Call Limitation

### **UM Group Failover**

• 11.7.2 PBX Configuration—[3-7-2] Group—UM Group—Unit Settings—Fail Over Site Name

#### **Feature Manual References**

4.2.3.3 UM Group Failover

# **Unified Messaging—Alternate Extension Group**

• 23.2 UM Configuration—[4-2] Service Settings—Parameters—Alternate Extension

#### **Feature Manual References**

3.2.1.1 Alternate Extension Group

# **Unified Messaging—Auto Forwarding**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—External MSG Delivery/Auto FWD/ Personal Custom Serv
  - Auto Forwarding Active
  - Auto Forwarding Mailbox Number
  - Auto Forwarding Delay Time
  - Auto Forwarding Message Type
  - Auto Forwarding Message Type Urgent
  - Auto Forwarding Mode
  - Auto Forwarding Expires

#### **Feature Manual References**

3.2.1.2 Auto Forwarding

# **Unified Messaging—Auto Receipt**

21.1 UM Configuration—[2] Class of Service—Mailbox—Auto Receipt

#### **Feature Manual References**

3.2.2.1 Auto Receipt

### **Unified Messaging—Automated Attendant (AA)**

- 23.2 UM Configuration—[4-2] Service Settings—Parameters
  - Wait Time for First Digit (0-20 s)
  - Menu Repeat Cycle (1-5 times)

- Play Owner's Name during Transfer
- Operator Service
- Operator Service—Operator's Extension
- Operator Service—Operator's Mailbox
- Operator Service—Busy Coverage Mode
- Operator Service—No Answer Coverage Mode
- Operator Service—Operator No Answer Time (10-60 s)
- Call Hold Mode
- Call Hold Mode—Call Queuing Announcement Mode
- Call Hold Mode—Call Retrieval Announcement Timing (1-30 s)
- Alternate Extension
- List All Names
- Operator Transfer Mode

3.2.1.3 Automated Attendant (AA)

# **Unified Messaging—Automatic Login**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Remote Call/Automatic Login/Direct Service
  - Auto Login Extension
  - Auto Login Extension Password Entry Requirement
  - Auto Login Caller ID 1, 2
  - Auto Login Caller ID Password Entry Requirement
  - Auto Login DDI/DID
  - Auto Login TRG No.
  - Auto Login DDI/DID, TRG No. Password Entry Requirement
  - Auto Login Toll Saver

#### **Feature Manual References**

3.2.2.3 Automatic Login

### Unified Messaging—Automatic Two-way Recording for Manager

- 7.10.3 Utility—Automatic Two-way Recording—Extension Setting List
  - Internal Call
  - External Call
  - Supervisor
  - UM Group No.
  - Mailbox Number

#### **Feature Manual References**

3.2.1.4 Automatic Two-way Recording for Manager

# **Unified Messaging—Call Services**

- 22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group
  - Day, Night, Lunch, and Break Mode Incoming Call Service
  - Day, Night, Lunch, and Break Mode Incoming Call Service Parameter
  - Day, Night, Lunch, and Break Mode Incoming Call Service Prompt

#### **Feature Manual References**

3.2.1.6 Call Services

### **Unified Messaging—Call Transfer Scenario**

- · 8.1.1 Users—User Profiles—Advanced setting
  - Advanced Call Transfer Setting
  - Scenario Setting

#### **Feature Manual References**

3.2.2.7 Call Transfer Scenario

# **Unified Messaging—Call Transfer Status**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—Call Transfer Status

#### **Feature Manual References**

3.2.2.8 Call Transfer Status

# **Unified Messaging—Call Transfer to Outside**

- 21.1 UM Configuration—[2] Class of Service—Call Transfer—Call Transfer to Outside
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Transfer to Outside

### **Feature Manual References**

3.2.1.7 Call Transfer to Outside

# **Unified Messaging—Call-through Service**

- 21.1 UM Configuration—[2] Class of Service—General—Call-through Service
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Transfer to Outside—Outside Transfer Sequence—Call Transfer to Outside Sequence (Up to 16 digits / [0-9 \* # D F R T , ; N])

#### **Feature Manual References**

3.2.2.6 Call-through Service

### **Unified Messaging—Caller ID Call Routing**

• 23.1 UM Configuration—[4-1] Service Settings—Caller ID / PIN Call Routing

# **Feature Manual References**

3.2.1.8 Caller ID Call Routing

# **Unified Messaging—Caller ID Callback**

• 21.1 UM Configuration—[2] Class of Service—Mailbox—Caller ID Callback

 24.4 UM Configuration—[5-4] System Parameters—Parameters—Transfer to Outside—Trunk Group (1– 96)—Caller ID Callback

#### **Feature Manual References**

3.2.2.10 Caller ID Callback

# **Unified Messaging—Caller ID Screening**

• 21.1 UM Configuration—[2] Class of Service—Call Transfer—Caller ID Screen

#### **Feature Manual References**

3.2.1.9 Caller ID Screening

# **Unified Messaging—Caller Name Announcement**

- 21.1 UM Configuration—[2] Class of Service—Mailbox—Number of CIDs for Caller Name Announcement (Selection)
- 24.3 UM Configuration—[5-3] System Parameters—System Caller Name Announcement

#### **Feature Manual References**

3.2.1.10 Caller Name Announcement

# **Unified Messaging—Company Greeting**

- 22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group
  - Day, Night, Lunch, and Break Mode Company Greeting No. (Selection)
  - Day, Night, Lunch, and Break Mode Company Greeting No. (Other)
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Daily Hours Setting

#### **Feature Manual References**

3.2.1.12 Company Greeting

# **Unified Messaging—Covering Extension**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—Covering Extension

# **Feature Manual References**

3.2.1.14 Covering Extension

### Unified Messaging—Custom Service

23.3 UM Configuration—[4-3] Service Settings—Custom Service

#### **Feature Manual References**

3.2.1.15 Custom Service

### **Unified Messaging—Custom Service Builder**

• 23.3 UM Configuration—[4-3] Service Settings—Custom Service—Custom Service Builder

# **Feature Manual References**

3.1.2.2 Custom Service Builder

# **Unified Messaging—Default Mailbox Template**

• 20.1 UM Configuration—[1] Mailbox Settings—Adding Mailboxes

#### **Feature Manual References**

3.1.2.3 Default Mailbox Template

# **Unified Messaging—Dialling by Name**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters
  - First Name
  - Last Name
- 21.1 UM Configuration—[2] Class of Service—General—Directory Listing

#### **Feature Manual References**

3.2.1.16 Dialling by Name

# **Unified Messaging—Direct Service Access**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Remote Call/Automatic Login/Direct Service—Direct Service UM Extension

#### **Feature Manual References**

3.2.2.12 Direct Service Access

# **Unified Messaging—Extension Group**

• 24.2 UM Configuration—[5-2] System Parameters—Extension Group

#### **Feature Manual References**

3.2.1.18 Extension Group

#### **Unified Messaging—External Message Delivery Service**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—External MSG Delivery/Auto FWD/ Personal Custom Serv
  - External Message Delivery Active
  - External Message Delivery Prompt Mode
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—Extension
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—External Message Delivery

#### **Feature Manual References**

3.2.2.13 External Message Delivery Service

# **Unified Messaging—Group Distribution Lists**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Personal Distribution List
- 24.1 UM Configuration—[5-1] System Parameters—Mailbox Group

#### **Feature Manual References**

3.2.2.17 Group Distribution Lists

# **Unified Messaging—Hold**

- 23.2 UM Configuration—[4-2] Service Settings—Parameters
  - Operator Service—Busy Coverage Mode
  - Call Hold Mode
  - Call Hold Mode—Call Queuing Announcement Mode
  - Call Hold Mode—Call Retrieval Announcement Timing (1-30 s)

#### **Feature Manual References**

3.2.1.20 Hold

# **Unified Messaging—Holiday Service**

- 10.5 PBX Configuration—[2-5] System—Holiday Table
- 10.9 PBX Configuration—[2-9] System—System Options—Option 9
- 23.4 UM Configuration—[4-4] Service Settings—Holiday Table

### **Feature Manual References**

3.1.1 Unified Messaging System Overview3.2.1.21 Holiday Service

# **Unified Messaging—Hospitality Mode**

• 21.1 UM Configuration—[2] Class of Service—Hospitality Mode

# **Feature Manual References**

3.2.1.22 Hospitality Mode

# **Unified Messaging—IMAP Integration**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—Mailbox Password (Message Client)
- 21.1 UM Configuration—[2] Class of Service—General
  - Fax Option
  - Desktop Messaging

#### **Feature Manual References**

3.3.2 IMAP Integration

### **Unified Messaging—Incomplete Call Handling Service**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters
  - Incomplete Call Handling for No Answer
  - Incomplete Call Handling for Busy

#### **Feature Manual References**

3.2.2.18 Incomplete Call Handling Service

### **Unified Messaging—Intercept Routing to a Mailbox**

 11.7.1 PBX Configuration—[3-7-1] Group—UM Group—System Settings—Intercept to Mailbox for Call to Extension

3.2.1.23 Intercept Routing to a Mailbox

# **Unified Messaging—Intercom Paging**

- 21.1 UM Configuration—[2] Class of Service—Call Transfer
  - Intercom Paging Group
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Intercom Paging Parameters

#### **Feature Manual References**

3.2.1.24 Intercom Paging

### **Unified Messaging—Interview Service**

20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—Interview Mailbox

#### **Feature Manual References**

3.2.1.25 Interview Service

### **Unified Messaging—List All Names**

• 21.1 UM Configuration—[2] Class of Service—General—Directory Listing

#### **Feature Manual References**

3.2.1.26 List All Names

# **Unified Messaging—Live Call Screening (LCS)**

- 10.8.3 PBX Configuration—[2-8-3] System—Ring Tone Patterns—Call from Others—Live Call Screening
   —Ring Tone Pattern Plan 1–8
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 4
  - LCS Recording Mode
  - LCS Answer Mode
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 4—LCS Recording Mode
- 21.1 UM Configuration—[2] Class of Service—Mailbox—Message Cancel for Live Call Screening

#### **Feature Manual References**

3.2.2.19 Live Call Screening (LCS)

### Unified Messaging—Logical Extension (All Calls Transfer to Mailbox)

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—All Calls Transfer to Mailbox

#### **Feature Manual References**

3.2.1.27 Logical Extension (All Calls Transfer to Mailbox)

### Unified Messaging—Mailbox

- 7.5.3 Utility—Report—UM View Reports
- 20.1 UM Configuration—[1] Mailbox Settings

3.2.2.20 Mailbox

### **Unified Messaging—Manager Service Switching**

- 21.1 UM Configuration—[2] Class of Service—General
  - System Manager Authority
  - Message Manager Authority

#### **Feature Manual References**

3.2.2.22 Manager Service Switching

# **Unified Messaging—Message Reception Mode**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters—All Calls Transfer to Mailbox

#### **Feature Manual References**

3.2.1.28 Message Reception Mode

# **Unified Messaging—Message Transfer**

• 21.1 UM Configuration—[2] Class of Service—Mailbox—Announce Message Transferred Information

#### **Feature Manual References**

3.2.2.23 Message Transfer

# Unified Messaging—Message Waiting Notification—E-mail Device

- · 7.5.3 Utility—Report—UM View Reports
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters
  - E-mail/Text Message Device—Device No. 1, 2, 3—User Name
  - E-mail/Text Message Device—Device No. 1, 2, 3—E-mail Address
  - E-mail/Text Message Device—Device No. 1, 2, 3—Notification Type
  - E-mail/Text Message Device—Device No. 1, 2, 3—Only Urgent Messages
  - E-mail/Text Message Device—Device No. 1, 2, 3—Title Order
  - E-mail/Text Message Device—Device No. 1, 2, 3—Title String
  - E-mail/Text Message Device—Device No. 1, 2, 3—Callback Number
  - E-mail/Text Message Device—Device No. 1, 2, 3—Send Wait Time [0-120 min]
  - E-mail/Text Message Device—Device No. 1, 2, 3—Attach Voice File
  - E-mail/Text Message Device—Device No. 1, 2, 3—Attach Fax File
  - E-mail/Text Message Device—Device No. 1, 2, 3—Use Mode
- 21.1 UM Configuration—[2] Class of Service—General
  - E-mail Option
  - Fax Option
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—E-mail Option

3.2.1.29 Message Waiting Notification—E-mail Device

### **Unified Messaging—Message Waiting Notification—Lamp**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters—Message Waiting Lamp

#### **Feature Manual References**

3.2.1.30 Message Waiting Notification—Lamp

# **Unified Messaging—Message Waiting Notification—Telephone Device**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters
  - Telephone Device—Device No. 1, 2, 3—Notification Type
  - Telephone Device—Device No. 1, 2, 3—Only Urgent Messages
  - Telephone Device—Device No. 1, 2, 3—Dial Number [0-9 \* # T X , ;]
  - Telephone Device—Device No. 1, 2, 3—No. of Retries
  - Telephone Device—Device No. 1, 2, 3—Busy Delay Time (min)
  - Telephone Device—Device No. 1, 2, 3—No Answer Delay Time (min)
  - Telephone Device—Device No. 1, 2, 3—Use Mode
  - Telephone Device—Device Notification Timer—Device Start Delay Time (0-120 min)
  - Telephone Device—Device Notification Timer—Device Interval Time between Device 1, 2, 3 and Next Device
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Dialling Parameters/MSW Notification

#### **Feature Manual References**

3.2.1.31 Message Waiting Notification—Telephone Device

# **Unified Messaging—Multilingual Service**

• 24.4 UM Configuration—[5-4] System Parameters—Parameters—Prompt Setting

# **Feature Manual References**

3.2.1.32 Multilingual Service

# **Unified Messaging—No DTMF Input Operation**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—External MSG Delivery/Auto FWD/ Personal Custom Serv
  - No DTMF Input Operation
  - No DTMF Input Operation Wait Time

#### **Feature Manual References**

3.2.1.33 No DTMF Input Operation

# **Unified Messaging—On Hold Announcement Menu**

7.9 Utility—UM – System Prompts Customisation

# **Feature Manual References**

#### 3.2.1.34 On Hold Announcement Menu

# **Unified Messaging—Operator Service**

- 23.2 UM Configuration—[4-2] Service Settings—Parameters
  - Operator Service
  - Operator Service—Operator's Extension
  - Operator Service—Operator's Mailbox
  - Operator Service—Busy Coverage Mode
  - Operator Service—No Answer Coverage Mode
  - Operator Service—Operator No Answer Time (10-60 s)

### **Feature Manual References**

3.2.1.35 Operator Service

# **Unified Messaging—Password Administration**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Mailbox Parameters
  - Mailbox Password
  - Mailbox Password (Message Client)

#### **Feature Manual References**

3.1.2.4 Password Administration

# **Unified Messaging—Personal Custom Service**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—External MSG Delivery/Auto FWD/ Personal Custom Serv—Personal Custom Service

#### **Feature Manual References**

3.2.2.24 Personal Custom Service

# **Unified Messaging—Personal Greetings**

- · 21.1 UM Configuration—[2] Class of Service—Mailbox
  - Personal Greeting Length (s)
  - Personal Greeting for Caller ID

### **Feature Manual References**

3.2.2.25 Personal Greetings

# **Unified Messaging—PIN Call Routing**

- 23.1 UM Configuration—[4-1] Service Settings—Caller ID / PIN Call Routing
  - PIN No.
  - Description
  - Call Transfer for Day, Night, Lunch, and Break service

#### **Feature Manual References**

3.2.1.36 PIN Call Routing

# **Unified Messaging—Play System Prompt After Personal Greeting**

21.1 UM Configuration—[2] Class of Service—Mailbox—Play System Prompt after Personal Greeting

#### **Feature Manual References**

3.2.1.37 Play System Prompt After Personal Greeting

# **Unified Messaging—Port Service**

• 22 UM Configuration—[3] UM Extension / Trunk Service

#### **Feature Manual References**

3.2.1.38 Port Service

# **Unified Messaging—Remote Call Forwarding Set**

 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Remote Call/Automatic Login/Direct Service—Remote Call Telephone Number 1, 2

#### **Feature Manual References**

3.2.2.29 Remote Call Forwarding Set

# **Unified Messaging—Subscriber Tutorial**

• 21.1 UM Configuration—[2] Class of Service—General—Tutorial

### **Feature Manual References**

3.2.2.31 Subscriber Tutorial

# **Unified Messaging—System Backup/Restore**

- 6.9 Tool—UM Data Backup
- 6.10 Tool—UM Data Restore
- 6.11 Tool—UM Backup History

# **Feature Manual References**

3.1.2.5 System Backup/Restore

# **Unified Messaging—System Prompts**

- 7.9 Utility—UM System Prompts Customisation
- 21.1 UM Configuration—[2] Class of Service—General—Prompt Mode
- 24.4 UM Configuration—[5-4] System Parameters—Parameters—Prompt Setting

#### **Feature Manual References**

3.2.1.42 System Prompts

# **Unified Messaging—System Reports**

• 7.5.3 Utility—Report—UM View Reports

#### **Feature Manual References**

3.1.2.6 System Reports

# **Unified Messaging—System Security**

26.1 UM Configuration—[7] System Security

### **Feature Manual References**

3.1.2.7 System Security

# **Unified Messaging—Toll Saver**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Remote Call/Automatic Login/Direct Service
  - Auto Login Extension
  - Auto Login Extension Password Entry Requirement
  - Auto Login Caller ID 1, 2
  - Auto Login Caller ID Password Entry Requirement
  - Auto Login DDI/DID
  - Auto Login TRG No.
  - Auto Login DDI/DID, TRG No. Password Entry Requirement
  - Auto Login Toll Saver
- 23.2 UM Configuration—[4-2] Service Settings—Parameters
  - Delayed Answer Time for New Message (5-60 s)
  - Delayed Answer Time for No New Message (5-60 s)

#### **Feature Manual References**

3.2.2.33 Toll Saver

### **Unified Messaging—Transfer Recall to a Mailbox**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Recall— Transfer Recall
- 11.7.1 PBX Configuration—[3-7-1] Group—UM Group—System Settings—Transfer Recall to Mailbox

### **Feature Manual References**

3.2.1.43 Transfer Recall to a Mailbox

### **Unified Messaging—Trunk Service (Universal Port)**

22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group

### **Feature Manual References**

3.2.1.45 Trunk Service (Universal Port)

# Unified Messaging—Two-way Record/Two-way Transfer

- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Two-way Recording
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Extension Number (for Two-way Record)
  - Extension Number (for Two-way Transfer)

- Extension Number (for Voice Mail Transfer)
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Two-way Recording
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Extension Number (for Two-way Record)
  - Extension Number (for Two-way Transfer)
  - Extension Number (for Voice Mail Transfer)
- 21.1 UM Configuration—[2] Class of Service—Mailbox—Two-way Recorded Message Save Mode

3.2.2.34 Two-way Record/Two-way Transfer

# **Unified Messaging—Urgent Message**

- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Notification Parameters
  - Telephone Device—Device No. 1, 2, 3—Only Urgent Messages
  - E-mail/Text Message Device—Device No. 1, 2, 3—Only Urgent Messages
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—External MSG Delivery/Auto FWD/ Personal Custom Serv—Auto Forwarding Message Type Urgent
- 20.1.2 UM Configuration—[1-2] Mailbox Settings—Full Setting—Announce Number of Messages
  - Subscriber Service New Urgent Messages
  - Receiving Message Service New Urgent Messages
- 21.1 UM Configuration—[2] Class of Service—Mailbox—First Playback Urgent Message

#### **Feature Manual References**

3.2.2.35 Urgent Message

#### Unified Messaging—Voice Mail (VM) Transfer Button

- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button—Extension Number (for Voice Mail Transfer)
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button—Extension Number (for Voice Mail Transfer)

#### **Feature Manual References**

3.2.2.36 Voice Mail (VM) Transfer Button

# **Unified Messaging—Voice Mail Service**

22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group

#### **Feature Manual References**

3.2.1.46 Voice Mail Service

# **Unified Messaging—Web Programming**

- 20.1 UM Configuration—[1] Mailbox Settings
- 22.1 UM Configuration—[3-1] UM Extension / Trunk Service—Service Group—Day, Night, Lunch, and Break Mode - Incoming Call Service Prompt

• 24.4 UM Configuration—[5-4] System Parameters—Parameters—Prompt Setting

#### **Feature Manual References**

3.2.2.37 Web Programming

# **UPS (Uninterruptible Power Supply) Integration**

4.1.1 Status—Equipment Status—UPS

# **Feature Manual References**

5.6.1 UPS (Uninterruptible Power Supply) Integration

#### **User Profiles**

- 8 Users
- 12 PBX Configuration—[4] Extension
- · 20 UM Configuration—[1] Mailbox Settings

#### **Feature Manual References**

5.5.1 User Profiles

### **Verification Code Entry**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Miscellaneous—Extension PIN—Lock Counter
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—User Remote Operation / Walking COS / Verification Code
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings
  - Option 1-ARS Itemised Code
  - Option 3—Charge Limit
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings
  - Option 1-ARS Itemised Code
  - Option 3—Charge Limit
- 14.3 PBX Configuration—[6-3] Feature—Verification Code

#### **Feature Manual References**

2.7.6 Verification Code Entry

#### **VIP Call**

 11.5.1 PBX Configuration—[3-5-1] Group—Incoming Call Distribution Group—Group Settings— Miscellaneous—VIP Call Mode

#### **Feature Manual References**

2.2.2.6 VIP Call

#### **Virtual PS**

• 9.31 PBX Configuration—[1-2] Configuration—Portable Station—Registration

### **Feature Manual References**

5.2.4.6 Virtual PS

# Voice Mail (VM) Group

- 11.7.1 PBX Configuration—[3-7-1] Group—UM Group—System Settings
- 11.7.2 PBX Configuration—[3-7-2] Group—UM Group—Unit Settings

#### **Feature Manual References**

3.1.1 Unified Messaging System Overview—UM Ports and the UM Group

# **Voice Mail Integration**

- 10.3 PBX Configuration—[2-3] System—Timers & Counters—Dial / IRNA / Recall / Tone—Recall— Transfer Recall
- 11.7.1 PBX Configuration—[3-7-1] Group—UM Group—System Settings
- 11.7.2 PBX Configuration—[3-7-2] Group—UM Group—Unit Settings
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 4
  - LCS Recording Mode
  - LCS Answer Mode
- 12.1.4 PBX Configuration—[4-1-4] Extension—Wired Extension—Flexible Button
  - Type
  - Extension Number (for Two-way Record)
  - Extension Number (for Two-way Transfer)
  - Extension Number (for Voice Mail Transfer)
  - Ext No. of Mailbox (for Two-way Transfer)
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Option 4—LCS Recording Mode
- 12.2.3 PBX Configuration—[4-2-3] Extension—Portable Station—Flexible Button
  - Type
  - Extension Number (for Two-way Record)
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  - Extension Number (for Voice Mail Transfer)
  - Ext No. of Mailbox (for Two-way Transfer)
- 13.1 PBX Configuration—[5-1] Optional Device—Doorphone—Service Group Number
- 18.2 PBX Configuration—[10-2] CO & Incoming Call—DIL Table & Port Settings—DIL
  - Tenant Number
  - UM Service Group No.
- 18.3 PBX Configuration—[10-3] CO & Incoming Call—DDI / DID Table
  - Tenant Number
  - UM Service Group No.
- 18.4 PBX Configuration—[10-4] CO & Incoming Call—MSN Table—MSN
  - Tenant Number
  - UM Service Group No.

### **Feature Manual References**

3.1.1 Unified Messaging System Overview

# **Voice over Internet Protocol (VoIP) Network**

28.1 Network Service—[1] IP Address/Ports—Basic Settings—DSP IP Setting—DSP Card #1 - 1/DSP Card #1 - 2/DSP Card #2 - 1/DSP Card #2 - 2—IP Address

#### **Feature Manual References**

4.3.2 Voice over Internet Protocol (VoIP) Network

# **Walking COS**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—User Remote Operation / Walking COS / Verification Code
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Optional Device & Other Extensions—Remote Operation by Other Extension
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main— Extension
  PIN
- 12.2.1 PBX Configuration—[4-2-1] Extension—Portable Station—Extension Settings—Main— Extension PIN

#### **Feature Manual References**

2.7.5 Walking COS

#### **Walking Extension Features**

- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Walking Extension
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Main—Extension PIN

#### **Feature Manual References**

2.24.3 Walking Extension Features

### **Walking Extension-Home position control**

 10.9 PBX Configuration—[2-9] System—System Options—Option 9—Walking Extension Option—Home position control

#### **Feature Manual References**

2.24.3.3 Walking Extension-Home position control

#### Whisper OHCA

- 9.15 PBX Configuration—[1-1] Configuration—Slot—V-IPEXT32—Port Property—Option—IP Codec Priority
- 10.6.3 PBX Configuration—[2-6-3] System—Numbering Plan—B/NA DND Call Feature
  - BSS / OHCA / Whisper OHCA / DND Override
  - BSS / OHCA / Whisper OHCA / DND Override-2
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Assistant—OHCA / Whisper OHCA
- 10.9 PBX Configuration—[2-9] System—System Options—Option 5—Whisper OHCA—for SLT

2.10.4.4 Whisper OHCA

#### **Wireless XDP Parallel Mode**

- 9.31 PBX Configuration—[1-2] Configuration—Portable Station—Forced De-registration
- 10.6.1 PBX Configuration—[2-6-1] System—Numbering Plan—Main—Features—Wireless XDP Parallel Mode Set / Cancel
- 10.7.1 PBX Configuration—[2-7-1] System—Class of Service—COS Settings—Optional Device & Other Extensions—Accept Wireless XDP Parallel Mode Set by PS
- 12.1.1 PBX Configuration—[4-1-1] Extension—Wired Extension—Extension Settings—Option 1—Wireless XDP / Shared Extension

#### **Feature Manual References**

5.2.4.5 Wireless XDP Parallel Mode

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