

Administration & Programming Manual

iPECS is an Ericsson-LG Brand

Please read this manual carefully before operating system. Retain it for future reference.

Revision History

SW version	ISSUE	DATE	DESCRIPTION OF CHANGES
	1.0	March, 2014	First Release
	1.1	June, 2014	Updated the content according to upgrading SW
1.2.x	1.2	June, 2015	 We updated the following features: On-line user guide Terminal attributes (Small popup use, large popup timer, SLT open loop time) Web Access Authorization NTP attributes Digit Conversion Table System attributes U-LOOP, PBX code insertion for emergency call Disconnect with Inband information Temp License expiration notify Trace Log via Web Add System date and time in Installation wizard Etc.
2.0.x	1.3	Jan. 2016	 Added Speed code number plan in PGM100. IPCR announce only for incoming call. Updated Strong password in PGM 160/161. Updated 'Do not overwrite station name in PGM 211. Added Attendant ring mode in PGM 257. Added the more items for Alarm in PGM 163. Added Flexible button default table (PGM 239) Added Preset flexible button default (PGM 240) Added LDAP server setting in PGM 160/161. Added Attein language. Updated Company directory in Station Name Display. Added the search box in Maintenance. Added MOH Management in Maintenance. Updated DB management by adding Comment field. Updated Install wizard DTMF repeat tone does not have nothing to do with PSTN in PGM160-15 Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 111. Added SLT Pulse and SLT pulse-MW type in PGM 111. Added SLT Pulse and SLT pulse-MW type in PGM 111. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-MW type in PGM 110. Added SLT Pulse and SLT pulse-INW type in PGM 111. Added SLT Pulse and SLT pulse-INW type in PGM 112. Added SLT Pulse and SLT pulse-INW type in PGM 111. Added SLT Pulse and SLT pulse-INW type in PGM 112. Added NFC Authorization Code use in PGM 112. Added Ref 180 after 183 and "Add 'user=phone' param" in PGM 133.

		 Added Short Modem Timer in PGM 182~182, 186 Added Alarm mode to send email to the address in PGM 163. Added the special character to DB management. Added Ring detection register setting in Analog parameter. Added LCD Dimming for LIP-9000 Series & LDP-9240D in PGM 112. 'Go to assignment' function added to Personal group overview and can check the master & member list at a glance. Added Station ICR scenario (1201) to Station Data. Changed the name from UCS Standard to UCS data. Added MOH management in Maintenance. Added Keyset admin password to Install Wizard.
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1. INTRODUCTION

1.1 Manual Application

This document provides detailed information covering the configuration of the UCP database and maintenance of the UCP. The manual also details the power-up and initialization routines and the Station Web Portal.

The manual is written for the experienced installer with knowledge of telephony terms, and functions of small and mid-sized business telecommunications systems.

1.2 Manual Organization

This manual is organized in ten (10) major sections including:

- Section 1 Introduction: This section introduces the content and organization of the manual.
- Section 2 System & Admin Information: In this section general information on System capacities, power-up routines and the system initialization process are detailed. In addition, this section discusses the process for registration of IP and softphones with the UCP system.
- Section 3 Station Administration: This section provides details on configuring the system employing a station allowed administrative access. Step by step procedures are given along with brief but concise descriptions of the various configuration parameters and available settings.
- Section 4 Web Services Overview: Provides general information on access to the Web services, the structure Web pages and navigation features of the Web services.
- Section 5 Web Setup Wizard: This section discusses access to and use of the iPECS UCP setup wizard.
- Section 6 Web Administration: Similar to the Station Administration section, the Web Administration section provides procedures and descriptions for the configuration parameters and settings available using a Web browser.
- Section 7 Maintenance: The Maintenance section provides details on managing the UCP including database upload and download, software upgrade, and user access management using the Web browser interface.
- Section 8 Station Program: This section discusses the configuration of the features and functions available in the portal.
- Section 9 On-line web user guide: This section explains the frequent use of features to a user. We didn't describe this section because you can easily get the information on the web by clicking [User's guide] of login page.
- Appendix A: The Station and Attendant Station User Program codes are listed with the

associated function. These fixed codes are available at the iPECS IP or LDP phones to configure basic functions such as ring tones, activate features and assign features and functions to Flex buttons.

• **Appendix B**: One of the nine Flexible Numbering Plans, which are listed in this Appendix, is selected as the system's Flexible Numbering Plan. Each of these Numbering Plans includes all feature and resource access codes, and any individual code can be changed.

Issue 1.3

2. SYSTEM & ADMIN INFORMATION

2.1 System capacities

This manual provides detailed information on the database management of the iPECS UCP Series systems. The iPECS UCP Series is available with several versions of the call server configuration. Several other variations exist between systems based on the model employed as shown in Table 2.1-1 System Capacity Chart.

ITEM	UCP100	UCP600	UCP2400	Remark
Main Cabinet		10 Slots		1 slot used by the PSU
System channels, basic	50	100	600	
maximum	199	600	2400	w/License
Stations	199	600	2400	Total stations and Lines
CO/IP Lines (external network channels incl. VoIP)	199	600	998	cannot exceed the available System channels
UCS Standard Clients				
Registrations	100	200	400	
Simultaneous	100	200	400	
UCS Premium Clients				
Registrations	199	600	2400	
Server Redundancy	No	Yes	Yes	Supports local and remote redundancy
Cabinet Power Redundancy		Yes		
Integrated Telephony ports ^{*1} standard	2 FXS (SLT)	None	None	Two FXS ports are equipped as standard in the UCP100
optional	4 CO, or 2 BRI or 4 BRI Lines	None	none	module; an optional CO/BRI line unit may be equipped or installed.
WTIM4/8 modules (Max.)		132		
Max DECT phones	100	255	255	
VoIP Switch channels. *2&3				
Built-in basic	8	8	0	
Built-in maximum	16	24	0	w/License
System Maximum	100	600	998	w/VOIM and VCIM
VoIP DSP channels,				VoIP DSP channels can be
Built-in max	6	6	0	assigned to the MCIU, 2
Multi-party Conference Unit (MCIU) channels	6/10/14/18	6/18	0	VoIP = 4 Conf channels. For UCP100 see Note 1.
Maximum MCIMs		30		
Max SIP channels	100	600	1200	
	8-Ch./4 Hrs.	8-Ch./6Hrs.	NA	
VSF ^{*4}	14 Hours	16 Hours	NA	w/License

Table 2.1-1 System Capacities

ITEM	UCP100	UCP600	UCP2400	Remark
UVM capacity, basic	8 Ch	annels at 50 hou	urs	
maximum	16 Ch	annels at 200 ho	ours	w/License
UVM per system		30		
Attendants		50		
Serial Port (RS-232C)		1		
USB Host port		1		
Alarm/Doorbell input	1	2	<u>)</u>	
External Control Relays	1	4	ļ	
Music Source Inputs (Ext)	1	2)	
Power Fail Circuit	1	4	ļ	
External Page zones	1	2)	
Internal Page Zones		100		
System Speed Dial		12,000		
System Speed Dial Zones (Groups)		50		
Station Speed Dial, per Station		100		
Total Station Speed Dial		24,000		
Call park		200		
Last Number Redial		10 (23 digits)		
Save Number Redial		1 (23 digits)		
Standard DSS Consoles/Station		9		
Serial DSS - System		500		
Serial DSS - Station (LIP-8000)		4		
Serial DSS – Station (LIP-9000)		1		
SMDR buffer		30,000		
CO Line Groups		200		
Station & Hunt Groups		200		
Station & Hunt Group Members		200		
Pickup Groups		200		
Pickup Group Member		2,4000		
Personal Groups		1200		
Conference Group - System		160		
Conference Group - Station	100			
Executive/Secretary pairs	100			
Authorization Codes	5200 (Station:2400/System:2800)			
Transparent Networking Table	100			
CLI Msg Wait (Missed calls)	4,000			
Redundancy	N/A Yes			
Flex DID Table		10,000		
MSN table	2,400			
DID Digits Analysis	4			

Table 2.1-1 System Capacities

ITEM	UCP100	UCP600	UCP2400	Remark
Tenancy (ICM) Groups		100		
ICLID table		500		

 Table 2.1-1 System Capacities

NOTE

- 1. The iPECS UCP-100 is equipped with two (2) FXS ports, and one of several built-in CO Line units may be factory or field installed.
 - 4 analog CO Lines (UCP-COIU4), uses two (2) VoIP DSP channels
 - 2 BRI Lines, 2B+D each, (UCP-BRIU2), uses two (2) VoIP DSP channels

4 BRI Lines, each 2B+D, (UCP-BRIU4), uses four (4) VoIP DSP channels Note the built-in PSTN interfaces require dedicated DSP resources. These DSP resources reduce the maximum VoIP DSP resources available shown in the above chart.

- 2. The eight (8) built-in VoIP Switching channels implement agent and packet relay functions. Remote device and network interfaces send RTP traffic to the VoIP channel, which forwards traffic to the appropriate local iPECS device. The VoIP Switching channel also forwards multi-cast packets to the remote end-points and local non-iPECS devices. Only the g.711 codec is allowed unless there is an available VoIP DSP channel.
- 3. The number of VoIP Switching channels can be increased to the maximum with license installation.
- 4. Approximately 35 minutes (16 Mbytes) of the VSF and UVM memories are used to provide basic system prompts, the remaining memory can be used for announcements and voice message storage. Note the built-in VSF supports the g.711 Codec only; the UVM supports g.711, g.729, g.723, and g.722 Codecs.

2.2 Initialization

When power is applied to the UCP or the UCP Reset button is pressed, the system will initiate the "Power-up" routine. During the Power-Up routine, the system will check the Initialization switch (pole 4th of UCP Mode Dip Switch). If the switch is in the OFF position, the system will perform a simple Power-Up routine; clear all scratch-pad memory, load run-time programs, establish communications with each registered gateway Module and iPECS terminal, send RESTART commands and load appropriate settings to the Modules and terminals. If a Module or terminal does not respond after several attempts, the system places the device in an out-of-service mode but maintains the database settings. Once the Power-up routine is complete, the system will conduct normal operations.

If the Initialization switch is in the ON position, in place of the Power-Up routine, the system will perform the full Initialization procedure. The initialization procedure will set the system database to default values. Further, during the full initialization procedure, the system will establish

communications with each gateway Module and iPECS terminal for registration. This communication will use the default device IP address and the UCP MAC address for system identification. The system will maintain IP addresses and Sequence Numbers for previously registered gateway Modules and iPECS terminals. These values are employed for subsequent communication and logical assignments of numbering plans, respectively. In addition, the system sends commands to modify all settings to the default values, including IP addresses but maintains the existing Sequence Numbers.

After successful initialization, should a device not respond to several attempts by the system to communicate, the system places the device in an out-of-service mode but maintains the database. Once initialization is complete, set the initialization switch to the OFF position to protect the database. The system must be restarted to complete the initialization.

2.3 Registration

2.3.1 Normal Registration Process

Module & Terminal

When power is applied and an Ethernet link is established, an unregistered device will attempt to discover and register with a local (on the same LAN) iPECS system. The Module or terminal will send a registration request to the assigned iPECS system (UCP) IP address. If no response is received, the device will generate a Multi-cast discovery request for registration.

Remote iPECS Phone & Remote Services Module

A remote device, iPECS Phone or gateway Module, registers with the system using the MAC address of the device. The MAC address must be assigned in the system database and the IP address of the system must be assigned in the remote device. Using this address, the remote device will attempt to register with the assigned iPECS system. When the system receives the registration request, the MAC address is compared with the database to authenticate the remote device. With a matching MAC, the system will accept the registration request and provide the remote device with the appropriate settings. Note that the position of the UCP Registration switch does not affect remote registration.

iPECS Softphone or SIP Phone

iPECS softphones (iPECS Communicator and UCS Client) and SIP phones register with the system employing the User Id and Password. When the system receives the registration request, the Id and password are compared to the Station Login parameters. If a match is found in the Station Login Table, the system registers the device and assigns the phone the Station Number requested (Desired number), if available. As with remote registration, the position of the UCP Registration switch will not affect Softphone or SIP Phone registration.

iPECS system

When power is applied, an Ethernet link is established, and the Registration switch (UCP DIP Switch position 3) is in the ON position, the UCP will send a Multi-cast request to unregistered gateway Modules and iPECS terminals for registration.

When the system receives a valid registration or discovery request, and the Registration switch (UCP DIP Switch position 3) is in the ON position, the system will respond to the gateway Module or terminal with a Registration command including the system IP and MAC address. During the registration process, the Module or terminal will receive data from the system including a Sequence Number, IP address, RTP characteristics, etc., as well as default settings appropriate to the type of Module or terminal. Once registered, the Module or terminal will maintain the system IP and MAC address in non-volatile memory and will not attempt further registrations.

If the Registration switch is in the OFF position, the system will not respond to normal registration requests from a local device.

Sequence Number

Sequence numbers are allocated to the different device types and are assigned sequentially to devices of the same type as shown in the Table 2.4.1 below.

Device Type	Start Sequence Number	End Sequence Number
Station	1	2400
CO line	2401	3000
VSF	3001	3100
MISC	3101	3200
MCIM	3201	3230
UCS server	3231	3246
IPCR and 3 rd party server	3247	3256
WTIM	3257	3388

Table 2.4.1 Sequence Number Allocation

2.3.2 Replacement Module Registration

Under certain situations, it is necessary to force the registration of gateway modules and terminals specifically when an UCP, gateway Module or iPECS Terminal is replaced. When replacing a UCP module, gateway Modules and iPECS terminals must be forced to register with the new system. With Module or terminal replacement, the system must recognize the "replacement" status to transfer the existing database values.

When replacing a UCP, the local Web interface is used to access the system. The user may update the system database using the database downloaded from the previous UCP memory.

Using the Terminal mode Command Line interface ("maint > reset ip"), the user provides the new UCP with the IP address of the previous UCP, and issues the Register command. The new system will then send a Uni-cast Register command to each gateway Module and iPECS terminal registered to the previous system. This Register command will include the previous system IP

address. These commands are repeated several times only. As communication is established, the new UCP will update the settings of the gateway Modules and iPECS terminals appropriately. When the gateway Modules and terminals respond, they are registered to the new system.

When replacing a gateway Module, use PGM 103 "Device IP Plan" in Web admin to change the service mode to "Out of Service", change the MAC information for the new module, change the service mode to in-service and install the new gateway Module.

When replacing an iPECS terminal, using PGM 103 "Device IP Plan" in Web admin change the service mode to "Out of Service" change the MAC information for the new iPECS terminal, change the service state to in-service, and install the new terminal.

2.4 General Admin and Menu Structure

The iPECS UCP can be configured to meet each customer's individual needs. System configuration may be accomplished by entering the "Program mode" at an assigned Admin Station or by pointing a Web Browser at the IP address of the, UCP. Section 3 provides a description for data entry using the Admin Station. Section 4 discusses configuration employing the Web browser. Note that some parameters are available through Web Admin and not the Keyset Admin.

Configurable items are organized as "Data" groups with a common affect, i.e. station, system, numbering plan, etc. Items are further grouped into "Programs" forming a multi-layered menu structure. Generally, Program groups are assigned a three-digit "Program" (PGM) code used to access the group from an Admin Keyset. The top-level Data groups include:

- System ID & Numbering Plans
- Station Data
- Board Based Data
- CO Line Data
- System Data
- Station Group Data
- ISDN Line Data
- SIP Data
- Tables Data
- Networking Data
- H.323 Routing Table
- T-NET Data
- Zone Data
- Device Login
- UCS Standard
- DECT Data
- Redundancy Data (for UCP600 & UCP2400)
- Initialization

3. STATION ADMIN PROGRAMMING

3.1 General

Using Station Admin, the Attendant Station or Admin enabled station can be used to configure the System Id & Numbering Plan data for the system. All other programming of the system and maintenance is accomplished using the Web services as covered in section 4.

3.1.1 LCD & Button Functions

While in the Program mode, the Liquid Crystal Display (LCD) and Flex button LEDs of an Admin Station are used to guide and indicate status of the feature. The dial-pad is most often used to enter data after selecting an item using the Flex buttons. In some cases, pressing a Flex button will toggle the entry with the Flex button LED indicating the status (ON/OFF).

For Programs with multiple Flex button selections, the volume controls (**[VOL UP]** and **[VOL DOWN]** buttons) may be used to select the next or previous item. The **[SPEED]** button is generally employed as a delete button to erase existing entries. However, where noted, it may be used to confirm a range input. Pressing the **[CONF]** button, returns to the first step of the data entry procedure for the Program without storing unsaved entries.

The **[SAVE]** button is used to store data after entry. If there are no conflicts in the entered data, confirmation tone is received and the data stored. If a conflict exists, error tone is provided and newly entered data are not saved. Generally, corrected data may be entered and stored without restarting the entry procedure from the 1st step.

3.1.2 Alphanumeric Data Entries

In some cases, an alphanumeric entry is required. Two (2) dial-pad digits represent each character of an alphanumeric entry, as shown in Table 3.1.2–1 below. Use the Table to determine the two digits that must be entered from the dial-pad for each character.

1	Q – 11	2	A - 21	3	D - 31
	Z – 12		B - 22		E - 32
	. – 13		C - 23		F - 33
	1 – 10		2 - 20		3 - 30
4	G – 41	5	J - 51	6	M - 61
	H - 42		K - 52		N - 62
	I - 43		L - 53		O - 63
	4 - 40		5 - 50		6 - 60
7	P - 71	8	T - 81	9	W - 91
	R - 72		U - 82		X - 92
	S - 73		V - 83		Y - 93
	Q - 7*		8 - 80		Z - 9#
	7 - 70				9 - 90
*	Blank -	0	0 - 00	#	#
	*1				
	: - *2				
	, - *3				

Table 3.1.2-1 ALPHANUMERIC DIAL-PAD ENTRIES

3.2 Data Entry Mode

Using Station Admin, data entry is accomplished from an Admin Station or station assigned for data entry (Station Data Common Attributes PGM 111 in Web Admin). After initialization and registration, all iPECS IP or LDP Phones may access the system database. In addition, as default, there is no Station Admin password defined. To enter the Program mode from the Admin Station follow the procedure below. In the left column of the chart are the LCD displays and in the right column are step-by-step instructions to modify database items.

PROCEDURE:	
STATION 100 (T) 04 SEP 01 02:49 PM	 Press the [PGM] button. Dial '*' and '#'.
ENTER ADMIN PASSWORD	 Enter the Admin password. Confirmation tone is received. As a default, there is no password and this step is skipped.
ADMIN PROGRAM START	
ENTER PGM NUMBER	 To select a program, use the instructions in the following sections, starting with "Press the [PGM] button" and dial the specified Admin Program code.

3.3 Procedure for Data Entry

The following sections provide specific instructions for entering data from the Admin Station once in the Program mode. Each section provides descriptive information, step-by-step instructions and Tables for determining appropriate entries.

3.3.1 System ID — PGM 100

Under System ID, the country is identified using the international dial codes (Country Code). If the Country Code requires changing, the system must be initialized to restructure memory and create the country specific defaults, gain, frequencies and other system characteristics specific to the country and regional regulatory requirements.

To change the Country Code:

- Set the UCP Module Mode Dip Switch pole 4 to the ON position,
- Follow the procedure below to modify the Country Code,
- Press the reset button on the UCP Module, power the system OFF and ON, or use PGM 450 to initialize the system,
- After initialization, reset the switches as needed; Mode Switch pole 4 should be OFF.

A twenty-four (24) character SITE NAME and the local Area Code(s) are defined in this program. The SITE NAME is primarily useful for the installer/programmer as a reference to the customer. In addition, under this program the system can be programmed to select one of eight (8) Flexible

Number Plans, refer to Appendix B. Individual items from the selected Numbering Plan can be changed under Flexible Numbering Plan part A to D - PGM 106 to 109- in section 3.3.2.5.

PROCEDURE:	
ENTER PROGRAM NUMBER	1. Press the [PGM] button and dial 100.
SYSTEM ID PRESS FLEX KEY (1-6)	 Select the desired Flex button (1~6), refer to Table 3.3.1-1. For COUNTRY CODE, refer to Table 3.3.1-2 for appropriate entries.
	3. Use the dial-pad to enter desired System Id data. For System Reset, button 6, press [Save] to reset the System Id to default.
	4. To store the System Id data press the [Save] button.

BTN	DISPLAY	REMARK	RANGE	DEFAULT
1	COUNTRY CODE 1	Refer to Table 3.3.1-2 below. Note system must be re-initialized if changed.	4 digits	1
2	CUSTOMER SITE NAME	Refer to Table 3.1.2-1 for alphanumeric dial-pad entries.	24 character	

Table 3.3.1-1 SYSTEM ID (PGM 100)

BTN	DISPLAY	REMARK	RANGE	DEFAULT
3	MY MULTI AREA CODE ENTER TABLE NO(00-40)	First, enter the Multi-Area Code table index, 00 ~ 40, then enter the area code. Multiple area codes may be entered.	6 digits	
4	NUMBERING PLAN (1-9) 2	Refer to Appendix B for details of Numbering Plan selection.	1-9	2
5	PREFIX USAGE (1:ON/0:OFF) : OFF	Enable/Disable 8-digit Station Numbering Plan. Assign the Prefix codes in the 8- Digit Numbering Table (PGM238).	0: OFF 1: ON	OFF
6	SYSTEM ID SYSTEM RESET	This selection returns the System Id to default.		

Table 3.3.1-1 SYSTEM ID (PGM 100)

Table 3.3.1-2 COUNTRY CODES

COUNTRY	CODE	COUNTRY	CODE	COUNTRY	CODE
America (U.S.A)	1	Argentina	54	Australia	61
Bahrain	973	Bangladesh	880	Belgium	32
Bolivia	591	Brazil	55	Brunei	673
Burma	95	Cameroon	237	Chile	56
China (Taiwan)	886	CIS	7	Colombia	57
Costa Rica	506	Cyprus	357	Czech	42
Denmark	45	Ecuador	593	Egypt	20
El Salvador	503	Ethiopia	251	Fiji	679
Finland	358	France	33	Gabon	241
Germany	49	Ghana	233	Greece	30
Guam	671	Guatemala	502	Guyana	592
Haiti	509	Honduras	504	Hong Kong	852
India	91	Indonesia	62	Iran	98
Iraq	964	Ireland	353	Israel	972
Italy	39	Japan	81	Jordan	962
Kenya	254	Korea	82	Kuwait	965
Liberia	231	Libya	218	Malta	356
Luxembourg	352	Malaysia	60	Morocco	212
Mexico	52	Monaco	377	Nigeria	234
Netherlands	31	New Zealand	64	Pakistan	92
Norway	47	Oman	968	Paraguay	595
Panama	507	P.N.G	675	Portugal	351
Peru	51	Philippines	63	Senegal	221
Qatar	974	Saudi Arabia	966	Spain	34
Singapore	65	South Africa	27	Sweden	46
Sri Lanka	94	Swaziland	268	Tunisia	216
Switzerland	41	Thailand	66	United Kingdom	44
Turkey	90	U.A.E.	971	Y.A.R.	967
Uruguay	598	Venezuela	58		

3.3.2 NUMBERING PLANS DATA — PGM 102 to 109

3.3.2.1 System IP Address Plan — PGM 102

The System IP Address Plan sets several IP addresses including the UCP Module LAN port IP address (UCP IP Address) required for external VoIP calls, the IP address for the router, and the system's internal private IP address Plan. Note the UCP and Router addresses must be routable IP addresses for access to an external VoIP network, remote access by a gateway/board or terminal and remote Web access. Any VOIM must also have a routable IP address for access to/from an external VoIP network or remote user.

When Automatic IP Assignment, button 7, is enabled, the system will assign IP addresses to each local gateway module terminal using the assigned System IP address range. These addresses are used for communications with the system.

The system may be connected to a LAN that is segmented by two separate private IP address schemes. This segmenting technique is often used to separate voice and data devices. However, with this segmenting technique, the system would normally treat the segmented Terminals such as iPECS Soft Phones, as remote devices, using valuable WAN bandwidth to communicate with the system. Assigning the "Second Sys IP address" with a valid IP address from the second segment permits the system to communicate with the devices directly over the LAN.

iPECS can be installed behind a NAPT server, if the NAPT server provides fixed address translation and port forwarding to the system. In this case, the system will employ the "Firewall IP address", button 10, as the fixed public IP address for communication with remote devices. This address must be assigned as the "UCP" address in the remote device.

PROCEDURE:	
ENTER PROGRAM NUMBER	1. Press the [PGM] button and dial 102.
SYSTEM IP ADDRESS PLAN Press FLEX KEY (01-17)	2. Select the desired button 1~19, refer to Table 3.3.2.1-1.
	 Use the dial-pad to enter desired IP addresses. Use an "*" to enter a dot (".")
	4. Press the [Save] button to store IP address entries.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

BTN	DISPLAY	DEFAULT	REMARK
1	UCP IP ADDRESS 10 .10 .10 .2	10.10.10.2	This is the UCP IP address. A Public IP Address is required for remote user and external VoIP network access. IPv4 format
2	UCP SUB NET MASK 255.255.255.0	255.255.255.0	

BTN	DISPLAY	DEFAULT	REMARK
3	ROUTER IP ADDRESS 10 .10 .10 .1	10.10.10.1	IP Address of the default gateway for external network (WAN) access. Required for shared voice and data LAN, external VoIP and remote Web access.
4	SYSTEM START IP ADDRESS 10.10.10.10	10.10.10.10	Start of range for private IP addresses assigned by the system to Modules/Terminals.
5	SYSTEM END IP ADDRESS 10.10.254.254	10.10.254.254	End of range for private IP addresses assigned by the system to Modules/Terminals.
6	SYSTEM SUB NET MASK 255.255.0.0	255.255.0.0	
7	AUTOMATIC IP ASSIGN (1:ON/0:OFF): ON	ON	The system will automatically assign IP addresses to modules and terminals (ON) or, when OFF, IP addresses are assigned manually in PGM 103 Device IP Address Plan or via DHCP.
8	SECOND SYS IP ADDRESS 0 .0 .0 .0	0.0.0.0	When devices are located on a different private address on the same network, enter the UCP IP address for the second LAN.
9	SECOND SYS SUB NET MASK 255.255.0 .0	255.255.0.0	
10	FIREWALL IP ADDRESS 0 .0 .0 .0	0.0.0.0	When the system is installed behind a NAPT server, the fixed IP Address provided by the NAPT server must be assigned in this field. Also, use this IP address for the UCP address in remote devices.
11	FIRST START MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the start address of the first range.
12	FIRST END MAC ADDR 00000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the end address of the first range.
13	SECOND START MAC ADDR 00000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the start address of the second range.
14	SECOND END MAC ADDR 00000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the end address of the second range.
15	SYSTEM IP ADDRESS PLAN SYSTEM RESET		Returns the System IP Address Plan to default values.
16	UCP DNS IP ADDR 0 .0 .0 .0	0.0.0.0	IP Address of Domain Name Server that iPECS will use to resolve URL to an IP address. The DNS provides the resolution after receiving the name from iPECS.

BTN	DISPLAY	DEFAULT	REMARK
17	UCP DHCP (1:ON/0:OFF) : OFF	OFF	The iPECS UCP includes a DHCP client and can obtain an IP address from a local DHCP server.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

3.3.2.2 Device IP Address Plan -PGM 103

To register an IP device:

As IP gateway Modules and terminals register to the iPECS, a Sequence number is assigned, which indicates the order of registration. In addition, based on the type of device (CO/IP gateway/board, Terminal) the system assigns a logical number (Station Number or CO/IP Line Number). The Sequence Numbers for CO gateway, Terminals, etc. are independently assigned based on the type of gateway. These Sequence Numbers are employed to provide a relationship between the physical MAC address and the logical port numbers of the device.

The system may assign a default private IP address to each Sequence Number. If desired, this program may be used to modify the assigned IP address for each gateway/board and iPECS Phone.

Each local gateway and terminal can be assigned to employ ARP (Address Resolution Protocol). If ARP is disabled, the system will employ the Ethernet MAC address, layer 2 switching to eliminate the need for IP traffic overhead, reducing overall LAN traffic.

The system normally employs IP multi-cast protocol to respond to a registration request from a gateway or terminal. When the device is separated from the system by a router, the system must use the IP uni-cast protocol. This is established by the "Local Device" assignment. When disabled (Off), the system will send an IP uni-cast message to the device in response to a registration request.

PROCEDURE:	
ENTER PROGRAM NUMBER	1. Press the [PGM] button and dial 103.
DEVICE IP ADDRESS PLAN PRESS FLEX KEY (1-7)	 Select the desired Flex button. Button 1: CO & VOIP Gateway/Board Button 2: Stations Button 3: MISU Button 4: UVMU, UVM Button 5: MCIM Button 6: SYSTEM RESET Button 7: WTIM
	3. Use the [VOL UP] and [VOL DOWN] buttons to see next/ previous IP Address. Refer to Table 3.3.2.2-1 for display information.

PROCEDURE:	
	 4. Press Flex 1~6 to select the attribute desired as shown in Table 3.3.2.2-1. Button 1: IP address Button 2: MAC address Button 3: ARP Button 4: REGISTRATION Button 5: CPU Type Button 6: Device (Board) ID
	 Use the dial-pad to enter desired data. For IP and MAC addresses, an "*" is used to enter a dot (".")
	6. Press the [Save] button to store the data entry.

Table 3.3.2.2-1 DEVICE IP ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
1	CO/IP Line	LCD shows: Line 1: Sequence Number, 2 or 3 digits MAC	CO & VoIP Gateway IP
	001-001 :B40EDCBF5606	Address, 12 digits	address set
	VOIP 1 :10 .10 .10 .2	Line 2: Module Type, 4 characters First Logical port number IP Address, 7~12 digits	sequentially, from the range
			in PGM 102.
1–1	SET IP ADDRESS VOIP 1 : 10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
1–2	SET MAC ADDRESS 001-001 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address in the system memory.	None
1–3	ARP	Use Flex button 3 to enable/disable ARP mode,	OFF
	(1:ON/0:OFF): OFF	which employs ARP to locate a device. Otherwise, layer 2 switching is employed with	
		local devices.	
1–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the UCP.	MCAST
1–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
1–6	DEVICE(BOARD) ID PRIB	Flex button 6 displays the Board type designation.	
2	iPECS IP Phone	LCD shows:	Station IP
	001-001 : B40EDCBF5606	Line 1: Sequence Number, 3 digits MAC Address, 12 digits	address set sequentially,
	KTU 1000 :10.10.10.10	Line 2: Station Type, 3 characters Station	from the range
	·	Number, 2~4 digits IP Address, 7~12 digits	in PGM 102.
2–1	SET IP ADDRESS KTU 1000 :10.10.10.10	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254

BTN	DISPLAY	FEATURE	DEFAULT
2–2	SET MAC ADDRESS 0001-0001 : B40EDCBF5606	Use Flex 2 button to enter the device's MAC address into system memory.	None
2–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable ARP mode, which employs ARP to locate a device. Otherwise, layer 2 switching is employed with local devices.	OFF
2–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the UCP.	MCAST
2–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
2–6	DEVICE(BOARD) ID HYIB	Flex button 6 displays the terminal type designation.	
3	Miscellaneous Unit	LCD shows: Line 1: Sequence Number, 2 digits MAC	IP address of built-in MISU
	001-017 : B40EDCBF5606 MISU :10.10.10.2	Address, 12 digits Line 2: "MISU" IP Address, 7~12 digits	set automatically,
3–1	SET IP ADDRESS MISU :10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
3–2	SET MAC ADDRESS 001-003 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address into system memory.	None
3–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable ARP mode, which employs ARP to locate a device. Otherwise, layer 2 switching is employed with local devices.	OFF
3–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the UCP.	MCAST
3–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
3–6	DEVICE(BOARD) ID MISU	Flex button 6 displays the MISU type designation.	
4	Voice Mail Unit	LCD shows:	IP address set

Table 3.3.2.2-1 DEVICE IP ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
	001-015 : B40EDCBF5606 UVMU :10.10.10.2	Line 1: Sequence Number, 2 digits MAC Address, 12 digits Line 2: device type and IP address.	sequentially, from the range in PGM 102.
4–1	SET IP ADDRESS UVMU :10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
4–2	SET MAC ADDRESS 001-015 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address into system memory.	None
4–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable ARP mode, which employs ARP to locate a device. Otherwise, layer 2 switching is employed with local devices.	OFF
4–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the UCP.	MCAST
4–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
4–6	DEVICE(BOARD) ID UVMU	Flex button 6 displays the type designation.	
5	Conference Module	LCD shows:	IP address set
	001-018 : FFFF0000FFFF MCIM : 10 .10 .10 .2	Line 1: Sequence Number, 2 digits MAC Address, 12 digits Line 2: device type and IP address.	sequentially, from the range in PGM 102.
5–1	SET IP ADDRESS MCIM :10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
5–2	SET MAC ADDRESS 001-018 : FFFF0000FFFF	Use Flex button 2 to enter the device's MAC address into system memory.	None
5–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable ARP mode, which employs ARP to locate a device. Otherwise, layer 2 switching is employed with local devices.	OFF
5–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the UCP.	MCAST
5–5	CPU TYPE MS828	Flex button 5 displays the type of CPU employed in the device.	
5–6	DEVICE(BOARD) ID MCIM_V	Flex button 6 displays the type designation, MCIM_V.	

BTN	DISPLAY	FEATURE	DEFAULT
6	DEVICE IP ADDRESS PLAN SYSTEM RESET	If the [Save] button is pressed, the system will reset and restart.	
7	Wireless DECT Module 001-003 : 00405A142C67 WTIM : 10:10:10:14	LCD shows: Line 1: Sequence Number, 2 digits MAC Address, 12 digits Line 2: "WTI4" and IP Address, 7~12 digits	IP address set sequentially, from the range in PGM 102.
7–1	SET IP ADDRESS WTIM :10.10.10.14	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
7–2	SET MAC ADDRESS 001-003 : 00405A142C67	Use Flex button 2 to enter the device's MAC address into system memory.	None
7–3	ARP (0:ON/1:OFF): OFF	Use Flex button 3 to enable/disable ARP mode, which employs ARP to locate a device. Otherwise, layer 2 switching is employed with local devices.	OFF
7–4	REGISTRATION (0:UCAST/1:MCAST):MCAST	Use Flex button 4 to disable/enable Local Device Mode, which defines the device as on a common LAN with the system. MCAST enables Local Device Mode.	MCAST
7–5	CPU TYPE MS828	Flex button 5 displays the type of CPU employed in the device.	
7–6	DEVICE(BOARD) ID WTIM	Flex button 6 displays the type designation, WTIM.	

Table 3.3.2.2-1 DEVICE IP ADDRESS PLAN (PGM 103)

3.3.2.3 CO Device Sequence Number -PGM 104

The system configures the CO/IP Line numbers as discussed in section 2. Each CO/IP Line module is assigned a registration "Sequence" number and a starting CO/IP Line number based on the Sequence number. In place of the default numbering, the Sequence number associated with the device can be changed thus altering the starting CO/IP Line numbers for a module.

PROCEDURE:	
ENTER PROGRAM NUMBER	1. Press the [PGM] button and dial 104.
0001 0002 0003 0004 0005 2401	 Press the Flex button (1~6) for the desired Sequence Number, use the [VOL UP] and [VOL DOWN] buttons for the next/previous set of six Sequence Numbers.

0006 0007 0008 0009 0010	3.	Using the dial pad, enter new slot numbers. Note slot numbers cannot be duplicated and duplicates will cause an error. The [SPEED] button may be used to erase the slot number associated with the selected Sequence Number.
	4.	Press the [Save] button to store the new data.

3.3.2.4 Flexible Station Numbering Plan -PGM 105

Each terminal (iPECS IP and LDP Phone, iPECS softphone, SIP phone, and SLT) is assigned a Sequence Number during the registration process. The Sequence Number is a 4-digit number starting at 0001, which is incremented as each terminal device is registered. At registration, station numbers increment sequentially with the Sequence Number and are assigned starting at station 1000 for Sequence Number 0001. The Station Numbering Plan allows the station numbers to be two (2) to four (4) digits and up to eight (8) digits in length when using the 8-digit Table.

Note, if the 8-Digit Table is used, the prefix digits for each station must be entered.

PROCEDURE:		
ENTER PROGRAM NUMBER		Press the [PGM] button and dial 105.
0001 0002 0003 0004 1000 1001 1002 1003	2.	Use either of the two methods below to change the station number associated with a Sequence Number. Note pressing the [SPEED] button twice clears all station number assignments. The [VOL UP] / [VOL DOWN] buttons are used to view the next/previous two station Sequence Numbers.
0001 0002 0003 0004 1000 1001 1004 1008	3.	Range entry: Using the dial-pad, enter a station number range (first & last station number). The range assignment begins with the first station number shown by the LCD and continues to the end of the entered range.
	4.	Single entry: 4.1 Press Flex button 1~4 to select the desired Sequence Number from those shown by the LCD 4.2 Dial new station number.
	5.	Press the [Save] button to store the new station numbers.

3.3.2.5 Flexible Numbering Plan part A to D - PGM 106 to 109

Feature dial codes for the system can be assigned using the system's Flexible Numbering Plan. Feature codes should be one (1) to four (4) digits in length and must not conflict with other codes or the Flexible Station Numbering Plan. For example, Feature dial codes 53 and 536 represent a conflict. The system will generate error tone and will not update the database. Tables 3.3.2.5-1 to 3.3.2.5-4 below show the defaults for Numbering Plan 1. Appendix B provides the default values for each of the eight basic Numbering Plans; select the basic Numbering Plan in PGM 100.

PROCEDURE:		
ENTER PROGRAM NUMBER	1.	Press the [PGM] button and dial 106 for Part A 107 for Part B 108 for Part C 109 for Part D
FLEX NUMBERING PLAN A PRESS FLEX KEY (01-24)	2.	Select the desired button (01~24); refer to Table 3.3.2.5-1 to Table 3.3.2.5-4 for PGM 106 to 109 respectively.
	3.	Use the dial-pad to enter desired data. Where a range is required, input the first and last numbers in the range.
	4.	Press the [Save] button to store the new Numbering Plan data.

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
1	INT PAGE ZONES START& END:*301-*400	Internal Page Zone access codes	*301~*400
2	INT ALL CALL ENTER NEW #:*543	Internal All Call Page access code	*543
3	MEET ME PAGE ENTER NEW #:*544	Meet-Me-Page answer code	*544
4	EXT PAGE ZONE 1 ENTER NEW #:*545	External Page Zone 1 access code	*545
5	EXT PAGE ZONE 2 ENTER NEW #:*546	External Page Zone 2 access code	*546
6	EXT ALL CALL ENTER NEW #:*548	External All Call Page access code	*548
7	ALL CALL PAGE ENTER NEW #:*549	All Call Page access code	*549
8	SMDR ACT CODE ENTER ENTER NEW #:*550	Dial code to signify the start of an SMDR Account Code.	*550
9	FLASH CMD TO CO ENTER NEW #:*551	Dial code to generate a Flash on the active CO Line.	*551
10	SLT LAST SPD DIAL ENTER NEW #:*552	SLT Last Number Redial feature access code.	*552

BTN	DISPLAY	FEATURE	DEFAULT
11	DND ENTER NEW #:*553	Dial code to activate Do-Not-Disturb.	*553
12	CALL FWD ENTER NEW #:*554	Dial code to activate Call Forward.	*554
13	SPD DIAL PGM ENTER NEW #:*555	Speed Dial programming access dial code for SLTs.	*555
14	MSG WAIT ENABLE ENTER NEW #:*556	Dial code to activate a Message Wait/Call Back.	*556
15	MSG WAIT RETURN ENTER NEW #:*557	Dial code to return a Message Wait/Call Back.	*557
16	SPD DIAL ACCESS ENTER NEW #:*558	SLT Speed Dial access code	*558
17	DND/FWD CANCEL ENTER NEW #:*559	Dial code to cancel DND/FWD/MSG Wait.	*559
18	CO SYS HOLD ENTER NEW #:*560	Dial code to place a CO call on System Hold.	*560
19	SLT PGM MODE ENTER ENTER NEW #:*561	User program mode entry dial code for SLTs.	*561
20	ATTD UNAVAILABLE ENTER NEW #:*562	Dial code to place attendant in the "unavailable" mode, attendant only.	*562
21	ALARM RESET ENTER NEW:*565	Dial code to terminate Alarm contact signal.	*565
22	GROUP CALL PICK-UP ENTER NEW #:*566	Group Call Pick-up dial code	*566
23	UNIVERSAL ANSWER ENTER NEW #:*567	Universal Night Answer dial code.	*567
24	ACCNT CODE WITH BIN ENTER NEW #:*568	Dial code for entering an Account code.	*568

Table 3.3.2.5-1 F	LEXIBLE NUMBERING	PLAN PART A	(PGM 106)
		,	(

BTN	DISPLAY	FEATURE	DEFAULT
1	WALKING COS ENTER NEW #:*569	Dial code to activate Walking Class-of- Service.	*569
2	ACD AGENT ON/OFF DUTY ENTER NEW #:*571	Dial code to toggle ACD Agent or Supervisor ON and OFF duty.	*571
3	ACD SUPERVISOR LOGIN ENTER NEW #:*572	Supervisor login dial code.	*572
4	ACD SUPERVISOR LOGOUT ENTER NEW #:*573	Supervisor logout dial code.	*573
5	ACD HELP CODE ENTER NEW #:*574	Agent code requesting Supervisor help and Supervisor Help request Response code.	*574
6	ACD CALLS IN QUEUE ENTER NEW #:*575	Dial code to display calls in queue.	*575
7	ACD SUPERVISOR STATUS ENTER NEW #:*576	Dial code to display group status.	*576
8	ACD SUPERVISOR MONITOR ENTER NEW #:*577	Dial code to activate Supervisor monitor.	*577
9	ACD REROUTE QCALL ANS ENTER NEW #:*578	Dial code to reroute call after answer.	*578
10	ACD REROUTE QCALL NO AN ENTER NEW #:*579	Dial code to reroute call prior to answer.	*579
11	CAMP-ON ANSWER ENTER NEW #:*621	Dial code to answer a Camped On call.	*621
12	CALL PARK LOCATIONS START#:#601-#800	Dial code to place/retrieve a call in a Park location.	#601~#800
13	STA GRP PILOT NUMBER START #:*401-*500	Station group pilot numbers	*401~*500
14	STA USER VSF FEATURES ENTER NEW #:66	VSF feature access code.	66
15	CALL COVERAGE RING ENTER NEW #:*76	Code for Call Coverage button	*76

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
16	DIRECT CALL PICK-UP ENTER NEW #:*77	Dial code to activate Directed Call Pick- up.	*77
17	ACCESS CO GROUP FEAT ENTER NEW #:89	Dial code to access a CO Line or IP channel from a CO/IP group.	89
18	ACCESS IND CO/IP FEAT ENTER NEW #:88	Dial code to access a specific CO Line.	88
19	ACCESS HELD CO/IP FEAT ENTER NEW #:8*	Dial code to access last held CO Line or IP channel from Hold.	8*
20	ACCESS HELD IND CO/IP ENTER NEW #:8#	Dial code to access a specific CO Line/IP channel from Hold.	8#
21	ACCESS CO IN 1ST CO GRP ENTER NEW #:9	Dial code to access the 1st available CO Line in any accessible group.	9
22	ATTENDANT CALL ENTER NEW #:0	Dial code to call an Attendant.	0
23	VM MSG WAIT ENABLE ENTER NEW #:*8	Dial code for external Voice mail to activate Message Wait indication.	*8
24	VM MSG WAIT CANCEL ENTER NEW #:*9	Dial code for external Voice Mail to deactivate Message Wait indications.	*9

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

Table 3.3.2.5-3 FLEXIBLE NUMBERING PLAN PART C (PGM 108)

BTN	DISPLAY	FEATURE	DEFAULT
1	DOOR OPEN 1 ENTER NEW #:#*1	Dial code to activate Door 1 contact (open door 1)	#*1
2	DOOR OPEN 2 ENTER NEW #:#*2	Dial code to activate Door 2 contact (open door 2).	#*2
3	DOOR OPEN 3 ENTER NEW #:#*3	Dial code to activate Door 3 contact (open door 3).	#*3
4	DOOR OPEN 4 ENTER NEW #:#*4	Dial code to activate Door 4 contact (open door 4).	#*4

BTN	DISPLAY	FEATURE	DEFAULT
1	MCID REQUEST ENTER NEW #:*0	Dial code to activate Malicious Call ID Request in ISDN Supplementary service. Not available in USA version	*0
2	AME FEATURE ENTER NEW #: *564	Dial code to assign an Answering Machine Emulation Flex button.	*564
3	US-CONF TMR EXTENSION ENTER NEW #:##	Dial code to extend Unsupervised conference time.	##
4	PTT GROUP LOGIN/OUT ENTER NEW #:#0	Push-To-Talk group login and logout dial code. The station must have a PTT button for proper operation.	#0
5	ACD AGENT P LOGIN ENTER NEW #:*581	ACD Agent Primary Login code	*581
6	ACD AGENT P LOGOUT ENTER NEW #:*582	ACD Agent Primary Logout code	*582
7	ACD AGENT P LOGOUT ENTER NEW #:*582 ACD AGENT S LOGIN ENTER NEW #:*583 ACD Agent Secondary Logout code		*583
8	ACD AGENT S LOGIN ENTER NEW #:*583		*584
9	ACD AGENT WRAPUP END ENTER NEW #:*585	ACD Agent wrap-up end code.	*585
10	TNET CM LOGIN/OUT ENTER NEW #:*586	When Central Control networking (TNET) is employed, a station can be manually logged in or out of the Central system using this code.	*586
11	ENTER INTO CONF-ROOM ENTER NEW #:*59	Code for a station to enter a conference room	*59
12	ENTER INTO CONF-GROUP ENTER NEW #:*68	Code to open a conference group	*68
13	STATION ICR ENTER NEW #:*587	Code to activate Station ICR	*587

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

14

PICK UP GROUP PICK-UP ENTER NEW #:*588 Pick Up Group Call Pick-up dials code.

*588

BTN	DISPLAY	FEATURE	DEFAULT	
15	EMERGENCY PAGE ENTER NEW #:*589	Code for emergency page	*589	
16	REMOTE MEX CONTROL ENTER NEW #:*580	Code to control the mobile extension settings remotely	*580	
17	ALL GR AGENT ON/OFF DUT ENTER NEW #:*58*	Code to change the state of the Agent ON/Off duty in all Station groups	*58*	
18	SLT ACNR CODE In SLT, user can ACNR feature by usin ENTER NEW #:*58# In SLT, user can ACNR feature by usin		*58#	
19	ACD SUPERVISOR RING MODE Code to check and change ACD group ENTER NEW #:*570 Ring mode by ACD group supervisor.		*570	
20	COMPANY DIRECTORY NAME ENTER NEW #:*563	Code to check and change recording station subscribe name of Company Directory feature. (USA Only)	*563	
21	ISDN SUPP HOLD ENTER NEW #:*57*	ISDN Supplementary Service for HOLD	*57*	
22	ISDN SUPP CONF ENTER NEW #:*57#	ISND Supplementary Service for Conference (Not supported).	*57#	
23	FORCED SEIZE BUSY STN/CO ENTER NEW #:*56*	Busy Station / CO can be connected with entering this Code.	*56*	
24	ADDED FLEX NUMBER PLAN PRESS FLEX KEY (1-5)			
24-1	OVERRIDE DND/CFW ENTER NEW #:*56#	[56#] + Station number, then the station's DND or CFW setting will be overridden.	*56#	
24-2	CALL BACK CANCEL ENTER NEW #:	Code is used to cancel call back.		
24-3	XFER TO VSF ANNC NO ENTER NEW #:*55*	When a station is talking over a CO line User, [Transfer] + [55*] + Valid system announcement (01-70), then Outside user can hear system announcement, and system starts DISA service.	*55*	

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 10)	9)
---	----

BTN	DISPLAY	FEATURE	DEFAULT
24-4	CCR ENTER NEW #:#2	This code is used with Digit Conversion to direct a call to a specific System Announcement. The conversion modifies the received digits to a four digit string "#2xx" where xx indicates the announcement number	#2
24-5	UCS SYS CONF GRP JOIN ENTER NEW #:5*0	After a UCS client activates a UCS Conference Group, other users may dial this code and the group number to enter the Conference.	5*0

3.3.2.6 8-Digit Table – PGM 238

The iPECS UCP supports a Station Numbering Plan of up to eight digits. By combining a prefix digit string of up to six (6) digits with the Add Digit count (digit count from the Station Numbering assigned in PGM 105), the Station Numbering Plan can support up to eight digits. Note that multiple prefixes (8 Digit Strings) can be assigned with varying Add Digit counts. In addition, in case of a conflict, the Prefix digit string will have priority over the Flexible Numbering Plan thus disabling the feature associated with the digit string.

PROCEDURE:		
ENTER PROGRAM NUMBER	1.	Press the [PGM] button and dial 238.
ENTER PROGRAM NUMBER DIGIT 8 TBL ENTER TBL NO(01-30) Digit 8 TBL 1 : Empty		Use the dial-pad to enter the desired table number.
Digit 8 TBL 1 : Empty	3.	Press the desired Flex button; refer to Table 3.3.2.6-1.
	4.	Use the dial-pad to enter the required data.
	5.	Press the [Save] button to store the data entry.

Table 3.3.2.6-1 8-Digit Table (PGM 238)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TBL 1 : SET 8 digit 8 Digit 1 :	This field defines the prefix digits for the Station Number Plan.	Up to 6 digits	N/A
2	TBL 1: SET ADD DIGIT ADD DIGIT : 0	This field assigns the number of digits from the Station Numbering Plan PGM 105.	0 ~ 4 digit	0

4. WEB SERVICE

4.1 General

The iPECS UCP incorporates a Web Server employed by the system's Web Service:

- 1) Setup Wizard
- 2) Administration: PGM Base & Function Base
- 3) Maintenance: File upload, Database, Multi language, SMDR, VSF, Voice Mail, Trace, other function.
- 4) Station Portal

The default database includes assignment of a private IP address to the system. This address (10.10.10.2) may be used to access the system from the LAN. However, a routable IP address must be assigned for access from a remote location.

To access the iPECS Web Server requires:

- 1. Operating iPECS series system
- 2. IP address assigned in the system and is known
- 3. TCP/IP port assigned for the UCP LAN port and is known
- 4. iPECS UCP connected to an accessible LAN
- 5. iPECS UCP password (Maint, Admin, and User) if any, is known

4.1.1 PC/Browser

- MS Explore 10.0, Chrome 24.0, Firefox 18.0 or higher version is recommended (HTML5 support required)
- Windows PC, at least 32MB RAM (64MB or more RAM is recommended)
- NIC (Network Interface Card)

4.1.2 Environment for LAN connection

- IEEE 802.3, 10/100 Base T
- Static/DHCP addressing
- Firewall, requires Network Administrator to allow access
- Remote access requires a routable IP address for the iPECS UCP Web Server. This
 must be assigned to the system prior to access.

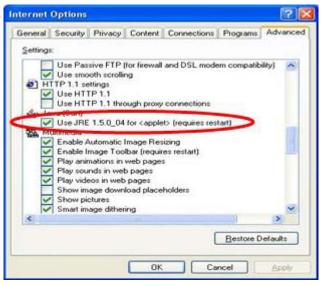
4.1.3 Web Browser setting

Web browsers may store (cache) a copy of the iPECS Web pages in a cache memory. The Web browser may use these copies to provide a "quick view". If the Web page has been altered by data entered in Station Admin or a file upgrade, the cached copy will be out-of-date and could cause unexpected system operation. To assure proper page views and data entry, the browser should be set to eliminate the use of the cached pages. For Explorer, in "Internet Options", enable refresh on "Every visit to the page", for other browser, the procedure may be different.

4.1.4 Password Encryption

When enabled in PGM 162, iPECS UCP implements decryption of the password employing RC-6 block encryption. iPECS UCP employs a Sun Java Virtual Machine applet to implement AES encryption. The PC entering the Password must have a JAVA Virtual Machine and the JRE (Java Runtime Environment) Explorer option enabled to handle encrypted passwords properly. The Sun JVM is downloaded from the Java home page (www.java.com). Once downloaded, execute the downloaded file. To enable the Explorer JRE option,

- 1. From the Explorer menu, select Internet Options-Advanced.
- 2. From the Advanced Internet Options check the [Use JRE....] Option.



 After restarting the computer, access the iPECS UCP Web Manager, section 4.2.
 "Applet iPECSPwd started" will display in the bottom left corner to indicate password encryption is active.

4.2 iPECS UCP Web Access & Login

In the browser 'ADDRESS' field, enter the UCP IP address (default is https://10.10.10.2 or http://10.10.10.2) and select 'GO'. The Web server goes to iPECS UCP Web Services Login page, Figure 4.2-1.

The UCP Web services include the Admin & Maintenance functions and the Station Program User Portal. To access the Admin and Maintenance function, a valid User ID and Password matching the assignments in the System Password PGM 162 or User Management in the Maintenance section must be entered. The default User ID is 'admin' and the password is '1234'.



Figure 4.2-1 iPECS UCP Home page

For reference, we explain Admin and Maintenance based on UCP100. The home page is displayed according to UCP type: UCP100, UCP600, UCP2400.

The exact specification according to UCP type is described "Section 2.1 System capacity" in this manual.

To access the Station program, the user must enter **Station number and full Authorization code** (station number and Auth code) as defined in *Tables Data – Station Authorization Codes* (*PGM 227*). The system will go to the Station Program Main page as below. For detail information, refer to the title "*Station Program (User Portal)*".

	PECS		Change Language Log Out
	STATION 1000 PROGRAM	< Station Information	×
	Station Attributes Station Call Forward	iPECS	
	Station ICR Scenario Station Speed Dial Pre Select Message	Station 1000 Program UCP100 Version : -	
	Flexible Buttons Send Internal SMS		
	Station Conference Group System Conference Group		
<	Mobile Extension Table Attendant Ring Mode		

Figure 4.2-2 iPECS UCP Station program

4.3 Web Admin & Maintenance Main Page Overview

In the Web Admin Login screen (see section 4.2), enter the User ID and Password then click the **[Login]** button to access the iPECS Admin & Maintenance Main Page as shown in Figure 4.3-1.

	IPECS UCP100	Administration	Maintenance	• •	Change Language	Log Out
	PGM Base Function Base	Favorite PGM				×
	Q PGM Search					Edit
	System ID & Numbering Plans	System Overview System ID & Numbering	System IP Plan(102) System ID & Numbering	Device IP Plan(103) System ID & Numbering	Common Attributes(111) Station Data	
	Station Data					
	Board Based Data	Flexible Buttons(115/129) Station Data	Common Attributes(140) CO Line Data	CO/IP Ring Assignme CO Line Data	CID/CPN Attributes(151) CO Line Data	
	CO Line Data					
	System Data	System Attributes(160 System Data	System Password(162) System Data	Station Group Assign Station Group Data	Station Group Attribut Station Group Data	
	Station Group Data					
	ISDN Line Data	Station Authorization Tables Data	System Authorization Tables Data	Flexible DID Conversi Tables Data		
	SIP Data					
<	Tables Data					
	Networking Data					
	H.323 Routing Table					
	T-NET Data					
	Zone Data					
	Device Login					
	UCS Standard					
	DECT Data					
	Hotel Data					
	Initialization					
Г						
	[Version] Appl(R2.0.8), Boot(1.0Ca), Kernel(R1.1.3)), H/W(1) Copyright	Ericsson-LG Enterprise Co., Ltd.	2013.		



The Admin & Maintenance Main Page has three sections,

Menu bar – Upper frame

Directory & Navigation section – Left frame Favorite Programs and Entry section – Central frame

Items in the Menu bar are mouse-clickable for selections of:

Administration – accesses the system database.
Maintenance – SW upgrade, Database, Multi Language, SMDR, VSF, Voice Mail, Trace, etc.
Change Language – change the desired language.

Log out - log out the web server

What is the meaning about Buttons and Text on page?

- 1) Hide menu by clicking the left arrow in the middle of window on left side.
- 2) X button at the top of the page on the right side functions whether the current tab or all tabs are closed or not.
- 3) button will display all PGM by click and check which PGM is using.
- 4) The Application, Boot, and Kernel version can find at the left side of bottom.
- 5) User can check the status indicator at the bottom on the right side of page by displaying the text such Disconnected or Read Only User.
 - Disconnected: discconected to Web Admin Server without working for a long time. User can connect to Web Admin Server by clicking Refresh button.
 - Read Only User: User who access to Web Admin Sever has no authority to set the function as the maintenance user and just is only for read.

em	Notification	
Ta	Connection Lost. If you want to reconnect, Click button Refresh.	
	Refresh Cancel	
	Copyright Ericsson-LG Enterprise Co., Ltd. 2013.	Disconnected

License State Display

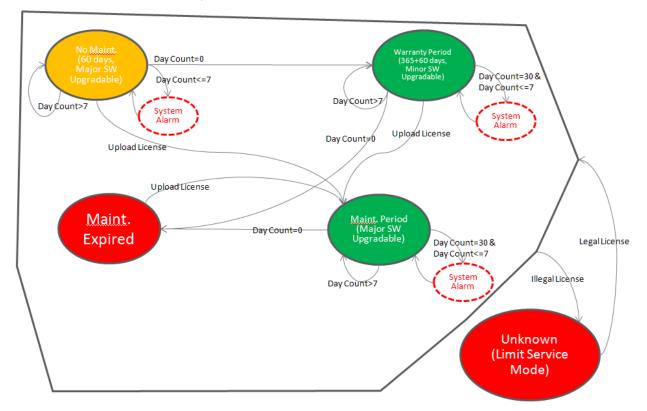
In UCP system, a Software Maintenance license is needed in order to upgrade system software. If "No Maint. Period" or the color of SW Maint. is GREEN, system software can be upgraded. Major version upgrade is possible in "No Maint." or "Maintenance" Period but Minor version upgrade is possible in "Warranty" Period. In other states, both upgrade and downgrade are not allowed.



- > First LED : SW maintenance
- Second LED: Temporary license
- > Third LED: T-Net LCM/Redundancy

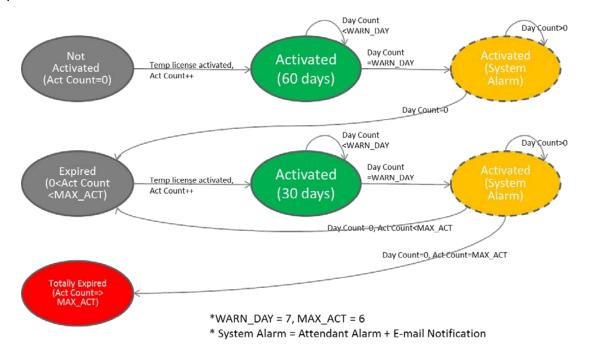
SW Maintenance State

The following figure is SW Maintenance stat for SMB. System Alarm is occurred 30 days once before expiration and for 7 days before expiration.



Temp License State

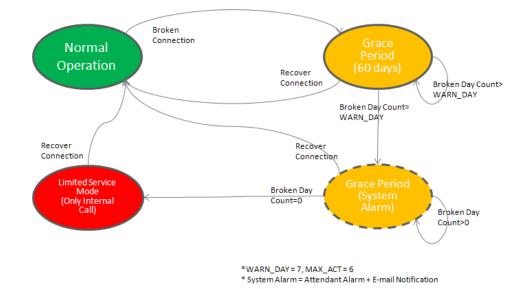
Temp License can be activated totally 6 times. It is valid for 60 days at first activation and is valid 30 days from second activation to the last. System Alarm is occurred from 7 days before expiration.



T-Net or Redundancy State

T-Net LCM license is valid for 60 days if the connection is broken. And Redundancy is valid for 60 days if eMG system is slave, active state, and the connection is broken. But the limitation is not applied in Master eMG. System Alarm is occurred from 7 days before entering "Limited Service Mode".

- Below cases are always "Normal".
- 1. TNLS license
- 2. Master system when redundancy



4.3.1 Favorite Program Groups

To ease access to frequently used program, the iPECS Admin Main Page displays a Favorite PGM list. The Favorite PGM list buttons, when selected, return the associated Web page. Up to 20 favorites are configured using the Edit button in the upper right of the page.

PGM Base Function Base	< Favorite PGM			
Q PGM Search				[
System ID & Numbering Plans	System Overview System ID & Numbering	System IP Plan(102) System ID & Numbering	Device IP Plan(103) System ID & Numbering	Common Attributes(111) Station Data
Station Data				
Board Based Data	Flexible Buttons(115/129) Station Data	Common Attributes(140) CO Line Data	CO/IP Ring Assignme CO Line Data	CID/CPN Attributes(151) CO Line Data
CO Line Data				
System Data	System Attributes(160 System Data	System Password(162) System Data	Station Group Assign Station Group Data	Station Group Attribut Station Group Data
Station Group Data				
ISDN Line Data	Station Authorization Tables Data	System Authorization Tables Data	Flexible DID Conversi Tables Data	
SIP Data				
Tables Data				
Networking Data				
H.323 Routing Table				
T-NET Data				
Zone Data				

Figure 4.3.1-1 Favorite Program Groups

To register a Favorite program, click Edit button. The following page will be displayed.

- Clear button: Clears the check box for all programs.
- Save button: Saves the Web page, PGMs with checked boxes are stored as Favorites, up to 20.
- Back button: Returns to the previous page.

Favorite PGM		>	×
Favorites can be registered up to 2	0	Clear Save Back	^
System ID & Numbering Plans	 System ID(100) System Overview Device Port Num Change(101) System IP Plan(102) Device IP Plan(103) CO Device Sequence Number(104) Flexible Station Number(105) Flexible Numbering Plan(106~109) 8 Digit Table(238) 		
Station Data	 Station Type(110) Common Attributes(111) Terminal Attributes(112) CLI Attributes(113) Flexible Buttons(115/129) Station COS(116) CO/IP Group Access(117) Internal Page Zone(118) PTT Group Access(119) Preset Call Forward(120) Idle Line Selection(121) Station IP Attributes(122) Station Timers(123) Linked Station(124) Station ICM Group(125) VM Attributes(127) Station Name Display Station Data Copy Station CTI IP Address 		
Board Based Data	 H.323 VoIP Attributes(130) T1/E1/PRI Attributes(131) Board Base Attributes(132) 		
	 CO Line Overview Common Attributes(140) Analog Attributes(141) VoIP Attributes(142) ISDN Attributes(143) 		<

Figure 4.3.1-2 Favorite Program Groups for edit

4.3.2 Using Function Base

Function Base is designed to customize the feature or PGM by configuring the Function base so that customer can be easy to use the desired and frequent feature.

There are two buttons: Common Function List and User Function List. The feature or PGM can register up to 20 as Favorites.

1) Common Function List

Generally, iPECS UCP supports the basic function list as default. The available function is 5 (DID Setting Scenario, Network Scenario, SIP Extension Registration, SIP Trunk Configuration, Station Group Scenario). The 5 functions can't be deleted or editable.

PGM Base Function Base	< Favorite Func			*
Q Function Search				Edit
Common Function List v	DID Setting Scenario Common Function List	Networking Scenario Common Function List	SIP Extension Regi Common Function List	
DID Setting Scenario				
Networking Scenario	SIP Trunk Configur	Station Group Sce		
SIP Extension Registration	Common Function List	Common Function List		
SIP Trunk Configuration				
Station Group Scenario				
User Function List				

Figure 4.3.2-1 Common Function List

2) User Function List

To configure the user function list, click Maintenance button and then you can see the Function Program in the left frame and click the sub menu '*User Function Management*' as the following figure. On this web page, you can add or delete the function.

S/W Upgrade	<	System Info	User Functi ×
Database			
Multi Language			
SMDR		Check All	Function Name
File System			
License Management			
DECT Statistics Feature			
Voice Mail Management			
Function Program V			
User Function Management			



Adding Function

This step is divided into 5 steps and you can make the desired function each step. The following is the guide to make Name and add the function on each step:

- 1) To enter the function name, English, Numbering, Underscore (_) and Parentheses are available. Function name has to be filled out.
- 2) To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
- 3) The step name doesn't need to be filled out, but the function has to be configured each step.
- 4) To cancel or close this tab, click the close button (X) and pop up the blow;

Notification		
All Tabs will be c	losed. Are you OK?	
Close all	without current tab	Cancel

- 1. Click the Add Function button.
- 2. On the below window, click the desired PGM in the left frame. First fill out the function name and step name. To configure the step 1, click the Make table to check the desired function and then click the Save button.
 - ✓ Check All: check all functions
 - ✓ Save: Save the checked functions
 - ✓ Initialize: Initialize the checked functions

PGM Search C	System Information User Function Manag Add Function	
System ID & Numbering Plans	Check All Save - Function Name: Save Function	
Station Data 🗸 🗸	Initialize	
Station Type(110)	Make Table Step 1 Step 2 Step 3 Step 4 Step 5	
Common Attributes(111)	Keyset Admin Access	
	CO PGM	
Terminal Attributes(112)	Automatic Hold	
CLI Attributes(113)		
Flexible Buttons(115/129)	CO/IP Line Queuing	
Station COS(116)	Speed Dial Access	
CO/IP Group Access(117)	Alarm / Door Bell	
Internal Page Zone Overview	Station Account	
•	Forced SMDR Account Code	
Internal Page Zone(118)	Loop LCR Account	
PTT Group Access(119)	Dor Open	
Preset Call Forward(120)	Flex Button PGM	
Idle Line Selection(121)	Prefer CO or Group	
Station IP Attributes(122)	Emergency CO or Group	
Station Timers(123)	ICM Tenancy Group Number	
	Call Time Restriction	
Linked Station(124)	PROCTOR MONITORING	
Station ICM Group(125)	Power-Failure	
Station VM Attributes (127)	Line Release Cost Display	
Station Personal CCR(128)	Carlos PTT Group Number	
Station Name Display	Hot Desk Station	
Station Data Copy	SMDR Hidden Dialed Digits	
Station CTI IP Address	Left Message to Executive	
	Station Web Level	
Station Recording Infomation	Headset page mode	
	Progress Indication	
Board Based Data	3.1KHz Audio	
CO Line Data	Pick-Up by Flex Button Prepaid Call	

3. The selected functions are displayed and click the Save button after checking each functions. The rest steps are the same as the step 1.

PGM Search	< Syste	em Information	User I	unction N	Aanag ×	Add Function	×			
system ID & Numbering Plans		heck All Save	A	Funct	ion Name: S	tation 1	? Save	Function		
itation Data V		Initialize								
Station Type(110)		e Table et Admin Access			Step 1 tion 1 Attr	Step 2	Step 3	3	Step 4	Step 5
Common Attributes(111)	CO F	PGM								
Terminal Attributes(112)	Autor	matic Hold								Save
CLI Attributes(113)	Indivi	dual CO Access								Save
Flexible Buttons(115/129)		Line Queuing		Enter S	tation Range				Load	
Station COS(116)		ng Line Preference								
CO/IP Group Access(117)		d Dial Access		Station	Range					
		n / Door Bell on Account	ч.	Order	Check All	Attribute	Value	Range		
Internal Page Zone Overview		on Account ed SMDR Account Co	de	1		Individual CO Access	Disable 🔻	5		
Internal Page Zone(118)		LCR Account	Je	<u> </u>	-					
PTT Group Access(119)		Open		2		CO/IP Line Queuing	Disable 🔻			
Preset Call Forward(120)		Button PGM		3		Ringing Line Preference	Disable 🔻			
Idle Line Selection(121)		r CO or Group		4		Alarm / Door Bell	Disable T			
Station IP Attributes(122)		gency CO or Group		5		Loop LCR Account	OFF T			
Station Timers(123)		Tenancy Group Numbe	er	<u> </u>		Loop Lore Adobuit				
Linked Station(124)	Call	Time Restriction								
Linkeu Station(124)	E PRO	CTOR MONITORING								

4. Finally, click the Save Function to save and then click the OK button.

	Notification		
	This function is closed.	s saved. This tab will be	-
		Ok	
S/W Upgrade	< System Information	User Function Man X	
Database			
Multi Language			
SMDR	Check All	Function Name	
File System		System 1 Station 1	
License Management			
DECT Statistics Feature			
Voice Mail Management			
Function Program ~			
User Function Management			

5. To check the function, click Function Base button in the left frame and User Function List and you will see the following figure.

You can enable or disable the function by checking each function and then click the save after setting Value. Also move to each step by clicking the next button or Previous button.

PGM Base Function Base	< Favorite Function Station 1 X C	×
Q Function Search	Step 1 (S Step 2 (Station 2 Attr) Step 3 (S Step 4 (S	Prev Next
Common Function List	Enter Station Range : Load	Save
User Function List V	Station Range 1000	
Station 1	Order La Check All Attribute La Value Range	
System 1	1 Line Release Cost Display OFF V	
	2 Active PTT Group Number 0-9	

Deleting Function

To delete the user function, click Maintenance at the top of window and then click *the Function Program -> User Function Management*. Check the desired function to delete and click the delete button.

CAN Upperede	< System Information	User Function Man
S/W Upgrade	System Information	User Function Man X
Database		
Multi Language		
SMDR	Check All	Function Name
		System 1
File System		Station 1
License Management		
DECT Statistics Feature		
Voice Mail Management		
Function Program V		
User Function Management		

4.3.3 iPECS Web Page Navigation

The Navigation frame appears in the left after login; refer to Figure 4.3-1. Selecting a Program group from either the Navigation pane or the Favorites list will display the selected Web entry page.

Each of the system's data entry Web pages includes a frame for data display and modification. To modify data, click in the data field, either a drop-down menu will appear for entry selection or a cursor will appear in the field and the user may type in the data required. Once all new data for a Web page has been entered, the **[Save]** button must be clicked to send the new page to the system and save the modified data.

In some cases, where mentioned, it may be necessary to reset the system. The system can be reset manually as described in the *iPECS UCP Hardware Description and Installation Manual* by selecting the Reset System button on the Initialization Web page or using the reset button on the UCP Module.

4.3.4 General Web Page Features

4.3.4.1 Web Page Range Entries

On many of the Web pages for Station, CO Line and Tables Data a range of station, lines or table indices must be entered to display the appropriate data entry page. In this case, a range of devices or indices can be selected by entering the lowest and highest device number separated by a dash. In addition, a comma can be used to enter non-sequential numbers. Note no space characters should be entered before or after the dash or comma. Note the data entry page displays the data for the lowest device or table index entered.

4.3.4.2 Table Check Boxes

Data entry pages that require a range entry, only display the data for the lowest device number or Table index entered in the range. To assure that only the appropriate data is changed for all entries in the range, a check box is located in front of each attribute. When the page is saved, only data for attributes with the box checked are saved for the range while data for unchecked attributes are not modified.

4.3.4.3 Sorting Displayed Data

Charts in the data pages typically allow the data to be sorted based on a given column in either ascending or descending order. In the column header, the sorting symbol displays to indicate the sorting function is available for the column.

5. WEB SETUP WIZARD

After the system is initialized, Install Wizard is displayed. The Wizard presents pages in sequence with parameters that should be verified or commonly need modification prior to operation of the system:

- 1) System Upgrade
- 2) Nation Code
- 3) System Time & Date
- 4) Station Number
- 5) Flexible Numbering Plan
- 6) CO Ring Assignment
- 7) License Upload
- 8) Maintenance ID & Password
- 9) IP Information

5.1 System Upgrade

Click the Select files button and then open the pop-up folder. Select the desired file to upload to the system's memory and click the **[Start]** button. The file is sent to the system's memory, saved and automatically loaded upon a system reset or restart.

						Change	Language Exit
Step 1 (Syste C Step 2 (S	Set Nat Step 3 (Set Sy	Step 4 (Set Sta	Step 5 (Set Fle	Step 6 (Set CO	Step 7 (License	Step 8 (Set Mai	Step 9 (Set IP I
Select Upload File and Wait for	Uploading to end!!						Next
+ Select File	23.55 Mbit/s 0	0:00:00 100.00 % 20	0.17 MB / 20.17 MB				
S-UCP-RIs1511-1.1.3-Ker.rom	20.17 MB	• Sta	art 🖉 Cancel				

Figure 5.1 System upgrade

5.2 Nation Code

During initialization, the system employs the Nation Code to establish the default gains and tones for the various interfaces (analog CO Lines, ISDN lines, etc.), as well as the numbering plans for the specific country. The gains, in particular must be set to comply with the local regulatory requirements. Normally, the Nation Code will be set at the factory, however, assure the Nation code matches the system location.

Changing Nation Code

- 1) Dip Switch pole 4 of UCP100 (or UCP600, UCP2400) moves to ON.
- 2) Change Nation Code by clicking in the combo box.
- 3) Click Save button and then the system start resetting to apply.

In addition, all other data will be initialized, so the Nation Code should be properly set prior to other programming. You can change the numbering plan for your situation.

Step 1 (Syste	Step 2 (Set Na	tep 3 (Set Sy	Step 4 (Set St	Step 5 (Set Fle	Step 6 (Set CO	Step 7 (Licens	Step 8 (Set Ma	Step 9 (Set IP .
								Prev Ne Sav
	Code when Dip Switch 4 tion Code, then make Dip		√ status.					
				inge				
you want to change Na		ip Switch 4 as Of		inge				
you want to change Na Attribute	tion Code, then make Dip	ip Switch 4 as Of Value						
you want to change Na Attribute Nation Code	tion Code, then make Dip	ip Switch 4 as Of Value	Ra					

Figure 5.2 Nation code

5.3 Set System Date and Time

You can set System Date and time in this page.

tep 1 (Syste	em U Step 2 (Se	t Natio Ste	ep 3 (Set Syst	Step 4 (Set Statio	Step 5 (Set Flexi	Step 6 (Set CO R	Step 7 (License U	Step 8 (Set Maint	Step 9 (Set IP In
									Prev N
Order	Attribute		Value		Range				
	Time	Hour	10	00-	23				
	Time	Minute	59	00-	59				
		Month	10	01-	12				
	Date	Day	05	01-	31				
		Year	15	00-	99				

Figure 5.2 System Date and Time

5.4 Set Station Number

You want to change the current station number to New station number. In this page, you can change the station number.

PE stall Wiza										Chan	ge Language
Step 1 (S	ystem U St	ep 2 (Set Natio	Step 3 (Set S	Syste Step 4	(Set Stati O	Step 5 (S	et Flexi	Step 6 (Set CO R	Step 7 (License U	Step 8 (Set Maint	Step 9 (Set
nter Stati	on Index Range (1	- 2400) :				0	oad				Prev
tation Ind	lex Range 1-50										
		Multiple	Station Number t	o change							
Enter	er Index Range :			Start Station Nu	mber :						
Enter	er Station Range :	-		Start Station Nu	mber :						
			Range Save								
ndex la	Station Number	↓ª Type	IP Address ↓ª	MAC Address 1ª	New Station	Number					
1	1000	LIP-8024D	-	b40edcba0e67	1000						
2	1001				1001						
3	1002				1002						
4	1003				1003						
5	1004				1004						
6	1005				1005						
7	1006				1006						
8	1007				1007						
9	1008				1008						
10	1009				1009						
11	1010				1010						
12	1011				1011						
13	1012				1012						
14	1013				1013						
15	1014				1014						
16	1015				1015						
17	1016				1016						
18	1017				1017						
19	1018				1018						
20	1019				1019						

Figure 5.4-1 Set Station Number

5.5 Set Flexible Numbering Plan

The Flexible Numbering Plan defines the various digit strings (codes) users may dial to access system resources (outside lines, page zones, etc.) and features. In the wizard, codes for features that commonly may require modification are displayed. For more detailed information, refer to the title *"Flexible Numbering Plan"*.

Step 1 (Syste Step 2 (Set Na	Step 3 (Set Sy	Step 4 (Set St	Step 5 (Set Fl	Step 6 (Set CO	Step 7 (Licens	Step 8 (Set Ma	Step 9 (Set IP
								Prev Ne Sav
O rder <u>↓</u> ª	Attribute <u>↓</u> ^a		Value					
1	Access CO In First CO Group	9						
2	Attendant Call	0						
3	Group Call Pick-Up	*566						
4	Station Group Pilot Number	*401	- *500					

Figure 5.5 Set Flexible Number Plan

5.6 Set CO Ring Assignment

CO Ring Assignment establishes how the system will route incoming calls. The wizard assignments cover all CO/IP Lines in the system and the Ring assignments for Day, Night and Timed Ring modes can be established. For details on Ring assignments, refer to the title "CO/IP *Ring Assignment*".

Step 1 (Syster	m U St	ep 2 (Set Natio	Step 3 (Set Syste	Step 4 (S	Set Statio Step	5 (Set Flexi	Step 6 (Set CO R	Step 7 (License U	Step 8 (Set Maint	Step 9 (Set IP Inf
										Prev N Sa
Check All	1	Attribute	Value		Range	Station Delay V	alue [Station:Delay]			
		Station Range	Range : Delay :		0~9	[1000:0]				
		Station Group								
	Day	© ∨SF	Announcement : Auto Drop :		0 - 200 (0 : Unused					
		AA Ring Time			0~30					
		Net Station								
		Station Range	Range :		0~9	[1000:0]				
		Station Group								
	Night	○ VSF	Announcement : Auto Drop :		0 - 200 (0 : Unused					
		AA Ring Time			0~30					
		Net Station								
		Station Range	Range :		0~9	[1000:0]				
		Station Group								
	Timed Ring	© ∨SF	Announcement : Auto Drop :		0 - 200 (0 : Unused					
		AA Ring Time			0~30					
		Net Station								

Figure 5.6 Set CO Ring assignment

5.7 Set License Upload

Before License upload, make sure that the date of system is set correctly. Click the Select files button and then open the pop-up folder. Select a valid license file to upload to the UCP system and click the **[Start]** button. If the file which is sent to the system is "System License File", it will be saved and automatically applied without restart. The enabled features by uploading license file can be shown in "System Overview" page.

							Chan	ge Language Exit
Step 1 (System U	Step 2 (Set Natio	Step 3 (Set Syste	Step 4 (Set Statio	Step 5 (Set Flexi	Step 6 (Set CO R	Step 7 (License O	Step 8 (Set Maint	Step 9 (Set IP Inf
	le and Wait for Uploading t							Prev Next
	be restarted after uploading	g license file.						
+ Select File								

Figure 5.7 Set license upload

5.8 Set Maintenance Password

The Wizard includes a password entry page. It is strongly recommended that a unique User ID and strong password be entered to minimize the risk of admin and maintenance access by unauthorized personnel.

In order to finish the final step, you should register one or more than a maintenance ID. If not so, the Wizard can't go on to the next.

Also, Keyset admin password can be registered in this page.

Install Wizard Change Lang	uage Exit
Step 1 (Syst Step 2 (Set Step 3 (Set Step 4 (Set Step 5 (Set Step 6 (Set Step 7 (Licen Step 8 (Set Step 8 (S	Step 9 (Set I
	Prev Next Save
Must register one or more maintenance account.	
Add User	
User ID Max 16 Characters & Digits English Only / First letter must be Alphabet / _ is allowed	
Password Show Password Max 16 Characters & Digits	
User List	
User ID Privilege	
Keyset Admin Password (Save : □)	
Password Show Password Max 16 Characters & Digits	

Figure 5.8 Set Maintenance Password



NOTE

The new information will be in effect immediately upon saving the information. When a new Admin User ID and Password are saved, the Web login screen appears. A new Admin session will be required using the new login credentials.

5.9 Set IP Information

The IP Information page establishes the UCP call server (UCP module) IP address scheme. DHCP can be enabled or static addressing can be configured. When the system is behind a firewall, the Firewall address must be entered allowing proper operation with remote users, devise and SIP trunks. A DNS (Directory Name Server) for Domain Name resolution should also be entered on this page. Note that changing any IP address in the system requires a system reset; the reset does not initialize data. For additional details, refer to the title "*System IP Plan*".

Step 1 (System	U Step 2 (Set Nati	o Step 3 (Set Syste	Step 4 (Set Statio	Step 5 (Set Flexi	Step 6 (Set CO R	Step 7 (License U	Step 8 (Set Maint	Step 9 (Set IP Inf
								Prev Fin
Check All	Attribute		Value					
	UCP DHCP	OFF V						
	UCP IP Address	10.10.10.2						
	UCP Subnet Mask	255.255.0.0						
	Router IP Address	10.10.10.1						
	System IP Range	10.10.10.10	- 10.10.254.254					
	System Subnet Mask	255.255.0.0						
	Firewall IP Address	0.0.0.0						
	DNS IP Address	0.0.0.0						

Figure 5.9 Set IP Information

6. Web Administration

6.1 System ID & Numbering Plans

Selecting the System ID & Numbering Plans expands the Navigation frame to display the available Program groups as shown in the below figure.

	PGM Base Function Base	< Favorite PGM			×
	Q PGM Search				Edit
	System ID & Numbering Plans	System Overview System ID & Number	System IP Plan(102) System ID & Number	Device IP Plan(103) System ID & Number	Common Attributes(Station Data
	Station Data				
	Board Based Data	Flexible Buttons(115 Station Data	Common Attributes(CO Line Data	CO/IP Ring Assign CO Line Data	CID/CPN Attributes(CO Line Data
	CO Line Data				
	System Data	System Attributes(1 System Data	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attrib Station Group Data
	Station Group Data				
	ISDN Line Data	Station Authorizatio Tables Data	System Authorizatio Tables Data	Flexible DID Conver Tables Data	
	SIP Data				
<	Tables Data				
	Networking Data				
	H.323 Routing Table				
	T-NET Data				
	Zone Data				
	Device Login				
	UCS Standard				
	DECT Data				
	Hotel Data				
	Initialization				

Figure 6.1-1 System ID & Numbering Plans sub-menu

6.1.1 System ID – PGM 100

Selecting System ID will display the following Input Entry page. Click **[Reset System]** to restart the system after changing Nation code, Site name, Site detail, My area code, Multi area code, Numbering Plan, Enable or Disable for VoIU.

	PGM Base Function Base	•	Favorite PGM	System ID(1 ×			×	>
a	PGM Search	2				Save	1	
					ĺ	Reset System	1	
	System ID & Numbering Plans v		Attribute	Value	Range		'	
	System ID(100)		Nation Code	North America				
	System Overview		Site Name		Max 24byte			
	Device Port Num Change(101) System IP Plan(102)		Site Detail		Max 100byte			
	Device IP Plan(103)		My Area Code		Max 6 Digits			
	CO Device Sequence Number(104)							
	Flexible Station Number(105)							
	Flexible Numbering Plan(106~109)							
	8 Digit Extension Table(238)							
	Station Data	1						
	Board Based Data	<u> </u>						
	CO Line Data							
	System Data							
	Station Group Data							
	ISDN Line Data							
	SIP Data							
	Tables Data							
	Networking Data		Multi Area Code		Max 6 Digits			
	H.323 Routing Table				5			
	T-NET Data							
	Zone Data							
								•
	Numbering Plan	2 🔻						
	VOIU	Enab	le 🔻					
	SPEED Numbering	Туре	(0): SYS(2	0000-31999), STA(000-099) 🔻				

Figure 6.1.1-1 System ID

Under System ID, the country is identified using the international dial codes (Nation Code). A twenty-four (24) character Site Name, Site detail and the local My Area Code maybe defined. This information is used to set gain, frequencies and other system characteristics specific to the country and regional regulatory requirements. The Site Name is primarily useful for the installer/programmer as a reference to customer.

In addition, the system employs one of the nine (9) basic Flexible Numbering Plans as detailed in Appendix B. Individual items from the selected Numbering Plan can be changed under "*Flexible Numbering Plan*".

The built-in VoIP DSP channels (VOIU) can be disabled allowing use of the DSPs for the Multi-

party Conference function. Note the capability to disable the VOIU is only available when dip switch 4 of the UCP module is in the ON position.

Note

To change the Nation Code or disable the VOIU, the UCP Module "Mode" dip switch pole 4 must be ON; you cannot change the Nation code while the switch is OFF.

Numbering Plan

The system employs one of the nine (9) basic Flexible Number Plans as detailed in Appendix B. Individual items from the selected Numbering Plan can be changed under Flexible Numbering Plan in section 6.1.8.

Note

The numbering plan on this manual is based on Numbering plan 2. The value (or feature code) may be different according to Numbering plan.

Speed Numbering

You can easily memory the system speed dial code and station dial code by selecting the desired type depending on the situation among the following types:

- 1) Type (0): System speed (20000~31999), Station speed (000~099)
- 2) Type (1): System speed (2000~9999), Station speed (000~099)
- 3) Type (2): System speed (2000~7999), Station speed (000~099)
- 4) Type (3): System speed (2000~4999), Station speed (000~099)
- 5) Type (4): System speed (200~999), Station speed (00~19)
- 6) Type (5): System speed (20~99), Station speed (00~19)
- 7) Type (6): System speed (10~99), Station speed (00~09)
- 8) Type (6): System speed (1~9), Station speed (0~0)

The notifications is displayed 'Speed Numbering type is successfully changed. Please refresh this page to reload Speed numbering data." According to selecting Speed numbering type, the range of System speed dial and Station speed dial is changed.

6.1.2 System Overview

Selecting System Overview will display the following System Overview page. This page shows the system capacity, the available applications, and Device ID list based on installed Module, Device, and the available license. Note that data can't be entered on this page.

Note

System overview may show different figure between the below and yours according to installing Module, Device, etc.

PGM Base Function Base		< Favorite PGN	System Ov	erview 🗙				
PGM Search	0		System Capaci	ty Overvie	w			
			max port / slot	used port	/ slot availabl	e port / slot		
System ID & Numbering Plans	/	Total	5916	1	5915			
		CO & STA	199	1	198			
System ID(100)		CO Gateway	199	0				
System Overview Device Port Num Change(101)		Station	199 (include hot desk 0)	1				
System IP Plan(102)		MISC Gateway	300 / 100	0/0	300 / 1	00		
Device IP Plan(103)		VSF Gateway	500 / 100	0/0	500 / 1	00		
CO Device Sequence Number(104)		MCIM Gateway	960 / 30	0/0	960			
Flexible Station Number(105)		UCS Server	16	0	16			
Flexible Numbering Plan(106~109)		3rd Party Server	10	0	10			
8 Digit Extension Table(238)		WTIM Gateway	132	0	132			
Station Data Board Based Data	_	cf) Max 3 WTIMs c	ascade in the same ph			iew		
	_	cf) Max 3 WTIMs c	ascade in the same ph		License Overv	iew		
Board Based Data	-	cf) Max 3 WTIMs c		System	License Overv 000E55E40D1	135552		
Board Based Data CO Line Data			License	System	License Overv 000E55E40D1 Status	135552 Current	· ·	Purchased
Board Based Data CO Line Data		Total System Por	License t Expansion	System	License Overv 000E55E40D1 Status 199 copy(s)	135552 Current 1 (STN 1 + CC) D (0)	199 copy(s)
Board Based Data CO Line Data System Data		Total System Por Total IP Extensio	License t Expansion n	System	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s)	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP) D (0)	199 copy(s) 199 copy(s)
Board Based Data CO Line Data System Data Station Group Data		Total System Po Total IP Extensio Third Party SIP E	License t Expansion n Extension	System Serial No. :	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 199 copy(s)	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0) D (0)	199 copy(s) 199 copy(s) 199 copy(s)
Board Based Data CO Line Data System Data Station Group Data		Total System Por Total IP Extensio Third Party SIP E VOIP Virtual Swit	License t Expansion n Extension tching Channel(8ch/cop	System Serial No. :	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s)	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s)
		Total System Por Total IP Extensio Third Party SIP E VOIP Virtual Swit VMU Recording T	License rt Expansion in Extension tching Channel(8ch/cop Time Add 10-Hour	System Serial No. :	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated
Board Based Data CO Line Data System Data Station Group Data ISDN Line Data		Total System Por Total IP Extensio Third Party SIP E VOIP Virtual Swit VMU Recording T Mobile Extension	License rt Expansion in Extension tching Channel(8ch/cop Time Add 10-Hour	System Serial No. :	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s)	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s)
Board Based Data CO Line Data System Data Station Group Data ISDN Line Data SIP Data		Total System Por Total IP Extensio Third Party SIP E VOIP Virtual Swi VMU Recording T Mobile Extension IP Networking or	License rt Expansion in Extension tching Channel(8ch/cop Time Add 10-Hour	System Serial No. : wy)	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s)	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s)
Board Based Data CO Line Data System Data Station Group Data ISDN Line Data SIP Data Tables Data		Total System Por Total IP Extensio Third Party SIP E VOIP Virtual Swi VMU Recording T Mobile Extension IP Networking or	License t Expansion n Extension Iching Channel(8ch/cop Time Add 10-Hour	System Serial No. : wy)	License Overv 000E55E40D Status 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated 199 copy(s)
Board Based Data CO Line Data System Data Station Group Data SDN Line Data SIP Data Tables Data		Total System Por Total IP Extensio Third Party SIP E VOIP Virtual Swi VMU Recording T Mobile Extension IP Networking or Transparent Netw	License t Expansion in Extension Iching Channel(8ch/cop Time Add 10-Hour QSIG Vork(T-NET) or Local Se	System Serial No. : wy)	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated Activated Activated
Board Based Data CO Line Data System Data Station Group Data SDN Line Data SIP Data Tables Data		Total System Poi Total IP Extensio Third Party SIP E VOIP Virtual Swi VMU Recording 1 Mobile Extension IP Networking or Transparent Netw Hotel Feature	License t Expansion n Extension tching Channel(8ch/cop Time Add 10-Hour QSIG cork(T-NET) or Local St e	System Serial No. : wy)	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated Activated	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated Activated Activated Activated Activated
Soard Based Data CO Line Data System Data Station Group Data SDN Line Data SIP Data Fables Data Vetworking Data 4.323 Routing Table		Total System Poi Total IP Extensio Third Party SIP E VOIP Virtual Swit VMU Recording T Mobile Extension IP Networking or Transparent Netw Hotel Feature FIDELIO Interfac Third Party TAPI	License t Expansion n Extension tching Channel(8ch/cop Time Add 10-Hour QSIG cork(T-NET) or Local St e	System Serial No. : ay)	License Overv 000E55E40D1 Status 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated Activated Activated	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch 0) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated Activated Activated Activated Activated Activated Activated
Board Based Data CO Line Data System Data Station Group Data ISDN Line Data		Total System Poi Total IP Extensio Third Party SIP E VOIP Virtual Swit VMU Recording T Mobile Extension IP Networking or Transparent Netw Hotel Feature FIDELIO Interfac Third Party SIP A	License t Expansion n Extension tching Channel(8ch/cop Time Add 10-Hour QSIG ork(T-NET) or Local St e Interface	System Serial No. : py) urvivability face	License Overv 000E55E4001 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated Activated Activated Activated Activated	135552 Current 1 (STN 1 + CC 1 (LIP 1 + SIP 0 0 ch 0 0) D (0)	199 copy(s) 199 copy(s) 199 copy(s) 2 copy(s) Activated 199 copy(s) Activated Activated

Figure 6.1.2-1 System Overview for UCP100

6.1.3 Device Port Number Change – PGM 101

Selecting Device Port Num Change (101) will display the following input entry page.

PGM Base Function Base	< Favor	rite PGM	Device	Port Nu X						
Q PGM Search										Sa
System ID & Numbering Plans V	0 1 13	C 1		D I T			M D		Virtual Reg	istratio
	Order 1ª	Seq Lo	ogical Num <u>1</u> ª	Device Type	CO Gateway	Device Delete	Max Port	Current Port	New Port	
System ID(100)	1	2401	- 8	BRIM4 GW			8	8		
System Overview	2	2402	-	T1IM GW			24	24		
Device Port Num Change(101)	3	2402		ISDN-PRI GW	_		24	24		
System IP Plan(102)						_				
Device IP Plan(103)	4	2404	66 - 63	VOIM8 GW			8	8		
CO Device Sequence Number(104)					STA					
Flexible Station Number(105)	1	1 1	1000	LIP-8024D			1	1		
Flexible Numbering Plan(106~109)					VSF Gateway					
8 Digit Extension Table(238)	1	3001	- 16	UVM GW			16	16		
				1	MCIM Gateway	1				
Station Data	1	3201	- 32	MCIM GW			32	32		
Board Based Data					UCS Server					
Doard Dased Data	1	3231 [First]	UCS Server			1	1		
CO Line Data				١	WTIM Gateway	/				
Durken Duk	1	3257		WTIM4 GW			16	1		
System Data										

Figure 6.1.3-1 Device Port Num Change

The system supports changing port count of a device or deleting devices. In this window, the Device ID, Mac address, IP address and port count of the device can be modified. Also checking the **[Device Delete]** check box will delete the device.

Devices may be registered by clicking **[Virtual Registration]** button on "*Device Port Number Change*" page. Devices can be registered with or without a MAC address and the number of ports associated with the device may be limited. This may be useful for example to implement a "partial T1" gateway where only some of the T1 channels are available. Note to virtually register a SIP trunk, use the Device ID Type of CO and device as VOIM, enter the desired number of channels. If you want to use virtual MAC address when you register Device, please check the check box in front of MAC address input field. Click **[Register]** button after finishing the desired value.

PGM Base Function Base	< Fa	avorite PGM D	evice Port N ×	Virtual Regist	×	
GM Search						
tem ID & Numbering Plans V	· · · · · · · · · · · · · · · · · · ·	vant to use virtual MAC check the check box i	· · · · · · · · · · · · · · · · · · ·	· · · · ·		
ystem ID(100)	Index	Devic	e ID	MAC Address	Data	
ystem Overview	1	[Device Type] 🔻	[Select Device] 🔻		Max Port	
ice Port Num Change(101)	2	[Device Type] 🔻	[Select Device] 🔻		Max Port	
stem IP Plan(102)	3	[Device Type] 🔻	[Select Device] 🔻		Max Port	
ce IP Plan(103)	4	[Device Type] 🔻	[Select Device] 🔻		Max Port	
Device Sequence Number(104)	5	[Device Type]	[Select Device] •		Max Port	
le Station Number(105)			<u> </u>			
le Numbering Plan(106~109)						
igit Extension Table(238)						

Figure 6.1.3-2 Virtual Registration

6.1.4 System IP Plan - PGM 102

Selecting System IP Plan will display the following input entry page. Use the check boxes to indicate which attributes to modify and the data for checked attributes is stored for the entire range of stations when saved.

PGM Base Function Base	< Favorite	PGM System IP PI	×Q	
PGM Search				
System ID & Numbering Plans 🛛 🗸	Check All	Attribute		Value
Sustan (D(100)		UCP DHCP	OFF T	
System ID(100) System Overview		UCP IP Address	10.10.10.2	
Device Port Num Change(101)		UCP Subnet Mask	255.255.0.0	
System IP Plan(102)		Router IP Address	10.10.10.1	
Device IP Plan(103)		System IP Range	10.10.10.10	- 10.10.254.254
CO Device Sequence Number(104)		System Subnet Mask	255.255.0.0	
Flexible Station Number(105)		Automatic IP Assign	ON T	
Flexible Numbering Plan(106~109)		Second System IP Address	0.0.0	
8 Digit Extension Table(238)		Second System Net Mask	255.255.0.0	
Station Data		Firewall IP Address	0.0.0.0	
		First MAC Range	000000000000000000000000000000000000000	- 00000000000
Board Based Data		Second MAC Range	000000000000000000000000000000000000000	- 00000000000
CO Line Data		DNS IP Address	0.0.0.0	
ystem Data				
Station Group Data				
SDN Line Data				
SIP Data				

Figure 6.1.4-1 System IP Plan (PGM 102)

The System IP Address Plan sets several IP addresses including the UCP module IP address that is required for external VoIP calls, the IP address for the router, and the system's internal private IP address Plan. Note that the LAN and Router addresses must be routable IP addresses for access to an external VoIP network, remote access by an iPECS Phone or remote Web access. When used, the LAN port of any VOIM (Voice over IP device unit) must also have a routable IP address for access to/from an external VoIP network and a remote iPECS device.

When "Automatic IP Assign" is enabled, the system will assign IP addresses to each iPECS IP terminal and gateway Modules including any VOIM using the System IP address range defined. These addresses are used for communications between the system and other VOIMs and terminals.

The system may be connected to a LAN that is segmented by two separate private IP address schemes. This segmenting technique is often used to separate voice and data devices. However, with this segmenting technique, the system will normally treat the segmented devices such as IP softphones, as remote devices, using valuable WAN bandwidth. Assigning the "Second Sys IP address" with a valid IP address from the second segment permits the system to communicate directly with the devices over the LAN.

iPECS can be installed behind a NAPT server, if the NAPT server provides fixed address translation and port forwarding to the system. In this case, the system will employ the "Firewall IP address" as the fixed IP address for communication with remote devices. This address must be

assigned as the "UCP" address in the remote device.

ATTRIBUTE	DESCRIPTION	DEFAULT
UCP DHCP	Controls the DHCP client function for the UCP.	OFF
UCP IP Address	Public IP Address of the LAN port that is required for remote user and external VoIP network access. IPv4 format	10.10.10.2
UCP Subnet Mask	Defines the system subnet for UCP IP addresses.	255.255.0.0
Router IP Address	IP Address of router for external network (WAN) access. Required for shared voice and data LAN, external VoIP and remote Web access.	10.10.10.1
System IP Range	Range for private IP addresses of Modules/Terminals.	
System Subnet Mask	Define the system subnet for private IP addresses.	255.255.0.0
Automatic IP Assign	The system automatically assigns IP addresses to modules and terminals (ON) or, when OFF, IP addresses are assigned manually in Device IP Address Table or from the DHCP address assigned to the device.	ON
Second System IP Address	When devices have different address schemes on the same LAN, enter an IP address from the second LAN for use by the UCP system.	0.0.0.0
Second System Net Mask	Net mask of the second private IP addresses	255.255.0.0
Firewall IP Address	When the system is installed behind a NAPT server, the fixed IP Address provided by the NAPT server must be assigned here. Also, use this IP address to identify the UCP in remote devices.	0.0.0.0
First MAC Range	MAC Address Range to register a device regardless of the 3rd Dip Switch.	0000000000000~ 0000000000000
Second MAC Range	MAC Address Range to register a device regardless of the 3rd Dip Switch.	0000000000000 000000000000
DNS IP Address	IP Address of Domain Name Server, which iPECS UCP will use to resolve a URL to an IP address. The DNS provides the resolution after receiving the URL from iPECS.	0.0.0.0

Table 6.1.4-1	SYSTEM IP	ADDRESS PLAN

6.1.5 Device IP Plan - PGM 103

PCM Base Function Base	4		Fave	onte Pi	GM Device IP Plan(103)	× O										
PGM Search O															I	Sau
System ID & Numbering Plans v	Order 1	Seq	Zone	SVC	Logical Num 1 ^a	Туре	DEV ID	MAC Address 1 ⁱⁱ O Gateway	IP Address 1 ^a	Mode	ARP	Register	Version	CPU	Remark	
System (D(100)	t	2401	4	9	1-6	VOIU	97	b061c703dco7	10 10 10 2	L	OFF ·	Multicast •	R112	MSC2K		
System Overview	2	2402	1	0	7 - 36	ISDN-PRI GW	41	b061c7034902	10.10.10.10	L	OFF .	Muticast 1	6.0Be	MS828		
Device Port Num Change(101)	3	2403	1		37 - 44	LOCM LOOP 8 GW	114	b061c701dc85	10 10 10 12	L	OFF .	Multicast •	6.1Ba	M\$828		
System IP Plan(102)								STA								
Device IP Plan(183)	1	1	1	0	1000	LIP-9040	246	b061c7028731	10.10.10.15	L.	OFF .	Multicast *	1.0Af	SC14463		
CO Device Sequence Number(104) Flexible Station Number(105)	2	2	1	8	1001 1002	SLTU2	119	b051c703dce7	10.10.10.2	L	OFF. •	Multicast .	R1.1.2	MSC2K		
Flexible Numbering Plan(105-109)	4	3	1	8	1003 1004 1005 1006 1007 1008 1009 1010	SLTM8 GW	119	b061c703a681	10.10.10.13	L	OFF .	Multicast •	6.1Df	M\$828		
8 Digit Extension Table(238)	12	4	1		1011	LIP-8024D	201	001a7ea350de	10.10.10.16	L	OFF .	Multicast .	1.148	TI 1050		
	13	5	1	0	1012[+] 1013[+] 1014[+] 1015[+] 1016[+] 1017[+] 1018[+] 1019[+]	DTIM8 GW	208	b061c702d7ec	10.10.10.17	L	OFF .	Multicast .	6.0Bg	MS828		
Station Data							M	ISC Gateway								
Board Based Data	1	3101	1	0	1+4	MISU	9	b051c703dce7	10.10.10.2	1	OFF .	Multie ast	R112	MSC2K		
							v	SF Gateway								
CO Line Data	1	3001	1	8	1-4	UVMU	31	b051c703dce7	10.10.10.2	L.	OFF •	Multicast •	R1.1.2	MSC2K		
System Data	2	3002	1	8	5 + 12	UMM GW	10	b061c700e57c	10.10.10.11	L	OFF .	Multicast •	1.0Be	MSC2K		
							M	CIM Gateway								
Station Group Data	1	3201	1	6	1.6	MCIU	116	b061c703dce7	10 10 10 2	L	OFF .	Multicast 1	R112	MSC2K		
ISON Line Data	2	3202	1	0	7 - 38	MCIM GW	116	b061c702009d	10.10.10.14	L	OFF .	Multicast *	6.0Da	MS828		

Selecting Device IP Plan will display the following input entry page.

Figure 6.1.5-1 Device IP Plan (PGM 103)

This page displays all of the devices registered to the iPECS UCP by grouping into the type of device (CO, STA, etc.).

If the station is assigned to Master or Slave by linked station, the bracket '[M] or [S]' will be displayed by the station number in PGM 101, 103, 105, 124 of Web page.

Selecting the SVC button for a device will toggle the service mode between in and out-of-service. The device type can be modified as well as the MAC and IP address. Using the SVC check box to place a device out of service, an errant device can be replaced without affecting the database. After placing the device out-of-service, it can be removed, replaced and the MAC address of the new device entered. The SVC check box is used to bring the new device into service employing the database from the replaced device.

The system may assign a default private IP address to each device. If desired, this program may be used to modify the assigned IP address for each Gateway/board and iPECS Phone.

The device mode, connected to a local or remote LAN, is displayed. Each Gateway/board and terminal can be assigned for "*ARP*". With ARP disabled, the system will employ the Ethernet MAC address of the device to send iPECS protocol messages to the device. This reduces the overall LAN traffic by eliminating ARP messages and the need for IP address headers in the messages.

The system normally employs IP multi-cast protocol to respond to a registration request from a Gateway/board or terminal.

When the device is separated from the system by a router, the system must use the IP uni-cast protocol. This is established by the *"Local Device"* assignment. When disabled (OFF), the system will send an IP uni-cast message to the device in response to a registration request.

6.1.6 CO Device Sequence Number - PGM 104

Selecting CO Device Sequence Number will display the following input entry page. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value to apply.

PGM Base Function Base	2	< Favorite PGM	CO Device S.	×			
Q PGM Search	0						
System ID & Numbering Plans	~	Ordering Num <u>↓</u> ª	Type <u>↓</u> ª	Sequence Number <u>↓</u> ª	CO Line Num <u>↓</u> ª	IP Address <u>↓</u> a	Order
	- 11	1	VOIU	2401	1	10.10.10.2	1
System ID(100)		2	ISDN-PRI GW	2402	7	10.10.10.10	2
System Overview		3	LGCM LOOP 8 GW	2403	37	10.10.10.12	3
Device Port Num Change(101)							
System IP Plan(102) Device IP Plan(103)							
CO Device Sequence Number(104)	- 11						
Flexible Station Number(105)							
Flexible Numbering Plan(106~109) 8 Digit Extension Table(238)							
	-						
8 Digit Extension Table(238)							
8 Digit Extension Table(238) Station Data							
8 Digit Extension Table(238) Station Data Board Based Data							

Figure 6.1.6-1 CO Device Sequence Number

The system configures the CO/IP Line numbers. Each Module is assigned the starting CO/IP Line number based on the registration order. In place of the default Order Numbering, the "*Order*" number assigned in this PGM can be used to reorder the CO/IP numbering.

6.1.7 Flexible Station Number - PGM 105

Selecting Flexible Station Number will return the following data entry page. This page permits changes in the Station Numbering Plan using one of three methods:

<u>Station Index Range</u>: use to change the station numbers associated with a range of "Order Numbers" (the indexes). The "Start Station Number" is assigned to the station with the first index then the station number is incremented by one and assigned to the next station in the range. The process is repeated until the station number with the last index is changed.

<u>Station Number</u>: enter the station number to search. The station number is displayed and then you can change the new station number as you wish.

<u>Multiple Station Number to change</u>: there are two ways to search the station number for change; Enter Index Range or Enter Station Range.

You can change station numbers over a range of stations using the "Start Station Number" as the first station number for the range. The station number is incremented by one for each successive station in the range.

	PGM Base Function Base	< Fi	avorite PGM F	lexible Stati	on N <mark>×</mark>				×
¢	PGM Search	Enter St	tation Index Range (1 -	2400) :				P Load	Save
	System ID & Numbering Plans V	Station	Index Range 1-10						
	System ID(100) System Overview	Station CID Pas		Search	o to Setting				
	Device Port Num Change(101)				tation Number	to change			
	System IP Plan(102)	• E	nter Index Range :			Start Station	Number :		
	Device IP Plan(103)	0 E	nter Station Range :		-	Start Station	Number :		
	CO Device Sequence Number(104) Flexible Station Number(105)				Range Save				
	Flexible Numbering Plan(106~109)			-					
	8 Digit Extension Table(238)	-	a Station Number <u>J</u> ^a 1000		-	MAC Address Jabe b40edcba0e67	New Station Number		
		1	1000	LIP-8024D	10.10.42.1	b40edcba0e67	1000		
<	Station Data	3	1001				1001		
	Board Based Data	4	1002				1002		
2		5	1003				1003		
	CO Line Data	6	1004				1004		
	System Data	7	1006				1006		
	Station Group Data	8	1007				1007		
	· · · · · · · · · · · · · · · · · · ·	9	1008				1008		
	ISDN Line Data	10	1009				1009		
	SIP Data								
	Tables Data								

Figure 6.1.7-1 Flexible Station Number

The station Index number is incremented from 1 as each terminal device is registered. At registration, station numbers increment sequentially with the index and are assigned starting at station 1000. The Station Numbering Plan allows the station numbers to be two (2) to eight (8) digits in length. If the 8-Digit Table is employed, the full station number including the Prefix digits must be entered in this table.

Setting CID Password directly

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You can set the CID password to click [Go to Setting] button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click [Save] button.

CID Password :	Go to Setting	
PGM Base Function Base	Favorite PGM Flexible Statio System Pass X	s
	Kauset Admin Descured (Court C)	5
System ID & Numbering Plans	Keyset Admin Password (Save :)	
Station Data	Enter Current Keyset Admin Password	
	Enter New Keyset Admin Password (MAX 12 digits)	
Board Based Data	Confirm New Keyset Admin Password	
CO Line Data	Remote Access Password (Save :)	
	Enter Current Remote Access Password	
System Data V	Enter New Remote Access Password (MAX 12 digits)	
System Attributes(160~161)	Confirm New Remote Access Password	
System Password(162)	CID Password (Save :)	
Alarm Attributes(163)	Enter Current CID Password	
Attendant Assignment(164)	Enter New CID Password (MAX 12 digits)	
Multicast IP/Port(165)	Confirm New CID Password	

6.1.8 Flexible Numbering Plan - PGM 106 ~ 109

Selecting Flexible Numbering Plan will display the following input entry page. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value to apply.

12 Call Forward *554 Board Based Data 13 Speed Dial Program *555 CO Line Data 14 Activate Message Wait/Call Back *556 System Data 15 Message Wait/Call-Back Answer *557 Station Group Data 16 SLT Speed Dial Access *558 17 DND/FWD Cancel *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566	PGM Search		vorite PGM Flexible Numberi ×			Save
1 Internal Page Zone '901 - '400 System D(100)	Custom ID & Numbering Disco	Order ↓ ^ε	a Attribute ↓a		Value	
System Cverview 3 Meet Me Page *544 Device Port Num Change(101) 5 5 External Page Zone - 1 *545 System IP Plan(102) Device IP Plan(103) *546 5 External Page Zone - 2 *546 Source Sequence Number(104) Fiexible Station Number(105) * <th>System ID & Numbering Plans V</th> <th>1</th> <th>Internal Page Zone</th> <th>*301</th> <th>- *400</th> <th></th>	System ID & Numbering Plans V	1	Internal Page Zone	*301	- *400	
Device Port Num Change(101) 1 Interversion 1 545 System IP Plan(102) 5 External Page Zone - 2 1546 1 Device IP Plan(103) 6 External Page Zone - 2 1548 1 CO Device Sequence Number(104) Flexible Numbering 1 All Call Page 1549 Flexible Numbering 9 Flash Command To CO Line 1551 1 Plan(106-102) 9 Flash Command To CO Line 10 SLT Last Number Redial 1552 Station Data 10 SLT Last Number Redial 1553 11 Do-Not-Disturb(DND) 1553 Station Data 11 Do-Not-Disturb(DND) 1555 11 14 Activate Message Wait/Call Back 1556 Station Group Data 15 Message Wait/Call Back 1556 14 Activate Message Wait/Call Back 1556 Station Group Data 15 Station Group Data 15 15 15 15 15 15 15 15 15 15 15 15 15 15 </td <td>System ID(100)</td> <td>2</td> <td>Internal All Call Page</td> <td>*543</td> <td></td> <td></td>	System ID(100)	2	Internal All Call Page	*543		
System IP Plan(102) 5 External Page Zone - 2 1546 Device IP Plan(103) 6 External Page Zone - 2 1548 CO Device Sequence Number(104) 6 External All Call page 1549 Flexible Number(105) Flexible Number(109) 8 SIMDR Account Code Enter 1550 9 Flash Command To CO Line 1551 10 SLT Last Number Redial 1552 10 SLT Last Number Redial 1552 11 Do-Not-Disturb(DND) 1553 12 Call Forward 1554 11 Do-Not-Disturb(DND) 1553 13 Speed Dial Program 1555 11 13 Speed Dial Program 1556 14 Activate Message Wait/Call-Back Answer 1557 16 SLT Speed Dial Access 1558 15 Message Wait/Call-Back Answer 1559 18 17 DND/FWD Cancel 1559 16 SLT Speed Dial Access 1561 19 SLT Program Mode Access 1561 19 SLT Program Mode Access 1561 19 SLT Prog	System Overview	3	Meet Me Page	*544		
Device IP Plan(103) CO Device Sequence Number(104) Flexible Station Number(105)5External All Call page15487All Call Page15498SMDR Account Code Enter15509Flash Command To CO Line15618Digit Extension Table(238)10SLT Last Number Redial155210SLT Last Number Redial155311Do-Not-Disturb(DND)155312Call Forward155613Speed Dial Program155514Activate Message Wait/Call Back156615Message Wait/Call-Back Answer156716SLT Speed Dial Access156817DND/FWD Cancel156918SLT CO System Hold156019SLT Program Mode Access156119SLT Program Mode Access156110SLT Program Mode Access156118SLT CO System Hold156019SLT Program Mode Access156120Attendant Unavailable156221AME Feature156422Alarm Reset156523Group Call Pick-Up156524Userset Mick Line Message156525Alarm Reset156526Alarm Reset156527Station Group Call Pick-Up156628Alarm Reset156529Alarm Reset156520Alarman156521Alarm Reset156522Alarm Re	Device Port Num Change(101)	4	External Page Zone - 1	*545		
CO Device Sequence Number(104) 6 External All Call page 1548 7 All Call Page 1549 8 SMDR Account Code Enter 1550 9 Flash Command To CO Line 1551 8 Digit Extension Table(238) 10 SLT Last Number Redial 1552 10 SLT Last Number Redial 1553 12 Call Forward 1554 11 Do-Not-Disturb(DND) 1553 12 Call Forward 1556 12 Call Forward 1556 14 Activate Message Wait/Call Back 1556 14 Activate Message Wait/Call-Back Answer 1557 16 SLT Speed Dial Access 1558 15 Message Wait/Call-Back Answer 1556 16 SLT Speed Dial Access 1556 16 SLT Speed Dial Access 1556 16 18 SLT CO System Hold 1560 19 SLT Program Mode Access 1561 16 20 Attendant Unavailable 1562 20 Attendant Unavailable 1562 12 21 AME Feature 1564 21 AME Feature <t< td=""><td></td><td>5</td><td>External Page Zone - 2</td><td>*546</td><td></td><td></td></t<>		5	External Page Zone - 2	*546		
CO Device Sequence Number(104) 7 All Call Page *549 Flexible Number(105) 8 SMDR Account Code Enter *550 Plan(106-109) 9 Flash Command To CO Line *551 8 Digit Extension Table(238) 10 SLT Last Number Redial *552 11 Do-Not-Disturb(DND) *553 11 Station Data 12 Call Forward *555 12 Call Forward *556 11 Soard Based Data 13 Speed Dial Program *555 13 Speed Dial Program *556 11 14 Activate Message Wait/Call Back *556 11 15 Message Wait/Call Back Answer *557 11 16 SLT Speed Dial Access *558 11 17 DND/FWD Cancel *559 11 18 SLT Co System Hold *560 11 19 SLT Program Mode Access *561 11 19 SLT Program Mode Access *561 11 20 Attendant Unavailable *562 12 21 AME F	· · · ·	6	External All Call page	*548		
Flexible Numbering Plan(106-109) 8 SMDR Account Code Enter *550 9 Flash Command To CO Line *551 8 Digit Extension Table(238) 10 SLT Last Number Redial *552 10 SLT Last Number Redial *553 11 Do-Not-Disturb(DND) *553 12 Call Forward *555 13 Speed Dial Program *556 14 Activate Message Wait/Call Back *556 15 Message Wait/Call-Back Answer *557 16 SLT Speed Dial Access *558 17 DND/FWD Cancel *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566		7				
Plan(106-109) 9 Flash Command To CO Line *551 8 Digit Extension Table(238) 10 SLT Last Number Redial *652 Station Data 11 Do-Not-Disturb(DND) *553 Station Data 12 Call Forward *555 Soard Based Data 13 Speed Dial Program *556 So Line Data 14 Activate Message Wait/Call Back *556 15 Message Wait/Call-Back Answer *557 System Data 16 SLT Speed Dial Access *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566		8	-			
8 Digit Extension Table(238) 10 SLT Last Number Redial *552 Station Data 11 Do-Not-Disturb(DND) *653 Board Based Data 12 Call Forward *555 Sto Line Data *556 14 Activate Message Wait/Call Back *556 System Data 15 Message Wait/Call-Back Answer *557 System Data 16 SLT Speed Dial Access *558 17 DND/FWD Cancel *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *565		9	Flash Command To CO Line			
Station Data 11 Do-Not-Disturb(DND) *553 Station Data 12 Call Forward *554 Station Data 13 Speed Dial Program *555 XO Line Data 14 Activate Message Wait/Call Back *556 15 Message Wait/Call-Back Answer *557 16 SLT Speed Dial Access *558 17 DND/FWD Cancel *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *565 22 Alarm Reset *565 23 Group Call Pick-Up *565	8 Digit Extension Table(238)	10	SLT Last Number Redial			
Station Data 12 Call Forward *554 Soard Based Data 13 Speed Dial Program *655 SO Line Data 14 Activate Message Wait/Call Back *556 Soget Data 15 Message Wait/Call-Back Answer *557 Soget Data 16 SLT Speed Dial Access *558 Station Group Data 17 DND/FWD Cancel *559 SDN Line Data 18 SLT CO System Hold *560 SIP Data 20 Attendant Unavailable *562 20 Attendant Unavailable *564 21 AME Feature *565 22 Alarm Reset *565 23 Group Call Pick-Up *566 24 Universit Mith Amerge *567		11	Do-Not-Disturb(DND)	*553		
Activate Message Wait/Call Back *556 14 Activate Message Wait/Call Back *556 15 Message Wait/Call-Back Answer *557 16 SLT Speed Dial Access *558 17 DND/FWD Cancel *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566	Station Data	12	Call Forward			
XO Line Data 15 Message Wait/Call-Back Answer *557 System Data 16 SLT Speed Dial Access *558 Station Group Data 17 DND/FWD Cancel *559 SDN Line Data 18 SLT CO System Hold *560 SIP Data 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566	Board Based Data	13	Speed Dial Program	*555		
XO Line Data 15 Message Wait/Call-Back Answer *557 System Data 16 SLT Speed Dial Access *558 Station Group Data 17 DND/FWD Cancel *559 SDN Line Data 18 SLT CO System Hold *560 SIP Data 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566		14	Activate Message Wait/Call Back	*556		
System Data 16 SLT Speed Dial Access *558 Station Group Data 17 DND/FWD Cancel *559 SDN Line Data 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 10 Attendant Unavailable *562 11 AME Feature *564 12 Alarm Reset *565 13 Group Call Pick-Up *566	O Line Data	15	-	*557		
Station Group Data 17 DND/FWD Cancel *559 18 SLT CO System Hold *560 19 SLT Program Mode Access *561 19 SLT Program Mode Access *562 20 Attendant Unavailable *562 21 AME Feature *565 22 Alarm Reset *565 23 Group Call Pick-Up *566	System Data	16		*558		
18 SLT CO System Hold *560 19 SLT Program Mode Access *561 20 Attendant Unavailable *562 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566 24 Universit Mich & annue *567	Station Group Data	17	DND/FWD Cancel			
19 SLT Program Mode Access *561 SIP Data 20 Attendant Unavailable *562 11 AME Feature *564 12 Alarm Reset *565 13 Group Call Pick-Up *566 14 University Nith American State *567		18	SLT CO System Hold			
SIP Data 20 Attendant Unavailable *562 Tables Data 21 AME Feature *564 22 Alarm Reset *565 23 Group Call Pick-Up *566 24 Unit Strange *567	SDN Line Data	19	SLT Program Mode Access	*561		
ables Data 22 Alarm Reset *565 letworking Data 23 Group Call Pick-Up *566 24 University Night Assess *567	IP Data	20	-			
22 Alarm Reset *565 23 Group Call Pick-Up *566 24 University Fight Assess *567		21	AME Feature	*564		
	ables Data	22	Alarm Reset	*565		
	letworking Data	23	Group Call Pick-Up	*566		
	222 Pouting Table	24				
25 Account Code With Bin *568	1.323 Routing Table	25	-			
a 26 Walking COS		. 26	Walking COS	*569		

Figure 6.1.8-1 Flexible Number Plan

Feature dial codes for the system can be assigned using the system's Flexible Numbering Plan. Feature codes should be one (1) to four (4) digit in length and must not conflict with other codes or the Station numbering. For example, Feature codes 53 and 536 represent a conflict. The system will not update the database until correct data is entered. If the 8-Digit Table is employed, the information is saved even if a conflict with the Flex Numbering Plan exists. In this case, the Station Number will have priority.

The below table provides a brief description for each feature and the default codes as they appear in **Numbering Plan 2**. The default values for other numbering plans, which can be selected on the title "System ID (100)" and the other numbering plan is described in Appendix B.

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
1	Internal Page Zone	Internal Page Zone access codes.	*301~*400
2	Internal All Call Page	Internal All Call Page access code.	*543

Table 6.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
3	Meet Me Page	Meet-Me-Page answer code.	*544
4	External Page Zone – 1	External Page Zone 1 access code.	*545
5	External Page Zone – 2	External Page Zone 1 access code.	*546
6	External All Call Page	External All Call Page access code.	*548
7	All Call Page	All Call Page access code.	*549
8	SMDR Account Code Enter	Dial code to signify the start of an SMDR Account Code.	*550
9	Flash Command To CO Line	Dial code to generate a Flash on the active CO Line.	*551
10	SLT Last Number Redial	SLT Last number redial feature access code.	*552
11	Do-Not-Disturb (DND)	Dial code to activate Do-Not-Disturb.	*553
12	Call Forward	Code to activate Call Forward.	*554
13	Speed Dial Program	SLT Speed Dial programming access code.	*555
14	Activate Message Wait/Call Back	Code to activate Message Wait/Call Back.	*556
15	Message Wait/Call-Back Answer	Code to return Message Wait/Call Back.	*557
16	SLT Speed Dial Access	SLT Speed Dial access code.	*558
17	DND/FWD Cancel	Code to cancel DND/FWD/MSG Wait.	*559
18	SLT CO System Hold	Code to place a CO Line call on System Hold.	*560
19	SLT Program Mode Access	SLT user program access code.	*561
20	Attendant Unavailable	Code to make attendant "unavailable".	*562
20		Dial code to assign an Answering Machine Emulation	502
21	AME Feature	Flex button.	*564
22	Alarm Reset	Code to terminate an Alarm signal.	*565
23	Group Call Pick-Up	Group Call Pick-up code.	*566
24	Universal Night Answer	Universal Night Answer code.	*567
25	Account Code With Bin	Dial code for entering an Account Code.	*568
25	Walking COS	-	*569
20		Dial code to activate Walking Class-of-Service.	*571
28	ACD Agent ON/OFF Duty ACD Supervisor Login	Code to toggle ACD Agent ON and OFF duty. Supervisor login code.	*572
20	ACD Supervisor Logout	Supervisor logout code.	*573
			*574
30	ACD Help Code	Agent & Supervisor code for Supervisor help.	
31	ACD Call In Queue Display	Dial code to display calls in queue.	*575
32	ACD Supervisor Status	Dial code to display group status.	*576
33	ACD Supervisor Monitor	Dial code to activate Supervisor monitor.	*577
34	ACD Reroute Queued Call Answer	Code to reroute call after answer.	*578
35	ACD Reroute Queued Call No Answer	Code to reroute call prior to answer.	*579
36	Camp-On Answer	Dial code to answer a Camped On call.	*621
37	Call Park Locations	Dial code to place/retrieve a call in a system Park Orbit.	#601~#800
38	Station Group Pilot Number	Station group pilot number.	*401~*500
39	Station User VSF Features Access	VSF feature access code.	66
40	Call Coverage Ring	Code for Call Coverage button.	*76
41	Direct Call Pick-Up	Dial code to activate Directed Call Pick-up.	*77
42	Access CO Group	Dial code to access a CO Line from a group.	89
43	Access Individual CO/IP	Dial code to access a specific CO/IP Line.	88
44	Access Held CO/IP	Dial code to access the last held CO/IP Line from	8*
45	Access Held Individual CO/IP	Hold. Dial code to access a specific CO/IP Line from Hold.	8#

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
46	Access CO In First CO Group	Dial code to access the 1 st available CO/IP Line in any accessible group.	9
47	Attendant Call	Dial code to call Main Attendant.	0
-11		Dial code for external Voice mail to activate Message	0
48	VM MSG Wait Enable	Wait indication.	*8
49	VM MSG Wait Cancel	Dial code for external Voice Mail to deactivate	*9
50	DeerOrer	Message Wait indication.	<i>#</i> *4
50	Door Open	Dial code to activate Door 1 contact.	#*1
51	Door Open	Dial code to activate Door 2 contact.	#*2
52	Door Open	Dial code to activate Door 3 contact.	#*3
53	Door Open	Dial code to activate Door 4 contact.	#*4
54	MCID Request	Dial code to activate Malicious Caller Id (Except USA version).	*0
55	Unsupervised Conference Time Extension Code	Dial code to extend unsupervised conference time.	##
		Push-To-Talk group login and logout dial code.	
56	PTT Group Logon/Logoff	The station must have a PTT button for proper operation.	#0
57	ACD Agent Primary Login	ACD Agent Primary Login code.	*581
58	ACD Agent Primary Logout	ACD Agent Primary Logout code.	*582
59	ACD Agent Secondary Login	ACD Agent Secondary Login Code.	*583
60	ACD Agent Secondary Logout	ACD Agent Secondary Logout Code.	*584
61	Wrap-up End		
01		When Central Control networking (TNET) is	*585
62	T-NET CM LOGIN/OUT	employed, a station can be manually logged in or out	*586
60	ENTER INTO CONF ROOM	of the Central system using this code.	*59
63 64	ENTER INTO CONF ROOM ENTER INTO CONF-GROUP	Code for a station to enter a Conference Room.	59 *68
-		Code for a station to initiate a Conference Group.	
65	STATION ICR	Code for a station to activate ICR forward.	*587
66	PICK UP GROUP PICK-UP	Pick Up Group Call Pick-up dialing code.	*588
67	EMERGENCY PAGE	Code for emergency page.	*589
68	REMOTE MEX CONTROL	Code to control the mobile extension settings remotely.	*580
69	Agent ON/OFF Duty In ALL GRP	Code to change the state of the Agent ON/Off duty in all station groups.	*58*
70	SLT ACNR	Dial code for an SLT to activate ACNR (Auto Call Number Redial)	*58#
71	ACD Supervisor Ring Mode	Code to check and change ACD group Ring mode by ACD group supervisor.	*570
72	Company Directory Name	Code to check and record a user's Name greeting for the Company Directory feature.	*563
73	ISDN Supplementary HOLD	ISDN Supplementary HOLD Numbering Plan Code.	*57*
74	ISDN Supplementary Conference	ISDN Supplementary Conference Numbering Plan Code (Not supported).	*57#
75	Forced Channel Seize	Code to disconnect an existing call and seize the CO/IP Line or connect to the station.	*56*
76	Override DND/Forward	Dial code to override DND or Call Forward activated by a station.	*56#
77	Cancel call back	Code to cancel a Callback request.	
78	Transfer to VSF Number	While on a CO/IP Line call, this code may be used to	*55*

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
		transfer a call to a valid system announcement,	
		[Transfer] + [*55*] + valid system announcement (01-	
		200). The outside party receives the system	
		announcement and DISA service activates.	
		This code is used with Digit Conversion to direct a	
		call to a specific System Announcement. The	
79	CCR	conversion modifies the received digits to a four digit	#2
		string "#2xx" where xx indicates the announcement	
		number.	
		After a UCS client activates a UCS Conference	
80	Room Type Conf Group Join	Group, other users may dial this code and the group	5*0
		number to enter the Conference.	

6.1.9 8 Digit Extension Table - PGM 238

Selecting 8 Digit extension table will display the following input entry page. Click **[Save]** button after changing Value to apply.

PGM Base Function Base		vorite PGM	8 Digit Extensio	×	
PGM Search					
stem ID & Numbering Plans V	Prefix U Order	Jsage : OFF ▼ Feature	Value	Range	
System ID(100)	Order	8 Digit String	value	Max 6 Digits	
System ID(100) System Overview	1	Add Digit	0	0 - 4	
Device Port Num Change(101)		8 Digit String		Max 6 Digits	
System IP Plan(102)	2	Add Digit	0	0 - 4	
evice IP Plan(103)		8 Digit String		Max 6 Digits	
CO Device Sequence Number(104)	3	Add Digit	0	0 - 4	
exible Station Number(105)		8 Digit String		Max 6 Digits	
lexible Numbering Plan(106~109)	4	Add Digit	0	0 - 4	
git Extension Table(238)		8 Digit String		Max 6 Digits	
on Data	5	Add Digit	0	0 - 4	
		8 Digit String		Max 6 Digits	
I Based Data	6	Add Digit	0	0 - 4	
ne Data		8 Digit String		Max 6 Digits	
	7	Add Digit	0	0 - 4	
em Data		8 Digit String		Max 6 Digits	
on Group Data	8	Add Digit	0	0 - 4	
Line Data		8 Digit String		Max 6 Digits	
Erric Data	9	Add Digit	0	0 - 4	
Data		8 Digit String		Max 6 Digits	
s Data	10	Add Digit	0	0 - 4	
		8 Digit String		Max 6 Digits	
orking Data	11	Add Digit	0	0 - 4	
3 Routing Table		8 Digit String		Max 6 Digits	
Data	12	Add Digit	0	0 - 4	
T Data		8 Digit String		Max 6 Digits	
Data	13	8 Digit String		Max 6 Digits	

Figure 6.1.9-1 8 Digit Table

The iPECS UCP supports a Station Numbering Plan of up to eight digits. By combining a prefix digit string (8 Digit String) of up to six (6) digits with the Add Digit count (digit count from the Station Numbering assigned in PGM 105), Station Numbering can support up to eight digits. Note that multiple prefixes (8 Digit Strings) with varying ADD Digit counts can be assigned. In addition, in case of a conflict, the Prefix digit string will have priority over the Flexible Numbering Plan thus disabling the feature associated with the digit string but allowing the station to receive calls.

6.2 Station Data

Selecting the Station Data group will display the Station Data sub-menu displayed in the left frame as the below figure.

PGM Base Function Base	< Favorite PGM			
PGM Search				
System ID & Numbering Plans	System Overview System ID & Numbe	System IP Plan(102) System ID & Numbe	Device IP Plan(103) System ID & Numbe	Common Attributes Station Data
Station Data ~				
Station Type(110) Common Attributes(111)	Flexible Buttons(11 Station Data	Common Attributes CO Line Data	CO/IP Ring Assign CO Line Data	CID/CPN Attributes(CO Line Data
Terminal Attributes(112) CLI Attributes(113) Flexible Buttons(115/129)	System Attributes(1 System Data	System Password(1 System Data	Station Group Assi Station Group Data	Station Group Attri Station Group Data
Station COS(116) CO/IP Group Access(117) Internal Page Zone Overview	Station Authorizati Tables Data	System Authorizati Tables Data	Flexible DID Conve Tables Data	
Internal Page Zone(118) PTT Group Access(119)				
Preset Call Forward(120) Idle Line Selection(121)				
Station IP Attributes(122) Station Timers(123)				
Linked Station(124) Station ICM Group(125)				
Station VM Attributes (127) Station Personal CCR(128)				
Station Name Overview Station Name Display				
Station User Greeting Station Data Copy				
Station CTI IP Address Station Recording Infomation				

Figure 6.2-1 Station Data Main Page

6.2.1 Station Type - PGM 110

Selecting Station Type will display the Station Type data input entry page. Enter a valid station range and click **[Load]** to modify the Station Type data. Click **[Save]** button after changing Value to apply.

PGM Base Function Base	< Favorite PGM	Station Ty	rpe(110) ô		
PGM Search C	Enter Station Range	:		Coad	Save
System ID & Numbering Plans	Station Range 1000-1	1045			
Station Data ×	Station Number <u>↓</u> ^a	Station Type	Associated Station Number		
Station Data V	1000	IPKTU 🔹			
Station Type(110)	1001	IPKTU 🔹			
Common Attributes(111)	1002	IPKTU 🔻			
Terminal Attributes(112)	1003	IPKTU 🔻			
CLI Attributes(113)	1004	IPKTU T			
Flexible Buttons(115/129)	1005	IPKTU •			
Station COS(116)	1006	IPKTU •			
CO/IP Group Access(117)	1007	IPKTU V			
Internal Page Zone Overview	1008	IPKTU V			
Internal Page Zone(118)	1009				
PTT Group Access(119) Preset Call Forward(120)	1010				
Idle Line Selection(121)	1011				
Station IP Attributes(122)	1012	IPKTU V			
Station Timers(123)	1013	IPKTU V			
Linked Station(124)	1014				
Station ICM Group(125)	1015				
Station VM Attributes (127)	1016				
Station Personal CCR(128)	1017				
Station Name Overview	1017				
Station Name Display					
Station User Greeting	1019	IPKTU V			
Station Data Copy	1020				
Station CTI IP Address	1021				
Station Recording Infomation	1022	IPKTU V			
Board Based Data	1023	IPKTU 🔻			

Figure 6.2.1-1 Station Type

Each station is assigned a type selected from the "*Station Type*" drop-down menu. The type is used by the system to recognize the station's capability and set default Flexible button configurations.

In addition, for standard iPECS DSS/DLS consoles the "Associated Station Number" is required so the system will recognize the station that is used with the console. Note this is not used with the Serial DSS/BLF Consoles.

In case of seleting SLT type, there are 6 types as below:

- · SLT (DTMF)
- · SLT (Pulse)
- · SLT (DTMF VOL-MW)
- · SLT (Pulse-MW)
- · SLT (DTMF FSK-MW)
- SLT (DTMF POL-MW)

6.2.2 Common Attributes - PGM 111

Selecting Common Attributes will display the common attributes data input page. Enter a valid station range and click the **[Load]** button to enter Common Attributes data.

Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

		Favorite PGM	Common Attributes×		
PGM Search	C Enter S	tation Range :		? Load	Save
System ID & Numbering Plans	Station	Range 1000			
Station Data	→ Urder	Check All	Attribute <u>↓</u> ^a	Value	Range
	1		Keyset Admin Access	Enable •	
Station Type(110)	2		CO PGM	Enable •	
Common Attributes(111)	3		Automatic Hold	ON V	
Terminal Attributes(112) CLI Attributes(113)	4		Auto Transfer By Button	ALL	
Flexible Buttons(115/129)	5		Individual CO Access	Enable	
Station COS(116)	6		CO/IP Line Queuing	Enable •	
CO/IP Group Access(117)	7		Ringing Line Preference	Enable T	
Internal Page Zone Overview	8		Speed Dial Access	Enable •	
Internal Page Zone(118)	9		Alarm / Door Bell		
PTT Group Access(119)	10		Station Account	OFF V	
Preset Call Forward(120)	11	0	Forced SMDR Account Code	OFF V	
Idle Line Selection(121)	12		Loop LCR Account	OFF V	
Station IP Attributes(122)			•		
Station Timers(123)	13		Door Open	Enable V	
Linked Station(124)	14		Flex Button PGM		
Station ICM Group(125)	15		Prefer CO or Group		Access Code
Station VM Attributes (127)	16		Emergency CO or Group		Access Code
Station Personal CCR(128)	17		ICM Tenancy Group Number	1	0-100
Station Name Overview	18		Call Time Restriction	OFF V	
Station Name Display Station User Greeting	19		PROCTOR MONITORING Power-Failure	OFF V	
Station Data Copy	20		Line Release Cost Display	OFF V	
Station CTLIP Address	21		Active PTT Group Number		0-9
Station Recording Infomation	22		Hot Desk Station	OFF V	
· · · · · · · · · · · · · · · · · · ·	23		SMDR Hidden Dialed Digits	Disable	
Board Based Data	24		Left Message to Executive	ON T	

Figure 6.2.2-1 Common Attributes

Common Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to the following table for a description of the features and the input required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Keyset Admin Access	When enabled, the station can access the system Database.	Disable Enable	Enable
CO PGM	A station can be permitted to change the CO/IP Line numbers (ports) associated with a Flexible button.	Disable Enable	Disable
Automatic Hold	With Auto Hold enabled, the system will place an active external call on hold if the user presses a CO/IP Line or DSS button.	OFF ON	ATD: ON Others: OFF
Auto Transfer By Button	Transfer a talking call to a new making call by press Station (DSS)/CO (Loop)/U-Loop flexible button.	OFF ALL	ALL

 Table 6.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Except CO to CO	
Individual CO Access	If allowed, the stations may use dial codes to access individual CO/IP Lines.	Disable Enable	Enable
CO/IP Line Queuing	When enabled, the station may queue for the next available Line if All Lines Busy signal is received.	Disable Enable	Enable
Ringing Line Preference	When enabled, calls that ring the phone can be answered by going off-hook without selecting the CO/IP Line button.	Disable Enable	Enable
Speed Dial Access	The station is permitted for accessing to System Speed Dial bins when this parameter is enabled.	Disable Enable	Enable
Alarm/Door Bell	The station will receive Alarm/Door Bell signals if enabled.	Disable Enable	Disable
Station Account	When allowed (ON), the station user must enter an authorization code to access CO/IP Lines.	OFF ON	OFF
Forced SMDR Account Code	When allowed (ON), the user must enter an Account code to place an outgoing call.	OFF ON	OFF
Loop LCR Account	The Station may be required to enter a Station Authorization code to access LOOP LCR operation.	OFF ON	OFF
Door Open	This feature enables Station to use Door open feature.	Disable Enable	Enable
Flex Button PGM	The ability to assign Flexible buttons of the iPECS IP and LDP Phones can be controlled. When allowed here, the user may assign features to Flexible buttons but requires special assignments to configure CO/IP Line buttons.	OFF ON	ON
Prefer CO or Group	The System will seize this CO/IP Line or a Line from the CO/IP group number when the station dials "9" (First available CO access code).	CO/IP Line/ CO Group number	Access code
Emergency CO or	This feature defines the CO/IP Line or Group employed by the	CO # or CO	Access
Group ICM Tenancy Group Number	system to place Emergency Assistance calls. The station is assigned to one of the 100 ICM Tenancy Groups.	Group # 0~100	code 1
Call Time Restriction	All outgoing calls will disconnect at expiration of the Call Restrict Timer. The Cut-Off Timers can be set the time for Station and CO Line. For cut off timer of Station, refer to the title " <i>Station Timers</i> (123)". For CO line, refer to the title " <i>CO Line data: Common</i> <i>Attributes</i> (144)".	OFF ON	OFF
Proctor Monitoring Power-Failure	This feature enables use of PABX ANI Link device for E-911 support. This feature uses only for SLT port.	OFF ON	OFF
Line Release Cost Display	When a CO/IP line is released, the disconnect cause or call-cost is displayed in the LCD of the iPECS IP or LDP Phone.	OFF ON	OFF
Active PTT Group Number	A station can be assigned to a PTT (Push-to-Talk) group and the available group. So the station can place and receive PTT announcements for the group.	0~9	
Hot Desk Station	If Station can be assigned as a Hot Desk phone, Users and agents can login and use resources of the system through the Hot Desk phone.	OFF ON	OFF
SMDR Hidden Dialed Digits	If this feature enables, you can hide the dialed digits on SMDR output.	Disable Enable	Disable
Left Message to	When a call forwards to the Secretary of an Executive/Secretary	OFF	ON

Table 6.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Executive	pair, messages can be left for the Executive (ON) or Secretary (OFF).	ON	
Station Web Level	Based on this level, the user will be able to view the specified programs within the Station User Web portal. Level 1 can view all programs, Levels 2 and 3 are configured in the title "System data: Station Web Authorization". This feature is configured only on Web PGM.	LEVEL 1 ~ LEVEL 3	LEVEL 2
Headset page mode	When a page announcement is received, it is normally received over the Speaker of the iPECS IP or LDP Phone. For headset users, the page can sent to the headset or both the headset and speaker.	Speaker Headset Both	Speaker
Progress Indication	When employing a non-ISDN terminal, specifically a modem or analog FAX, the ISDN call SETUP message must include this message and "Progress Indication" should be set to "ON".	OFF ON	OFF
3.1 KHz Audio	When an analog device (SLT or FAX) uses an ISDN Line in the system, the Information Element of the ISDN SETUP message must indicate the device only has 3.1 KHz audio capabilities. If an SLT or analog FAX will be allowed access to the ISDN Lines, this feature must be "ON"	OFF ON	OFF
Pick-Up by Flex button	When a station receives a call, the DSS/BLF button at other stations will flash and, if allowed, other stations may use the button to answer (pick-up) the call.	OFF ON	ON
Prepaid Call	It is useful feature for user to pay the money within the budget (Prepaid) for outgoing calls. For more information, refer to the below feature " <i>Prepaid money</i> ".	OFF ON	OFF
Prepaid Money (0 - 999999) &	An amount can be associated with the station as prepayment for outgoing calls. The assigned "Pre-paid Money" is reduced by the calculated call cost (Call Metering or cost/minute). This parameter	000000 – 999999	0
& Used Prepaid Money	displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The "Used Pre-paid Money" displays the money that has been used.	- 000000 999999	0
SIP USER TABLE INDEX	These fields reference the index to the SIP User ID Attributes Table. The referenced SIP User Id may be employed for several	0~2400	0
SIP USER TABLE INDEX2	of the SIP headers for outgoing calls and may be employed for incoming call routing as configured in the SIP CO Attributes PGM	0~2400	0
SIP USER TABLE INDEX3	133, "Id Assigned Station". Up to three SIP User Id indices can be assigned to each station to permit the use of up to three SIP Trunk service providers.	0~2400	0
Station Web Language	User can select the desired language for Station Web.	English, Local	English
Lift Handset for Page	If an iPECS IP or LDP Phone user attempts to page using the speakerphone, pre-selection will be activated and the display shows 'Lift Handset for Page when Lift Handset for Page is ON". If Lift Handset for Page is OFF, then User can make page on speakerphone without lift handset.	OFF ON	ON
Privacy	If Privacy option is ON, then any person could not barge-in to the station and Attendant can't intrude to Station. Also, if Privacy option is ON, any person can't forcefully disconnect the station.	OFF ON	OFF

 Table 6.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	Call Coverage Attributes		
Call Coverage Mode	The Call Coverage feature permits an iPECS IP or LDP Phone user to receive ring and answer calls for other stations.	OFF ON	OFF
Call Coverage Delay Ring	When a covered station rings, the {CALL COVERAGE} button LED will flash at the covering station and the station will receive ring (immediate or delayed by 0 to 15 ring cycles).	0~15	0
Call Coverage On Busy	Call Coverage can be configured to provide coverage while the covered station is idle (OFF) or both idle and busy (ON).	OFF ON	ON
Call Coverage Through Mobile Extension	Call Coverage can be configured to deliver coverage ring to the assigned Mobile phone (ON) when call coverage is active.	OFF ON	ON
Call Coverage On Busy Range	When Call Coverage Busy is enabled, the system can send coverage ring for outside calls only or both internal and outside calls.	External Call Only, External and Internal Call	External Call Only
Call Coverage Delay Ring Method	Call Coverage delayed ring can be determined by the covered (originator) or covering (member) settings for the delay.	by Originator, by Member	by Originator
Call Coverage For Wakeup Ring	Call Coverage can deliver coverage ring for Wake-Up signals.	OFF ON	OFF
Call Coverage Ring Type on Member	The station can be assigned to receive normal ring for a covered call or only a flashing of the Call Coverage button. For LIP phones, Muted ring or a muted single burst can be used to notify the station.	Silence, Normal Ring, Muted Ring- 80xxE only, One Burst- 80xxE only	Normal Ring
	Tone/Ring Attributes		
Call Time Tone	A tone can be sent periodically with indicating the elapsed time of an outgoing CO/IP call. The Elapsed Call Timer determines the period between tones. For more information about Elapsed Call timer, refer to the title " <i>System data: System timer (180~182, 186)</i> ".	OFF ON	OFF
Camp On Tone	When the Camp-on feature is enabled for the station, if the station is busy and receives a Camp-on request, the LCD indicates the camped on call. In addition, if Camp-on tone is enabled, the Camp-On tone is sent to the station as an audible signal for the camp-on.	OFF ON	ON
ICM Dial Tone Source	The dial tone sources can be selected for each station.	Dial Tone, Int/Ext Music1, Ext Music2, VSF MOH, SLT MOH 1~5, VSF MOH2, VSF MOH3	Dial Tone
ICM Ring Back Tone Source	The ring back tones can be selected for each station.	Ring Back Tone, Int/Ext	Ring Back Tone

Table 6.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		music1, Ext Music2, VSF MOH, SLT MOH 1~5, VSF MOH2, VSF MOH3	
Off-Hook Ring Type	While the station is Off hook, the type of ring can be adjusted as a single burst, muted normal ring, system ring or no audible ring signal.	Burst, Mute, System Attributes, Silence	Refer to System attributes
SIP Color Ring	With a SIP based AA/VM that supports color ring, color ring may be provided to SIP pones. The group number associated with the external AA/VM should be entered as the SIP Color Ring source.		Station number
Tone table index	Selects one of five Tables to determine the tones sent to the Station. The individual tones are configured in PGM 410 to 417 under the Maintenance.	1-5	1
Gain table index	Selects one of three Tables employ to set the gain from a device to other device types. PGM 410 to 417 under the Maintenance tab set the individual gains.	1-3	1
Digit conversion table	One of the 32 Digit Conversion Tables can be configured for use for this CO/IP Line.	1~32	
	Routing Attributes		
Call Forward	When allowed, Call Forward can be activated by the station.	OFF ON	ON
DND	Enables DND to be activated by the station. The station can be limited to activate DND for outside calls (CO call only) or for internal calls (ICM call), if desired.	OFF, ALL, ICM call, CO call only	ALL
Off-Net Forward	A station must be allowed Off-Net Fwd to forward external incoming calls outside the system or otherwise establish a CO-to-CO connection (Unsupervised Conference).	Disable Enable	Enable
ACD Group Service	When unavailable, DID/DISA calls to the station can route to the ACD Group to which the station is a member.	OFF ON	OFF
Ring Group Service	When unavailable, DID/DISA calls to the station can route to the Ring Group to which the station is a member.	OFF ON	OFF
ACD Login Priority	ACD Group members may be assigned as a priority, 0-9. Members with the highest priority receive calls ahead of lower priority members.	0~9	0
Prime Line	This feature enables Delayed Prime Line (Idle Line) activation; see the title " <i>Idle Line Selection (121)</i> " and " <i>System data: System</i> <i>timer: Prime Line Delay timer (180~182 & 186)</i> ".	HOT WARM	WARM
Auto ACD DND	If an Agent doesn't answer an ACD call in the ACD No Answer timer, the Agent enters an unavailable state with entering the Reason code. The reason code is sent in ACD Event messages.	None, #, *, 0~9	None
FWD if OOS	If a station is Out-of-Service and has previously forwarded calls, the system will forward the calls to the previous destination if this feature is ON.	OFF ON	OFF

Table 6.2.2-1 Common Attributes

ATTRIBUTE DESCRIPTION RANGE DEFAULT							
ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
LDT Table Index	LCR (Least Call Routing) operation for the station will use LDT Table index defined here from 0 to 32.	0~32	1				
LDT Zone Number	If the LDT Zone Number of a LDT table (LCR LDT (221)) is equal to this value, the LDT table is available to the station.	1-100	1				
Mobile (Web)	When enabled, the station can activate Call back from the Station	Disable	Diachla				
Client Service	Web portal.	Enable	Disable				
Click To Call Service	To use click call application, it should be enabled.	Disable Enable	Disable				
MS Lync RCC Service	To use MS Lync RCC, it should be enabled.	Disable Enable	Disable				
MSN Wait	Calls to an MSN number route to idle stations with a free MSN button for the MSN number. In addition, the call can be routed to busy stations if MSN Wait is ON and the station has a free (idle) corresponding MSN Loop button.	OFF ON	OFF				
DID Restriction	A call routed using DID normally routes to the appropriate station. If desired, a Station can be restricted from receiving DID calls.	OFF ON	OFF				
DISA Restriction	A call routed using DISA normally routes to the appropriate station. If desired, a Station can be restricted from receiving DISA calls.	OFF ON	OFF				
Pre-Selected Msg DND	When the user activates Pre-Selected or Custom Messages, the system can automatically activate DND for the station so that the station will not receive ring and the call is routed by following DND treatment.	OFF ON	OFF				
	Voice Attributes						
Page Access	Stations must be allowed Page access to send a page over the system's Paging facilities.	OFF ON	ON				
Forced Hands- Free Answer	When placing an intercom call, a user can change the ICM signaling mode, Tone Ring to Hands free answer mode or Hands free Answer to Tone Ring.	OFF ON	OFF				
Group Listening	Audio is sent to both the handset and speaker with the handset microphone active and speakerphone microphone OFF.	Disable Enable	Enable				
Override Privilege	Enables intrusion to gain access to an active CO/IP call.	Disable Enable	Disable				
Voice Over	Enables use of Voice Over by the station.	Disable Enable	Enable				
Barge In Mode	Barge-in permits an authorized station to intrude into other existing outside/internal calls or to force disconnection of an existing call.	Disable Monitor Only Monitor, Join & Disconnect	Disable				
Camp on enable	Station can receive a Camp-on while busy. If 'Camp On Tone' is enabled, the stations receive Camp-on tone, otherwise only the LCD will indicate the camp on call. If the station is not allowed to receive a Camp-On, the calling user receives error tone.	OFF ON	ON				
Video Show on Calling (ex. IP Video Door Phone)	When a VoIP video door phone rings to a video-enabled LIP phone, the video streaming commences immediately or after the call is answered. A VoIP channel is required to serve ring-back tone to the Door phone.	OFF ON	OFF				

Table 6.2.2-1 Common Attributes

6.2.3 Terminal Attributes - PGM 112

Selecting Terminal Attributes will display the Terminal Attributes data input page. Enter a valid station range and click **[Load]** to enter Terminal Attributes data. Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

PGM Base Functi	on Base	< Fa	vorite PGM	Terminal Attributes(×		
PGM Search	0	Enter Stat	ion Range :		2	Load
System ID & Numbering Plans		Station Ra	inge 1004			
Station Data	~	<mark>Order</mark> <u>↓</u> a	Check All	Attribute <u>↓</u> ª	Value	Range
Station Data	· ·	1		Auto Speaker Selection	ON T	
Station Type(110)		2		No Touch Answer	OFF V	
Common Attributes(111)		3		ICM Signaling Mode	TT	
Terminal Attributes(112)		4		Headset Ring	Speaker •	
CLI Attributes(113)		5		Speaker / Headset	Speaker •	
Flexible Buttons(115/129)		6		LCD Display LED	Ring •	
Station COS(116)		7		Message Scroll Speed	3	0-7
CO/IP Group Access(117)		8		EarMic Headset(LDP/LIP7000 Only)		
Internal Page Zone Overview	v	9	0	Enblock Mode	OFF T	
Internal Page Zone(118)		10		Back Light Usage	BUSY ONLY	
PTT Group Access(119) Preset Call Forward(120)		10		By-Pass DTMF	OFF V	
Idle Line Selection(121)		12		Serial DSS Usage	Enable •	
Station IP Attributes(122)		12		Howler Tone		
Station Timers(123)		13		Flex Button Page		
Linked Station(124)		14		ÿ	Use 3 Page	
Station ICM Group(125)				Align LCD	Not Align V	
Station VM Attributes (127)		16		Small Popup Use	OFF •	
Station Personal CCR(128)		17		Large Popup Timer	0	0-5 sec
Station Name Overview		18		Message Wait Indication LED	MWI AII	
Station Name Display		19		NFC Authcode Use	ON T	LIP 9071
Station User Greeting		20		LCD Dimming Apply	ON V	LIP 9000/LDP 9240
Station Data Copy				SLT Attribute		
Station CTI IP Address		1		Data Security	OFF T	
Station Recording Infomatio		2		ECM Faxes in T.38	Allow T	
Board Based Data		3		Modem Enable	OFF V	
Dourd Dabou Data	•	4		SLT CID Type	FSK •	

Figure 6.2.3-1 Terminal Attributes (PGM 112)

Terminal Attributes define features and functions available to the terminal itself. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to the following table for a description of the features and the input required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Speaker Selection	Enables [SPEAKER] activation automatically when a CO/IP Line, DSS or other feature button is pressed; there is no need to lift handset.	OFF ON	ON
No Touch Answer	When On, No-touch answer connects transferred calls to the station's speakerphone automatically after a short tone.	OFF ON	OFF
ICM Signaling Mode	The user can select ICM signaling mode among Hands-free (H), Privacy (P) or Tone Ring (T).	H/ T/ P	т

Table 6.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Headset Ring	The user can select how to receive Incoming ring signals among Speaker, Headset or Both.	Speaker Headset Both	Speaker
Speaker/Headset	The user can select between Speaker and Headset for Call.	Headset/ Speaker	Speaker
LCD Display LED	The LED at the top of LCD is an indication for Intercom call ring or Message wait indication.	Ring MWI	MWI
Message Scroll Speed	The user can adjust the scroll speed on message from 0 to 7.	0 ~7	3
EarMic Headset	The user can use Ear Microphone Headset for Internal or external calls.	OFF ON	OFF
Enblock Mode	When ON, digits dialed by the user are stored at the iPECS IP or LDP Phone until explicitly sent by the user. When sent, all dialed digits are sent to the system in a block. En-block mode is only available to iPECS IP or LDP Phones with 3-Soft keys.	OFF ON	OFF
Back Light Usage	The backlight of iPECS IP and LDP Phones is assigned to be OFF, light only when the station is busy, or light constantly. This feature applies to LIP-8000, LIP 9000 and LDP 9000 series phones. In addition, Back Light Usage applies to LDP-7000 phones with a graphic LCD.	Always Off Busy Only Always On	Busy Only
By-Pass DTMF	When detected, DTMF from an SLT may be regenerated by CO/IP Line interface circuitry, the SLT port can bypass detection so DTMF is not detected.	OFF ON	OFF
Serial DSS Usage	Enables an LIP-8000/LIP-9000 phone to have a Serial DSS/BLF Console attached.	Disable Enable	Enable
Howler Tone	Howler tone can be sent to a phone when off-hook.	OFF ON	ON
Flex Button Page	iPECS LIP-9030 and 9040 have 8 and 12 Flexible buttons, respectively. Additional Flex buttons are available using Flex button pages. The phone can have up to 3 pages each with the 8 or 12 Flex buttons. Thus, an LIP-9030 can have 24 Flex buttons and the LIP-9040 can have 36 Flex buttons. The Navigation Up/Down button is used to scroll through the Flex buttons pages assigned.	Use 1 Page Use 2 Page Use 3 Page	Use 3 Page
Align LCD	For the iPECS LIP-9010/20/30/40, character alignment for messages to the phone can be right or left aligned by the system, or alignment controlled by the phone ("Not Align").	Not Align Align Left Align Right	Not Align
Small Popup Use	If this option is set to ON, small popup is displayed on the LCD of LIP-9030/9040. If it is set to OFF, top bar is displayed instead of small popup.	OFF ON	OFF
Large Popup Timer	When Large popup timer is set to any value from 1 to 5 except 0, the display of large popup is disappeared after the timer expired and then the large popup information is displayed at top bar.	0~5 (Sec.)	0
Message Wait Indication LED	User can program MWI (Message Wait Indication) LED according to the following type: 1. MWI All: LED is blinking about all calls and Message 2. VM MWI: blinking in case of getting Voice mail 3. CLI MWI: blinking in case of Calling Line Identification	MWI AII, VM MWI, CLI MWI,: SMS MWI, ICM MW	MWI ALL

Table 6.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	 SMS MWI: blinking in case of getting Short message ICM MWI: blinking in case of Incomming call 		
NFC Authorization Code Use	If this option is ON, User enters Authorization code to use NFC function for LIP-9071.	OFF ON	ON
LCD Dimming Apply	If this option is ON, LCD dimming is available only for LIP-9000 Series and LDP-9240D. LCD is dark when the phone is paused so some light is needed. So we provide the dimmable lights.	OFF ON	OFF
	SLT Attributes		
Data Security	Disables override and camp-on tones to the station. This feature is commonly used for an analog modem or FAX to assure tones do not affect received information.	OFF ON	OFF
ECM Faxes in T.38	ECM stands for Error Correction Mode. If you failed to send something via Faxes, you can send it again until it is successful.	Allow, Prevent	Allow
Modem Enable	When an SLT port is connected to a Modem, the port can be enabled for Modem operation. This will activate Echo Cancellation and disregard any Camp-on/Call Wait to improve modem performance.	OFF ON	OFF
SLT CID Type	Caller ID can be sent to an SLT as FSK or DTMF signals.	FSK, DTMF	FSK
Send SLT CLI Info	When allowed, the system sends CLI (Calling Line Identification) information to SLT.	OFF ON	ON
SLT Flash Mode	 When an SLT activates a Hook-flash, the system will perform one of the following operations: Flash Transfer – active call placed on hold and dial tone is returned. Flash-Drop – the active call is dropped. Flash-Ignore – the Hook-flash is ignored, no action is taken. Hold Release – the active call is placed on hold and, if the SLT returns to idle, the call is dropped. 	Flash Transfer Flash Drop Flash Ignore Hold Release	Flash Transfer
SLT configuration mode	For the South African region, the SLT gain is adjusted based on the SLT Configuration Mode.	Default, Short, Long, Far	Default
Block Back Call	When an SLT attempts to transfer a CO/IP call to another CO/IP Line, the transfer can be blocked and the call released.	OFF ON	OFF
SLT Open Loop Time	Send open loop signal to SLT port when counter party user hangs up SLT.	0~9 (100ms)	0
Short Modem	If this value of a SLT is ON, the SLT is the modern mode in seizing a CO line. When the CO line is LGCM, the {short modern timer} is starting when the SLT seizes the co line. And if the {short modern timer} is expired, the SLT goes to the original mode. When the CO line is ISDN, the {short modern timer} is starting after receiving the ISDN connect message. And if the {short modern timer} is expired, the SLT goes to the original mode.	OFF ON	OFF

Table 6.2.3-1 Terminal Attributes

6.2.4 CLI Attributes - PGM 113

Selecting CLI Attributes will display the CLI Attributes data input page. Enter a valid station range and click **[Load]** to enter CLI Attributes data. Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

	Base	< Fav	orite PGM	CLI Attributes(113)		
PGM Search	Ο	Enter Stat	ion Range :		2 Load	S
System ID & Numbering Plans		Station Ra	inge 1000-1045			
Station Data	~	<mark>Order</mark> <u>↓</u> a	Check All	Attribute <u>↓</u> ^a	Value	Range
		1		Call Wait	For External/Internal	
Station Type(110)	_	2		Call Wait Signal Continuous	OFF •	
Common Attributes(111)	_	3		Call Wait Signal Duration(*3sec.) Of A Call	2	2~20(*3sec)
Terminal Attributes(112)	_	4		CLIP Display	ON V	
CLI Attributes(113)	_	5		COLP Display	ON V	
Flexible Buttons(115/129)	_	6		CLIR Service	OFF V	
Station COS(116)	_	7		COLR Service	OFF T	
CO/IP Group Access(117)	_	8		CLI Name Display	ON T	
Internal Page Zone Overview Internal Page Zone(118)	_	9		CLI/IP Message Wait	OFF T	
PTT Group Access(119)		10		FAST CLI For Transfer Call	OFF T	
Preset Call Forward(120)	_	11		E.164 Call Log CLI (for SIP Extension)	OFF T	
Idle Line Selection(121)				CID Password	Go to Setting	
Station IP Attributes(122)		12		Station CLI 1	1000	Max 12 Digits
Station Timers(123)		13		Station CLI 2		Max 16 Characters
Linked Station(124)		14		Station CLI 3		Max 16 Characters
Station ICM Group(125)		15		Station CLI 4		Max 16 Characters
Station VM Attributes (127)		15		Station CLI 5		Max 16 Characters
Station Personal CCR(128)		10		CLI/Redirect Display		max to characters
Station Name Overview			_	1.7		
Station Name Display Station User Greeting		18		Station or Attendant	Station •	
Station Data Copy		19		CPN type	NOT SEND V	
Station CTLIP Address		20		CLI Name Preference	NET V	
Station Recording Infomation		21		Display Restricted Caller Number	OFF V	

Figure 6.2.4-1 CLI Attributes (PGM 113)

CLI Attributes define Called and Calling Line ID characteristics for the station. Generally, the entry will turn the feature ON (enable) or OFF (disable) or enter is made in the text box. Refer to the following table for a description of the features and the input required.

Setting CID Password directly

You can set the CID password to click **[Go to Setting]** button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click **[Save]** button.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call Wait	When a busy station receives a call, the call may queue to the station instead of receiving busy treatment. With Call Wait, the caller will hear Ring-back tone and the CO/IP Line LED flashes. Also, the CLI for the new incoming call displays.	OFF, For External/Internal, For External, For Internal	For External/Internal

Table 6.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call wait signal continuous	When this filed set On, you will get the indication of Call wait signal continuously without returning to the current conversation. In case of Off, you will return to the current conversation after 1 cycle of Call wait signal indication.	ON, OFF	OFF
Call wait signal duration (*3sec.) of a call	You can set the call wait signal duration of a waiting call: the default is 2 (2*3sec.) and the range is from 2 to 20.	2-20 (*3sec)	2
CLIP Display	CLIP (Calling Line Identification Presentation), a carrier service, sends the number of the calling party to the system in the Call SETUP message. If enabled here, the number will be shown in the iPECS LIP and LDP Phone LCD.	OFF ON	ON
COLP Display	COLP (Connected Line ID Presentation), a carrier service, sends the number of the answering party to the system in the Call CONNECT message. If enabled here, the number will be shown in the iPECS LIP and LDP Phone LCD.	OFF ON	ON
CLIR Service	CLIR (Calling Line Identification Restriction), a carrier service, removes calling party ID sent from the ISDN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction when an outgoing ISDN call is placed.	OFF ON	OFF
COLR Service	COLR (Connected Line ID Restriction), a carrier service, removes connected party ID sent from ISDN messages to the calling party with a RESTRICT instruction in the CONNECT message. If enabled here, the system will send the restrict instruction when the station answers an ISDN call.	OFF ON	ON
CLI Name Display	When the CLI data in the call SETUP message from the carrier matches a number in Speed Dial, the system can display the name associated with the Speed Dial bin, if set to ON.	OFF ON	OFF
CLI/IP Message Wait	A log of missed calls with Caller ID can be maintained for the user, permitting the user to call back the identified party. Up to 4000 entries are maintained in the log, system-wide.	OFF ON	OFF
FAST CLI For Transfer Call	If this feature is set to ON, when a transferred call is routed to an SLT or DECT phone, the CLI for the CO/IP call is sent to the SLT or DECT phone instead of transferring station number.	OFF ON	OFF
E.164 Call Log CLI	When enabled, the E.164 format CLI is sent to SIP	OFF	OFF
(for SIP Extension)	Extensions for an incoming CO/IP call.	ON	
Station CLI 1	When not restricted by CLIR or COLR, this entry is added	12 digits	1000
Station CLI 2	to the number in the COLP/CLIP Table defined for the	16 characters	
Station CLI 3	CO/IP Line under the CO Line Data CID/CPN Attributes	16 characters	
Station CLI 4 Station CLI 5	and used as the caller or answering party id. The specific Station CLI (1-5) is determined as the Station CLI Type assigned in the CID/CPN Attributes for the CO/IP Line.	16 characters 16 characters	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CLI/Redirect Display	When an incoming call is redirected in the carrier's network, the call SETUP message will contain an original and redirected CLI. This selection determines if the iPECS IP and LDP Phone will display the original or redirected number.	Original CLI Redirect CLI	Original CLI
Station or Attendant	The Station CLI added to the CLIP or COLP can be, the CLI associated with the Attendant or the station.	Station Attendant	Station
CPN Type	NOT SEND: CPN is not sent to S0 interface. STATION NUMBER: Station number is sent as CPN to S0 interface. BYPASS FROM NET: Incoming CPN is sent as CPN to S0 interface.	Not send, Station number, By pass from NET	Not send
CLI Name Preference	NET: If CLI name is provided from network, then it is displayed. If CLI name is not provided from network, matched Speed name is displayed. SPD: If CLI is matched with Speed bin and it has name, then matched Speed name is displayed. If CLI is not matched or matched Speed name is not configured, CLI name from network is displayed.	NET, SPD	NET
Display Restricted Caller Number	When {Display Restricted Caller Number} in CLI Attributes(113) of a station is ON, Although the caller number is restricted in ISDN message, the ringing station displays the caller number.	OFF ON	OFF

Table 6.2.4-1 CLI Attributes

6.2.5 Flexible Buttons - PGM 115/129

Selecting Flexible Buttons will display the Flexible buttons data input page. Enter a valid Station range and click **[Load]** to enter Flexible button data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

			xible Buttons(11×		
PGM Search C	Enter Station R	ange :		C Load	Save
System ID & Numbering Plans	Station Range	1000-1045			
Station Data v	Check All	Button	Туре	Value	Label
		Flex Button 1	CO Line	1	
Station Type(110)		Flex Button 2	CO Line	2	
Common Attributes(111)		Flex Button 3	CO Line	' 3	
Terminal Attributes(112)		Flex Button 4	CO Line •	4	
CLI Attributes(113)		Flex Button 5	CO Line	5	
Flexible Buttons(115/129)		Flex Button 6	CO Line	6	
Station COS(116)		Flex Button 7	CO Line	7	
CO/IP Group Access(117)	0	Flex Button 8	CO Line	1 8	
Internal Page Zone Overview		Flex Button 9	CO Line •	9	
Internal Page Zone(118) PTT Group Access(119)		Flex Button 10	CO Line		
PTT Group Access(TT9) Preset Call Forward(120)		Flex Button 11			
Idle Line Selection(121)		Flex Button 12	Loop		
Station IP Attributes(122)		Flex Button 13	Station Number		
Station Timers(123)					
Linked Station(124)		Flex Button 14	Station Number		
Station ICM Group(125)		Flex Button 15	Station Number		
Station VM Attributes (127)		Flex Button 16	Station Number	1003	
Station Personal CCR(128)		Flex Button 17	Station Number	1004	
Station Name Overview		Flex Button 18	Station Number	1005	
Station Name Display		Flex Button 19	Station Number	1006	
Station User Greeting		Flex Button 20	Station Number	1007	
Station Data Copy		Flex Button 21	Station Number	1008	
Station CTI IP Address		Flex Button 22	Station Number		
Station Recording Infomation		Flex Button 23	Station Number		
		Flex Button 24	Station Number		

Figure 6.2.5-1 Flexible Buttons Assignment

Each Flex button for each iPECS IP and LDP Phones, and DSS Console can be assigned a function (TYPE) as below. After selecting the Type for a button, enter the value, if required. The types available from the drop-down menu are shown in Table below. In addition, for the LIP Phone models 8040, 8050, and 9000 series and the LSS Console models, a label can be assigned that is used as the designation for the button in the LCD of the phone.

ТҮРЕ	REMARK
N/A	Empty (unassigned), may be defined by the user.
CO Line	Assigns a button to access a defined CO/IP line.
CO Group	Assigns a button to access a free line in the CO/IP Group.
Loop	Assigns a button to access CO/IP Line that does not otherwise appear on the phone.
Station Number	Assigns a button as DSS/BLF for the assigned station number.

Table 6.2.5-1 FLEXIBLE BUTTON TYPE & VALUE

TYPE	REMARK
Programming (Numbering Plan)	Assigns a button to dial a code from the Flexible Numbering Plan as shown in Appendix B.
Programming (PGM)	Assigns a button to perform a User Program function from the Numbering Plan shown in Appendix A.
Station Speed Bin	Assigns a button to a Station Speed Dial bin.
System Speed Bin	Assigns a button to a System Speed Dial bin.
Net Station Number	Refer to Network Numbering Plan Table - PGM 324.
U-Loop	U-Loop button for call wait of internal & external call

Table 6.2.5-1 FLEXIBLE BUTTON TYPE & VALUE

6.2.6 Station COS - PGM 116

Selecting Station COS will display the Station COS data input page. Enter a valid station range and click **[Load]** to enter the Station COS data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

PGM Base Function	Base	< Favori	te PGM St	ation COS(116) ×			
Q PGM Search	Θ	Enter Stati	on Range :			? Load	Save
System ID & Numbering Plans			nge 1000-1045				
Station Data	~	Order <u>↓</u> a	Check All	Attribute	Value		
		1		Day COS	1 •		
Station Type(110)		2		Night COS	1 🔻		
Common Attributes(111)		3		Timed Ring COS	1 🔻		
Terminal Attributes(112)							
CLI Attributes(113)							
Flexible Buttons(115/129)							
Station COS(116)							
CO/IP Group Access(117)							
Internal Page Zone Overview							
Internal Page Zone(118)							
PTT Group Access(119)							
Preset Call Forward(120)							
Idle Line Selection(121)							
Station IP Attributes(122)							
Station Timers(123)							
Linked Station(124)							
Station ICM Group(125)							
Station VM Attributes (127)							
Station Personal CCR(128)							
Station Name Overview							
Station Name Display							
Station User Greeting							
Station Data Copy							
Station CTI IP Address							
Station Recording Information							

Figure 6.2.6-1 Station COS

In case of PGM 116 is in condition of limited service mode due to License issue, the default value is 7 for all COS type.

All stations are assigned a Class-of-Service (COS), which determines the ability of the user to dial certain types of calls, refer to the below table. Separate COS assignments are made for Day, Timed and Night Mode operation. As a default, all stations are assigned with a Station COS of 1 for all modes, no restrictions. The station COS interacts with the CO Line COS to establish overall dialing or Toll restrictions. This interaction and the resulting restrictions are given in table 'Station/CO COS'.

Long distance calls are determined by the first dialed digit ("0" or "1") and the number of digits dialed. If the first digit dialed is a LD code, default "0" or "1", or, if the number of digits dialed exceeds the assigned LD digit counter in '*System Data SMDR Attributes section*', the call is considered a Long Distance call and appropriate restrictions applied.

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default "0" or "1", and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count cannot exceed the LD digit counter, default 7 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny Numbers
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny numbers.

Table 6.2.6-1 STATION COS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, "1" or "0") and Table C	Local Call only (LD Code, "1" or "0") and Table C	Local Call only (LD Code, "1" or "0") and Table C	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction

Table 6.2.6-2 STATION/CO COS

6.2.7 CO/IP Group Access - PGM 117

Selecting CO/IP Group Access will display the CO/IP Group Access data input page. Enter a valid station range and click **[Load]** to enter CO/IP Group Access data. Check the appropriate boxes to allow or delete access to each CO/IP Group. Click **[Save]** button after changing Value to apply.

PGM Base Function B	ase Favorite PGM	CO/IP Group A		
Q PGM Search	O Enter Station Range :		2 Load	Save
System ID & Numbering Plans	Station Range 1000-104	15		
Station Data	CO/IP Group	Unselect All		
Station Data	Group 1			
Station Type(110)	Group 2			
Common Attributes(111)	Group 3			
Terminal Attributes(112)	Group 4			
CLI Attributes(113)	Group 5			
Flexible Buttons(115/129)	Group 6			
Station COS(116)	Group 7			
CO/IP Group Access(117)				
Internal Page Zone Overview	Group 8			
Internal Page Zone(118)	Group 9			
PTT Group Access(119)	Group 10			
Preset Call Forward(120)	Group 11			
Idle Line Selection(121)	Group 12			
Station IP Attributes(122)	Group 13			
Station Timers(123)	Group 14			
Linked Station(124)	Group 15			
Station ICM Group(125)	Group 16			
Station VM Attributes (127)	Group 17			
Station Personal CCR(128) Station Name Overview	Group 18			
Station Name Display	Group 19			
Station User Greeting	Group 20			
Station Data Copy				
Station CTI IP Address	Group 21			
Station Recording Infomation	Group 22			
	Group 23			
Board Based Data	Group 24			
	Group 25			

Figure 6.2.7-1 CO/IP Group Access

Stations can be allowed or denied access to CO Lines and IP Channels by group. As a default, all stations are allowed access to all groups except Private Lines (group 201) and unused CO Lines (group 0). The CO Line of an RSGM is assigned as a Private Line by default.

6.2.8 Internal Page Zone - PGM 118

Selecting Internal Page Zone overview will display the current status of the Internal Page Zone as below.

PGM Base Function Base	< Favorite PGM Internal Page Z	x >
Q PGM Search	Internal Member List	*
System ID & Numbering Plans Station Data ~ Station Type(110) ~ Common Attributes(111) Terminal Attributes(112) CLI Attributes(113) Flexible Buttons(115/129)	Internal Page Zone 1 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 10 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 10 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 10 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 10 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 10 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1089, 1081, 1082, 10 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1033, 1094, 1095, 1096, 1097, 1098, 1081, 1082, 10 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 11 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 11 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 11 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 11 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198	032, 1033, 049, 1050, 066, 1067, 083, 1084, 100, 1101, 117, 1118, 134, 1135, 151, 1152, 168, 1169,
Station COS(116) CO/IP Group Access(117) Internal Page Zone Overview Internal Page Zone(118) YTT Group Access(119) Preset Call Forward(120) Idle Line Selection(121) Station IP Attributes(122)	Internal Page Zone 2 Internal Page Zone 3 Internal Page Zone 4	
Station Timers(123) Linked Station(124) Station ICM Group(125) Station VM Attributes (127) Station Personal CCR(128) Station Name Overview Station Name Display	Internal Page Zone 5 Internal Page Zone 6 Internal Page	
Station User Greeting Station Data Copy Station CTI IP Address Station Recording Information	Zone 7 Internal Page Zone 8 Internal Page Zone 9	
Board Based Data	Internal Page	•

Figure 6.2.8-1 Internal Page Zone overview

Selecting Internal Page Zone will display the Internal Page Zone data input page. Enter a valid station range and click **[Load]** to enter the Internal Page Zone Access data. Check the appropriate boxes to allow the station to receive pages from each Internal Page Zone. Click **[Save]** button after changing Value to apply.

PGM Base Function 8	Sase Favorite PGM Interna	I Page Z <mark>×</mark>		*
Q PGM Search	Enter Station Range :		? Load	Save
System ID & Numbering Plans	Station Range 1000-1045			
Station Data	Internal Page	Select All		
	Internal Page Zone 1			
Station Type(110)	Internal Page Zone 2			
Common Attributes(111)	Internal Page Zone 3			
Terminal Attributes(112)	Internal Page Zone 4			
CLI Attributes(113)	Internal Page Zone 5			
Flexible Buttons(115/129)	Internal Page Zone 6			
Station COS(116)	Internal Page Zone 7			
CO/IP Group Access(117)	Internal Page Zone 8			
Internal Page Zone Overview	Internal Page Zone 9			
Internal Page Zone(118) PTT Group Access(119)	Internal Page Zone 10			
Preset Call Forward(120)	Internal Page Zone 11			
Idle Line Selection(121)	Internal Page Zone 12			
Station IP Attributes(122)	Internal Page Zone 13			
Station Timers(123)	Internal Page Zone 14			
Linked Station(124)				
Station ICM Group(125)	Internal Page Zone 15			
Station VM Attributes (127)	Internal Page Zone 16			
Station Personal CCR(128)	Internal Page Zone 17			
Station Name Overview	Internal Page Zone 18			
Station Name Display	Internal Page Zone 19			
Station User Greeting	Internal Page Zone 20			
Station Data Copy	Internal Page Zone 21			
Station CTI IP Address	Internal Page Zone 22			
Station Recording Infomation	Internal Page Zone 23			
Board Based Data	Internal Page Zone 24			
Doard Dabeu Data	Internal Page Zone 25			

Figure 6.2.8-2 Internal Page Zone

Each iPECS IP and LDP Phone is assigned to receive announcements from each Internal Page Zone. A station can be assigned to any, all or no zones. Note a station not assigned to any Internal Zone will not receive any page announcements including Internal All Call. As a default, all stations except remote stations are assigned to receive pages from zone 1.

6.2.9 PTT Group Access - PGM 119

Selecting PTT (Push-to-Talk) Group Access will display the PTT Group Access data input page. Enter a valid Station range and click **[Load]** to enter the PTT Group Access data. Check the appropriate boxes to allow access to each PTT Group. Click **[Save]** button after changing Value to apply.

PGM Base Function E	ase	< Favorite PGM PT1	Group AccX	
PGM Search	0	Enter Station Range :		
System ID & Numbering Plans		Station Range 1000-1045		
Station Data	~	Internal Page	Select All	
Station Data		PTT Group 1		
Station Type(110)		PTT Group 2		
Common Attributes(111)		PTT Group 3		
Terminal Attributes(112)		PTT Group 4		
CLI Attributes(113)		PTT Group 5		
Flexible Buttons(115/129)		PTT Group 6		
Station COS(116)		PTT Group 7		
CO/IP Group Access(117)		PTT Group 8		
Internal Page Zone Overview		PTT Group 9		
Internal Page Zone(118) PTT Group Access(119)		PTT Group 0		
Preset Call Forward(120)			_	
Idle Line Selection(121)				
Station IP Attributes(122)				
Station Timers(123)				
Linked Station(124)				
Station ICM Group(125)				
Station VM Attributes (127)				
Station Personal CCR(128)				
Station Name Overview				
Station Name Display				
Station User Greeting				
Station Data Copy Station CTI IP Address				
Station CTTIP Address Station Recording Infomation				
Station Recording mioffation				

Figure 6.2.9-1 PTT Group Access

Each iPECS IP or LDP Phone is assigned to receive PTT announcements from any combination of the ten (10) PTT groups. Note a station not assigned to any group will not receive PTT page announcements including Internal All PTT group page. As a default, all stations except remote stations are assigned to group 1.

6.2.10 Preset Call Forward - PGM 120

Selecting Preset Call Forward will display the Preset Call Forward data input page. Enter a valid station range and click **[Load]** to enter the Station Preset Call Forward data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

	GM Base Function B	STC	< Favo	rite PGM	Preset Call For	
P	GM Search	Θ	Enter Sta	tion Range :		Coad
Syst	em ID & Numbering Plans		Station R	ange 1000-1045		
Stati	on Data	~	Order <u>↓</u> a	Check All	Call Forward Type	Destination
	on Data		1		Unconditional	N/A • :
St	ation Type(110)		2		Internal Busy	N/A • :
Co	ommon Attributes(111)		3		Internal No Answer	N/A ▼ :
Te	rminal Attributes(112)		4		Internal DND	N/A • :
CL	I Attributes(113)		5		External Busy	N/A ▼]:
Fle	exible Buttons(115/129)		6		External No Answer	N/A •:
	ation COS(116)		7		External DND	N/A T:
	D/IP Group Access(117)		8		Transfer to Mail Box	Station Group V : FFFF
	ernal Page Zone Overview		<u> </u>	0		
	ernal Page Zone(118)					
	T Group Access(119)	- 1				
	eset Call Forward(120) e Line Selection(121)					
	ation IP Attributes(122)					
	ation Timers(123)					
	ked Station(124)					
	ation ICM Group(125)					
	ation VM Attributes (127)					
	ation Personal CCR(128)					
iti	ation Name Overview					
t	ation Name Display					
Sta	ation User Greeting					
St	ation Data Copy					
Sta	ation CTI IP Address					
~	ation Recording Infomation					

Figure 6.2.10-1 Preset Call Forward

Stations can be programmed so that incoming CO/IP and Intercom calls forward to a preset station or station group. This allows an external or internal call to initially ring at a station and forward to a pre-determined destination. Preset Forward can be separately assigned Unconditional, Internal Busy, Internal No Answer, Internal DND, External Busy, External No Answer, External DND preset forwarding to any station, Station group, System Speed dial bin (off-net) or Station ICR. As a default, no Preset Call Forward is assigned.

For "Transfer to Mail Box" enter the Station Group number of the Voice Mail group. This will permit other users to transfer calls directly to the desired user's Voice Mailbox.

6.2.11 Station ICR Scenario - PGM 1201

Selecting Station ICR Scenario displays the input entry page.

Q PGM Search	•	Favorite PGM	Station ICR Scenario (12 ×		×
System ID & Numbering Plans Station Data		r Station Range :	C Load	2	Save
Station Type(110)	Ind		Value	Range	Del
Common Attributes(111)		Call Profile Table Usage	0	0~3 (0:Deactive CP)	
Terminal Attributes(112)		Caller ID	N/A T:	Max 23 Digits	
CLI Attributes(113)				YYYY-MM-DD format	
Flexible Buttons(115/129)		T 0 10	Start Date End Date	1111 Williebe Tonnac	
Station COS(116)		Time Condition	MON TUE WED THU FRI SAT SUN ALL Holiday Start Time - End Time		
CO/IP Group Access(117)				hhmm (Must be 4 digits) 0000-2359	
Internal Page Zone Overview	0	Destination	N/A • : CO Value Dial Digit	Max 23 Digits	
Internal Page Zone(118)		Scenario Priority		0~9 (0:highest priority)	
PTT Group Access(119)		Forwarding from NET Call	Yes 🔻		
Preset Call Forward(120)		Call Profile Table Idx	0	0~3 (0:Deactive CP)	
Station ICR Scenario (1201)		Call Profile Timer	10	10~60 sec	
< Idle Line Selection(121)		Caller ID	N/A • :	Max 23 Digits	
Station IP Attributes(122)			Start Date - End Date	YYYY-MM-DD format	
Station Timers(123)		Time Condition	MON TUE WED THU FRI SAT SUN ALL Holiday		
Linked Station(124)			Start Time - End Time	hhmm (Must be 4 digits) 0000-2359	
Station ICM Group(125)	1	Destination	N/A T: CO Value Dial Digit	Max 23 Digits	
Station VM Attributes (127)		Scenario Priority	NA CO Value Diai Digit	0~9 (0:highest priority)	
Station Personal CCR(128)		,		0-9 (c.nignest phonty)	
Station Name Overview		Forwarding from NET Call			
Station Name Display		Call Profile Table Idx	0	0~3 (0:Deactive CP)	
Station User Greeting		Call Profile Timer	10	10~60 sec	
Station Data Copy		Caller ID	N/A •:	Max 23 Digits	
Station CTI IP Address			Start Date - End Date	YYYY-MM-DD format	
Station Recording Infomation		Time Condition	MON TUE WED THU FRI SAT SUN ALL Holiday		
			Start Time - End Time	hhmm (Must be 4 digits) 0000-2359	9
Board Based Data	2	Destination	N/A CO Value Dial Digit	Max 23 Digits	
CO Line Data		Scenario Priority		0~9 (0:highest priority)	
		Forwarding from NET Call	Yes •		
System Data	-	Call Profile Table Idx	0	0~3 (0:Deactive CP)	

Figure 6.2.11-1 Station ICR Scenario

Station ICR is an extension of call forward where the user enters scenarios to define the call forward feature. Each station has ten (10) routing scenarios that define conditions for routing a user's incoming calls. Each scenario may define time of day, day of week, date, caller ID and destination for incoming calls. In addition, the scenarios may be prioritized; calls are routed to the destination with the highest priority-matching scenario.

6.2.12 Idle Line Selection - PGM 121

Selecting Idle Line Selection will display the Idle Line Selection data input page. Enter a valid Station range and click **[Load]** to enter the Idle Line Selection data. Check the appropriate radial button and enter the value for the Idle Line Selection. Click **[Save]** button after changing Value to apply.

e Function I	Base	< Favorite PGM Idl	e Line SelecX		
Search	Θ	Enter Station Range :		2 Load	
m ID & Numbering Plans		Station Range 1000-1045			
		Destination	Value		
on Data	~	No Selection			
ation Type(110)		Flex Button			
ommon Attributes(111)		CO Line			
erminal Attributes(112)		CO Group			
LI Attributes(113)		Station/Net			
exible Buttons(115/129)		Station Group			
tation COS(116)		Station Speed			
O/IP Group Access(117)		System Speed			
nternal Page Zone Overview		System Speed			
nternal Page Zone(118)					
PTT Group Access(119)					
Preset Call Forward(120)					
dle Line Selection(121)					
Station IP Attributes(122)					
Station Timers(123)					
inked Station(124)					
tation ICM Group(125)					
Station VM Attributes (127)					
Station Personal CCR(128)					
tation Name Overview					
tation Name Display					
Station User Greeting					
Station Data Copy Station CTI IP Address					
Station CTTTP Address					

Figure 6.2.12-1 Idle Line Selection

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides intercom dial tone. In place of dial tone, the station can be programmed to access a CO Line, CO/IP Group or call a Station or Station Group as described in the below table when the station goes off-hook. The Idle Line Selection (Prime Line) can be either immediate (Hot) or delayed after going off-hook (Warm). The immediate/delay selection is based on the Hot/Warm assignment in '*Common Attributes - Prime Line*'.

TYPE	DESCRIPTION
No Selection	Returns Intercom dial tone.
Flex Button	Flex button, activates Flex button as if pressed.
CO Line	CO path seizes the CO line.
CO Group	CO Group seizes CO line from the CO/IP Group.
Station/Net	Station, calls the assigned station.
Station group	Station group, calls the assigned Station group.
Station speed	Station speed, calls the number assigned in a station speed bin.
System speed	System speed, calls the number assigned in a system speed bin.

6.2.13 Station IP Attributes - PGM 122

Selecting Station IP Attributes will display the Station IP Attributes data input page. Enter a valid Station range and click **[Load]** to enter the Station IP Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

	PGM Base Function Ba	se	< Favorite	PGM Station I	P Attri ×		×
C	PGM Search	0	Enter Station	Range :		2 Load	Save
	System ID & Numbering Plans		Station Range				
	Station Data	~	Change	Attribute Direct IP Call	Value Enable 🔻		
<	Station Type(110) Common Attributes(111) Terminal Attributes(112) CLI Attributes(113) Flexible Buttons(115/129) Station COS(116) CO/IP Group Access(117) Internal Page Zone Overview Internal Page Zone Overview Internal Page Zone(118) PTT Group Access(119) Preset Call Forward(120) Idle Line Selection(121) Station IP Attributes(122) Station Timers(123) Linked Station(124) Station ICM Group(125) Station VM Attributes (127) Station Personal CCR(128) Station Name Overview Station Name Display Station Data Copy Station CTI IP Address Station Recording Information						

Figure 6.2.13-1 Station IP Attributes

Stations are allowed access to the systems VoIP resources based on the Station IP Attributes.

6.2.14 Station Timers - PGM 123

Selecting Station Timers will display the Station Timers input page. Enter a valid Station range and click **[Load]** to enter the Station Timers data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

P	GM Base Function B	ase	<	Favo	orite PGM	Station Timers(
	PGM Search	0	Ente	er Sta	ation Rang	e :		2	Load
3	system ID & Numbering Plans				ange 1000				
s	station Data	~		ler <u>1</u> ª	^a Change		Value		Range
			1			Station Forward No Answer Timer			000-600
	Station Type(110)		2			Cut Off Timer	0	(*1min)	00-99
	Common Attributes(111)								
	Terminal Attributes(112)								
	CLI Attributes(113)								
	Flexible Buttons(115/129)								
	Station COS(116)								
	CO/IP Group Access(117)								
	Internal Page Zone Overview								
	Internal Page Zone(118)								
	PTT Group Access(119)								
	Preset Call Forward(120)								
	Idle Line Selection(121)								
	Station IP Attributes(122)								
Ì	Station Timers(123)								
	Linked Station(124)								
	Station ICM Group(125)								
	Station VM Attributes (127)								
	Station Personal CCR(128)								
	Station Name Overview								
	Station Name Display								
	Station User Greeting								
	Station Data Copy								
	Station CTI IP Address								
	Station Recording Infomation								

Figure 6.2.14-1 Station Timers

Certain timers can be assigned on a station basis. Available timers, description and valid inputs are given in the below table.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Forward No Answer Timer	Lattects both manual and 'Preset Call Forward' and		0
Cut Off Timer	Allowed length of CO/IP calls when station is assigned ' <i>Call Time restriction in Common</i> Attributes of Station data'.	00-99 (minutes)	0

6.2.15 Linked Station - PGM 124

Selecting Linked Station will display the Linked Station input page. Enter a valid Station range and click **[Load]** to enter the Linked Station data. Click **[Save]** button after changing Value to apply.

PGM Search	C Enter Station Range :			2	Load			Save
System ID & Numbering Plans	Station Range 1000-1		ID Address	Device ID Address	Mada	400	Desister	Cadar
Station Data	× Station Number <u>J</u> ^a	MAC Address	IP Address	Router IP Address	Mode	ARP	Register Multicast •	Codec G.711 •
	1001					OFF V	Multicast V	G.711 V
Station Type(110)	1002					OFF T	Multicast •	G.711 •
Common Attributes(111)	1002							
Terminal Attributes(112)						OFF V	Multicast V	G.711 •
CLI Attributes(113)	1004					OFF •	Multicast •	G.711 •
Flexible Buttons(115/129) Station COS(116)	1005					OFF •	Multicast •	G.711 V
CO/IP Group Access(117)	1006					OFF •	Multicast •	G.711 •
Internal Page Zone Overview	1007					OFF T	Multicast 🔻	G.711 •
Internal Page Zone(118)	1008					OFF 🔻	Multicast 🔻	G.711 •
PTT Group Access(119)	1009					OFF v	Multicast 🔻	G.711 T
Preset Call Forward(120)	1010					OFF T	Multicast 🔻	G.711 •
Idle Line Selection(121)	1011					OFF v	Multicast 🔻	G.711 •
Station IP Attributes(122)	1012					OFF •	Multicast 🔻	G.711 •
Station Timers(123)	1013					OFF •	Multicast •	G.711 •
Linked Station(124)	1014					OFF T	Multicast V	G.711 •
Station ICM Group(125)	1015				í	OFF •	Multicast •	G.711 •
Station VM Attributes (127)	1016					OFF V	Multicast V	G.711 •
Station Personal CCR(128)	1017					OFF T	Multicast V	G.711 •
Station Name Overview	1018					OFF T	Multicast V	G.711 •
Station Name Display	1019					OFF V	Multicast V	G.711 •
Station User Greeting								
Station Data Copy	1020					OFF T	Multicast •	G.711 •
Station CTI IP Address Station Recording Infomation	1021					OFF T	Multicast •	G.711 •
Station Recording miomation	1022					OFF T	Multicast •	G.711 •
oard Based Data	1023					OFF 🔻	Multicast 🔻	G.711 🔹

Figure 6.2.15-1 Linked Station Pair

For UCS Client, it is recommended that PGM 443 be employed for an unregistered (MAC Linked pair) station. When unregistered station linking is used, the linked station does not reduce the system's capacity. However, in this case, the linked station must be an iPECS IP Phone. Unregistered linking is allowed only to an iPECS IP Phone. Once UCS Client is linked, it will display in this Web page as well as in PGM 103 and 443.

If the station is assigned to Master or Slave by linked station, the bracket '[M] or [S]' will be displayed by the station number in PGM 101, 103, 105, 124 of Web page.

To link registered stations, the Personal Group feature is used and configured in PGM 260 and 261.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MAC Address	Set MAC address of linked un-registered station, required data. Note the secondary station must not be registered in the system prior to linking. If needed, delete the device from the system prior to linking.		

Table 6.2.15-1 LINKED STATION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
IP Address	The IP Address of the linked station.	IPv4 address	
Router IP Address	Set the Router IP address for a linked station.	IPv4 address	
Mode	This field displays the operating mode of the station, remote or local and NAT or NAPT.	Remote: R/NAPT R/NAT R/NAP R Local/Remote: LO/NAPT LO/NAT LO/NAP LO Local: L/NAPT L/NAT L/NAP L	L (Local)
ARP	If OFF, the system will employ layer 2 switching over the LAN to communicate with the linked station. If ON, the system will employ ARP (Address Resolution Protocol) to determine the IP address of the device, if required, and communicate using IP.	OFF ON	OFF
Register	Normally, iPECS IP devices register using multi-cast packets. When separated from the system, that is when the device is remote, unicast is used.	Multicast Unicast	Multicast
Codec Type	A specific Codec type can be configured for the station.	G.711 G.723.1 G.729 System, use the codec defined for the system	G.711

Table 6.2.15-1 LINKED STATION TABLE

6.2.16 Station ICM Tenancy Group - PGM 125

Selecting Station ICM Tenancy Group displays the Station ICM Tenancy Group input page. Select ICM Tenancy Group and click **[Load]**, the system will display the ICM Tenancy Group Characteristics. Enter the Station number of the group Attendant and check the appropriate box to allow calling to the group. Click **[Save]** button after changing Value to apply.

	PGM Base Function Ba	ase Favorite	PGM Station ICM Grox
a	PGM Search	C Enter ICM Te	enancy Group No (1 - 100) : Load
	System ID & Numbering Plans	ICM Tenancy	Group 1
	Station Data	ATD STA Nu	
		Selec	t All Set Access Group
	Station Type(110)		Access Group 1
	Common Attributes(111)		Access Group 2
	Terminal Attributes(112)		Access Group 3
	CLI Attributes(113)		Access Group 4
	Flexible Buttons(115/129)		Access Group 5
	Station COS(116)		Access Group 6
	CO/IP Group Access(117)		Access Group 7
	Internal Page Zone Overview		Access Group 8
	Internal Page Zone(118) PTT Group Access(119)		Access Group 9
	Preset Call Forward(120)		Access Group 10
	Idle Line Selection(121)		Access Group 11
	Station IP Attributes(122)		Access Group 12
	Station Timers(123)		
	Linked Station(124)		Access Group 13
	Station ICM Group(125)		Access Group 14
	Station VM Attributes (127)		Access Group 15
	Station Personal CCR(128)		Access Group 16
	Station Name Overview		Access Group 17
	Station Name Display		Access Group 18
	Station User Greeting		Access Group 19
	Station Data Copy		Access Group 20
	Station CTI IP Address		Access Group 21
	Station Recording Infomation		Access Group 22
	Board Based Data		Access Group 23
		.	Access Group 24

Figure 6.2.16-1 Station ICM Tenancy Group

Stations can be assigned to an ICM Tenancy group under '*Common Attributes section*'. Up to 100 Tenant groups can be defined. Each group is configured to allow or deny placing intercom calls, including transfers, to stations in other groups and an Attendant station can be defined for each group. The Attendant will receive "dial 0" calls and controls Day/Night mode for the group.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ATD STA Number	Assign the Attendant station for the ICM Tenant group. The ATD receives dial '0' calls and controls Day/Night Service. Any station can be assigned as the Attendant for the Tenancy group.	Station No.	
Group Access	ICM tenancy groups allowed access by stations of the selected group.	1~100	1

Table 6.2.16-1 STATION ICM TENANCY GROUP ATTRIBUTES

6.2.17 Station Voice Mail Attributes – PGM 127

Selecting VM Attributes displays the Station Voice Mail Attributes input page. Enter a valid Station range and click **[Load]** to enter the Station Voice Mail Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

PG	M Base Function Base	<	Fav	orite PGM	Station VM Attribut					
Q PGM Search		о е	Enter Station Range :				? Load	Save		
System ID & Numbering Plans Station Range 1000-1045										
Station Data V			Order <u>J</u> ^a Check All		Attribute <u>↓</u> ^a		Value	Range		
otation	Data		Basic Attributes							
Statio	on Type(110)		1		VSF Access	Enable •				
Comr	mon Attributes(111)		2		Two Way Record	OFF T				
Term	inal Attributes(112)		3		VM Device Slot Seq.			3001		
CLI A	Attributes(113)		4		Multi Language	Prompt1				
Flexi	ble Buttons(115/129)		5		Pre-Sel Msg Language	Prompt1 •				
Station COS(116) CO/IP Group Access(117)			6		Default VM group number	FFFF				
			7		Automatic Talk Recording Option	OFF T				
	nal Page Zone Overview		8		Automatic Talk Recording Destination					
	nal Page Zone(118)		9		VSF MSG Date/Time	ON T				
	Group Access(119)		10		VM Password Check	Password or	nly 🔻			
	Preset Call Forward(120) Idle Line Selection(121)		11		VMID Number	1000		Max 8 Digits		
	on IP Attributes(122)		12		Retrieve MSG Method	LIFO V		max o Digito		
	on Timers(123)		13		Wake-Up Announcement	0		0 - 200 (0 : Unused)		
	d Station(124)		14		Two Way Record Announcement	0		0 - 200 (0 : Unused)		
Statio	on ICM Group(125)							0 - 200 (0 . Onused)		
Statio	on VM Attributes (127)		15		Message Wait Notice(MWI, CLI, VM)					
Statio	on Personal CCR(128)		1		VM Message No	Enhanced Attributes 000 (New: 000 , Saved: 000 , Urgent: 000)				
Statio	Station Name Overview		2		VM Message No VM COS	1 T	, carea. ooo, orgent. ooo	/		
Station Name Display			3		Administrator MailBox	Disable V				
	Station User Greeting		4							
	on Data Copy				Announce only MailBox	Disable Previous Menu				
	on CTI IP Address		5		Announce only Option					
Statio	Station Recording Infomation		6		Company Directory - First Name			Max 12 Characters		
D 10 10.			7		Company Directory - Last Name			Max 12 Characters		
Board E	Based Data	-	8		Message Rewind/Fast-Forward Time	04		3-99 (sec)		

Figure 6.2.17-1 Station VM Attributes

The Station VM Attributes are divided into three sub-sections. The Basic Attributes assign general characteristics of the Station's Voice Mail and announcements. En100hanced Attributes assign characteristics including VM COS, notification, cascading and Company Directory Names. The E-Mail Notification section defines various SMTP server data such as the Station and System E-mail account data.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT								
Basic Attributes											
VSF Access	The station must be permitted VSF access to access the built-in Voice Mailbox.	Disable Enable	Enable								
Two way Record	When allowed, the station can activate the Two-way record feature to record a conversation.	OFF ON	OFF								
VM Device Slot Seq.	The sequence number defines the VSF gateway where messages for the station are stored.	Seq. No.	3001								

Table 6.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Multi Language	The selected language is employed for prompts played to the user.	Prompt 1~6	Prompt 1
Pre-selected Message Language	The selected language is employed for prompts played to an external CO caller if the called station has activated Pre-selected Message.	Prompt 1~6	Prompt 1
Default VM group number	When the user has no Voice messages and selects the [Call Back/Msg] button, the "Default VM group number" is called.		
Automatic Talk Recording Option	This field enables unconditional recording of all calls placed or received by the station. Recordings, in .wav format, are stored at the Call Recording destination defined below.	OFF ON	OFF
Automatic Talk Recording Destination	When Auto Call Recording is defined for a station, the destination for the recording is defined here. The UCS Client Station number, or an IPCR or 3 rd party SIP recording server.	Station or Group	
VSF MSG Date/Time	When ON, the date and time the message was received is played to the user prior to the message.	OFF ON	ON
VM Password check	The user may be required to enter a password to access their VSF Voice Mailbox. The password can be defined as none, the Authorization code only or the normal Station Number and Authorization code.	No password Password only Station number & password	Password only
VMID Number	When using an adjunct VM, the system can translate the Mailbox number from the user's station number to the assigned VMID. The system sends the station number or VMID, if assigned, to the VM (in-band, SMDI) in order to identify the appropriate Voice Mailbox.	Max. 8 digit	Station Number
Retrieve MSG Method	Messages stored in the built-in VM may be retrieved in either a FIFO (first-in-first-out) or LIFO (last-in-first-out) order based on the default setting.	FIFO/ LIFO	LIFO
Wake-Up Announcement.	A system announcement can be recorded to play to the station as a Wakeup Announcement.	0-200	0
Two way record announcement	The two way record announcement can be recorded to play to the station as Announcement.	0-200	0
Message Wait Notice(MWI, CLI, VM)	When a user has voice mail, system can provides this as voice prompt instead of dial tone according to option based on station. Disable: System provides normal dial tone when a user goes to off hook status. Tone: System provides warning tone instead of dial tone to give indication when a user goes to off hook status. Prompt: System provides message indication as voice prompt when a user goes to off hook status. DECT phone do not support this feature.	Disable, Tone, Prompt	Tone
	Enhanced Attributes		
VM Message No	Number of Voice Messages in the user's Mailbox.		
VM COS	Each Voice Mailbox is assigned one of five VM Classes of Service (COS) that determines basic characteristics of the Mailbox such as message retention. The Voice Mail COS	1-5	1

Table 6.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	attributes are set in PGM 253.		
Administrator Mailbox	A Mailbox can be assigned as an Administrator Mailbox permitting broadcast messaging and control other user mailboxes.	Disable Enable	Disable
Announce Only Mailbox	A mailbox can be configured so that the connected party will hear the greeting but cannot leave a message, Announce Only. After the greeting, the call is routed based on the "Announce Only Option below.	Disable Enable	Disable
Announce Only Option	This feature determines if the caller will be disconnected or returned to the previous menu after hearing an Announce Only Mailbox greeting.	Previous Menu/ Hang Up	Previous menu
Company Directory – First Name	This feature is first name of a station for Company Directory feature.	Max. 12 characters	N/A
Company Directory – Last Name	This feature is last name of a station for Company Directory feature.	Max. 12 characters	N/A
Message Rewind/Fast-Forward Time	While listening to a message, the user may rewind or fast forward. The Rewind and Fast Forward time can be set according to user's needs.	3 – 99 (Seconds)	04
VM Notify retry count	If the notification to the user's mobile fails repeatedly, after the retry count, the system will send the call to the Attendant to complete the notification.	00 – 99	03
VM Notify dial time	When the Mobile notification call is placed, the system will terminate the call, considering the retry count of failure, if no digits are received from the mobile phone user before the timer expires.	00 – 99 (Seconds)	15
VM Forward Option	When a left message is forwarded, this feature is applied.	Move / Copy	Move
Cascade Mailbox 1	A left message is copied or moved to 1'st mailbox destination station.	Station No	N/A
Cascade Mailbox 2	A left message is copied or moved to 2'nd mailbox destination station.	Station No	N/A
Cascade Mailbox 3	A left message is copied or moved to 3'rd mailbox destination station.	Station No	N/A
Cascade Mailbox 4	A left message is copied or moved to 4'th mailbox destination station.	Station No	N/A
Cascade Mailbox 5	A left message is copied or moved to 5'th mailbox destination station.	Station No	N/A
Cascade Method	Cascade method can be set.	Disable / Copy / Move	Disable
Cascade Message Type	Cascade Message Type can be selected.	Normal Only / Urgent Only / All	Normal Only
Cascade Apply Timer	Cascade Apply Timer is set.	001 ~250 (min)	000
	E-Mail notification [Send Mail]		
	d Mail] button is used for sending the mail after filling out the		Γ
SMTP Server Address (IP or Domain name)	This field defines the IP address or URL of the SMTP mail server the system will use to send the notification E-mail.	IP v4 address or Mail server name	
SMTP Port	This field defines the TCP/IP port the system will employ	00001 - 65535	25

Table 6.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	when communicating with the SMTP E-mail server.		
SMTP Security connection	The system can support basic security policies when communicating with the SMTP E-mail server. Note the server must also be configured for the selected security protocol.	No Security SSL TLS	No Security
E-Mail Account ID	This field defines the account Identification for the system's E-mail account in the SMTP server.		
E-Mail Account Password	This field defines the password for the system's E-mail account in the SMTP server.		
Sender E-Mail Address (From)	This field defines the E-mail address used to send the new Voice Message notification via E-mail.	E-mail address	
Receiver E-Mail Address (To)	This field defines the E-mail address to notify when a new VSF message is received for the station.	E-mail address	
Attach Message Option	When E-mail notification is enabled in the VM COS (PGM 253), the E-mail may include the Voice message as a wav file attachment. The proper information must be assigned for the receiver mail and system mail account.	OFF ON	ON
Delete Message Option	After sending an E-mail notification, the system will automatically delete the Voice message from the user's Voice Mailbox if this parameter is ON.	OFF ON	OFF

Table 6.2.17-1 STATION VM ATTRIBUTES

6.2.18 Station Personal CCR Table – PGM 128

Selecting Station Personal CCR displays the Station Personal CCR Table input page. Enter a valid Station range and click **[Load]** to enter the Station Personal CCR Table data. Click **[Save]** button after changing the type or value.

PGM Search	C Enter Stat					- 4
PGM Search	Enter Stat	ion Range :				ad
System ID & Numbering Plans		inge 1000-1045				
Station Data	Order <u>↓</u> ^a	Attribute	Туре		Value	VMID
itation Data	1	1 Destination	N/A	•		STA :
Station Type(110)	2	2 Destination	N/A	•		STA :
Common Attributes(111)	3	3 Destination	N/A	•		STA :
Ferminal Attributes(112)	4	4 Destination	N/A	•		STA :
LI Attributes(113)	5	5 Destination	N/A	•		STA :
Flexible Buttons(115/129)	6	6 Destination	N/A	•		STA :
Station COS(116)	7	7 Destination	N/A	•		STA :
CO/IP Group Access(117)	8	8 Destination	N/A	-		STA :
nternal Page Zone Overview	9	9 Destination	N/A	-		STA :
Internal Page Zone(118)	10	0 Destination	N/A	-		STA :
PTT Group Access(119)	10	CCR Table Usage	OFF T			on
Preset Call Forward(120)	12	CCR One Digit	OFF T			
Idle Line Selection(121)	13	* Button Used As	Leave Message Immediate			
Station IP Attributes(122) Station Timers(123)	14	# Button Used As	Access Mailbox			
Linked Station(124)						
Station ICM Group(125)						
Station VM Attributes (127)						
Station Personal CCR(128)						
Station Name Overview						
Station Name Display						
Station User Greeting						
Station Data Copy						
Station CTI IP Address						
Station Recording Infomation						

Figure 6.2.18-1 Station Personal CCR Table

A CCR Table can be associated with the station's Voice Mail greeting recorded for the built-in Voice Mail. The greeting should direct the caller to enter a digit when the called user is busy or does not answer.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
1-0 Destination	Entries $1 \sim 9$ and 0 represent the digit dialed by the outside caller. A destination type and value is defined for each digit. Refer to Table 6.2.17-2 for the destinations available.		
CCR Table Usage	This option enables use of the CCR Table. If not enabled, DISA is employed to analyze the caller-dialed digits and determine routing.	OFF ON	OFF
CCR One Digit	When ON, the system will analyze the first digit received only, additional digits dialed by the caller are ignored.	OFF ON	OFF
* Button Used As	 The asterisk (*) can be used for the following functions only: Flex Numbering Plan Replay Greeting Access Mailbox Leave Message Immediate 	Refer to Description	Leave Message Immediate

Table 6.2.18-1 STATION CCR Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
# Button Used As	 The pound (#) can be used for the following functions only: Flex Numbering Plan Replay Greeting Access Mailbox Leave Message Immediate 	Refer to Description	Access Mailbox

Table 6.2.18-1 STATION CCR Table

Table 6.2.18-2 STATION CCR DESTINATIONS

DESTINATION TYPES
Route to a Station
Route to a Station Group
Route with System Speed Dial
Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
Route to VSF Announcement
Route to VSF Announcement and disconnect
Route to Networked Station.
Conference Room
Internal Page
External page
All Call Page
Route to voice mail(station group/station number)
Company Directory
Record VM Greeting
Room type conference group join

6.2.19 Station Name Overview & Display

Selecting Station Name Overview shows the current station name.

PGM Base Function Base	< Favorit	e PGM Station Nan	ne Over <mark>×</mark>	
PGM Search	Index <u>↓</u> a	Station Number <u>↓</u> ª	Station Name <u>↓</u> ª	
	1	1000	A	
stem ID & Numbering Plans	2	1001	В	
ation Data 🗸 🗸	3	1002	C	
ation Data	4	1003	D	
Station Type(110)	5	1004	E	
Common Attributes(111)	6	1005	F	
Ferminal Attributes(112)	7	1006	G	
CLI Attributes(113)	8	1007	Н	
Flexible Buttons(115/129)	9	1008	1	
Station COS(116)	10	1009	J	
CO/IP Group Access(117)	11	1010	К	
ternal Page Zone Overview	12	1011	L	
nternal Page Zone (118)	13	1012	M	
PTT Group Access(119)	14	1013	N	
	15	1014	0	
Preset Call Forward(120)	16 17	1015	P	
Idle Line Selection(121)	17	1016 1017	Q R	
Station IP Attributes(122)	18	1017	S	
Station Timers(123)	20	1018	T	
Linked Station(124)	20	1019	I	
Station ICM Group(125)				
Station VM Attributes (127)				
Station Personal CCR(128)				
Station Name Overview				
tation Name Display				
station User Greeting				
Station Data Copy				
Station CTI IP Address				
Station Recording Infomation				



Selecting Station Name Display will display the Station Name input page. Enter a valid Station range and click **[Load]** to enter the Station Name data. Click **[Save]** button after changing the type or value.

PGM Base Function Base	< Favorit	e PGM	Station Name Display $_{\mathcal{O}}^{\mathbf{x}}$		
PGM Search	Enter Station	Range :		2 Load	Save
ystem ID & Numbering Plans	Station Range	e 1000-1045			
tation Data v	Station Number <u>↓</u> ª	Station Name <u>↓</u> ª	Input Name	Company Directory - First Name	Company Directory - Last Name
Otation Trans (110)	1000				
Station Type(110)	1001				
Common Attributes(111) Terminal Attributes(112)	1002				
CLI Attributes(112)	1003				
ELE Attributes(113) Flexible Buttons(115/129)	1004				
Station COS(116)	1005				
CO/IP Group Access(117)	1006				
nternal Page Zone Overview	1007				
internal Page Zone(118)	1007				
PTT Group Access(119)	1009				
Preset Call Forward(120)					
dle Line Selection(121)	1010				
Station IP Attributes(122)	1011				
Station Timers(123)	1012				
Linked Station(124)	1013				
Station ICM Group(125)	1014				
Station VM Attributes (127)	1015				
Station Personal CCR(128)	1016				
Station Name Overview	1017				
Station Name Display	1018				
Station User Greeting	1019				
Station Data Copy	1013				
Station CTI IP Address					
Station Recording Infomation	1021				
	1022				
ard Based Data	1023				

Figure 6.2.19-2 Station Name Display

You can fill out the Station name, Input name (up to 20 digits), company directory-First name & Last name for customer's convenience.

6.2.20 Station User Greeting

Selecting Station User Greeting will display the Station User Greeting data input page. Enter a valid Station range and click **[Load]** to enter the Station Voice Mail Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

PGM Base Function Ba	se	< Favo	orite PGM	Station User	Gre O				
PGM Search	Θ	Enter Stat	ion Range :					2 Load	Si
ystem ID & Numbering Plans		Station Ra	ange 1000-1045						
itation Data	~	Order <u>↓</u> a	Check All	Condition	Call Type	Time	User Greeting		
lation Data	· ·	1				Day	User Greeting 1 🔻		
Station Type(110)		2			Internal	Night	User Greeting 1 🔻		
Common Attributes(111)		3		Unconditional		Timed	User Greeting 1 🔻		
Terminal Attributes(112)		4		Unconditional		Day	User Greeting 1 🔻		
CLI Attributes(113)		5			External	Night	User Greeting 1 🔻		
Flexible Buttons(115/129)		6				Timed	User Greeting 1 🔻		
Station COS(116)		7				Day	User Greeting 1 •		
CO/IP Group Access(117)		8			Internal	Night	User Greeting 1 •		
Internal Page Zone Overview		9				Timed	User Greeting 1 •		
Internal Page Zone(118) PTT Group Access(119)		10		Busy		Day	User Greeting 1 V		
Preset Call Forward(120)		11			External	Night	User Greeting 1 V		
Idle Line Selection(121)		12			External	Timed	User Greeting 1 •		
Station IP Attributes(122)		13				Day	User Greeting 1 •		
Station Timers(123)		13			Internal	Night			
Linked Station(124)					Internal		User Greeting 1		
Station ICM Group(125)		15		DND		Timed	User Greeting 1 •		
Station VM Attributes (127)		16				Day	User Greeting 1 •		
Station Personal CCR(128)		17			External	Night	User Greeting 1 🔻		
Station Name Overview		18				Timed	User Greeting 1 🔻		
Station Name Display		19				Day	User Greeting 1 🔻		
Station User Greeting		20			Internal	Night	User Greeting 1 🔻		
Station Data Copy		21		No Answer		Timed	User Greeting 1 🔻		
Station CTI IP Address		22		NU Answel		Day	User Greeting 1 🔻		
Station Recording Infomation		23			External	Night	User Greeting 1 🔻		
ioard Based Data		24				Timed	User Greeting 1 •		

Figure 6.2.20-1 Station User Greeting

There are 4 User greeting for each station.

User can select multi user greeting depending on the condition, call type, and time.

- -. Condition: unconditional, busy, DND, No answer
- -. Call Type: Internal, External
- -. Call Time: Day, Night, Timed

6.2.21 Station Data Copy

Selecting Station Data Copy will display the Station Data Copy data input page. Enter a valid Source Station, Destination Station Range and click **[Copy]** to copy the station data.

Note that this function is not available for an Attendant station.

	PGM Base Function I	Base	<	Favorite PGM S	tation Data Copy	
۹	PGM Search	0				Ca
	System ID & Numbering Plans			Attribute	Value	
				Source Station Number		
5	Station Data	~		Destination Station Range	~	
	Station Type(110) Common Attributes(111) Terminal Attributes(112) CLI Attributes(113)			Copy Option	Include VMID Flex Button Only Exclude Flex Button Exclude VSF MSG - Receiver Mail Address Station Speed Dial Only	
	Flexible Buttons(115/129)			Result		
	Station COS(116)					
	CO/IP Group Access(117)					
	Internal Page Zone Overview					
	Internal Page Zone(118)					
	PTT Group Access(119)					
	Preset Call Forward(120) Idle Line Selection(121)					
	Station IP Attributes(122)					
	Station Timers(123)					
	Linked Station(124)					
	Station ICM Group(125)					
	Station VM Attributes (127)					
	Station Personal CCR(128)					
	Station Name Overview					
	Station Name Display					
	Station User Greeting					
	Station Data Copy					
	Station CTI IP Address	_				
	Station Recording Infomation					

Figure 6.2.21-1 Station Data Copy

6.2.22 Station CTI IP Address (1st Party TAPI)

Selecting Station CTI IP Address displays the following figure. Enter a Station Range and click **[Load]** to display and modify the CTI IP address. Click **[Save]** button after changing the type or value.

PG	M Base Function Base	• • F	avorite PGM	Station CTI IP .	×
c	PGM Search	C Enter	Station Range :		
	System ID & Numbering Plans	Station	n Range 1000-1045		
	0	Index	Station Number	IP Address	State
	Station Data	1	1000	0.0.0.0	Deactivated
	0. F. T. (140)	2	1001	0.0.0.0	Deactivated
	Station Type(110)	3	1002	0.0.0.0	Deactivated
	Common Attributes(111)	4	1003	0.0.0.0	Deactivated
	Terminal Attributes(112)	5	1004	0.0.0.0	Deactivated
	CLI Attributes(113)	6	1005	0.0.0	Deactivated
	Flexible Buttons(115/129)	7	1006	0.0.0	Deactivated
	Station COS(116)	8	1007	0.0.0	Deactivated
	CO/IP Group Access(117)	9	1008	0.0.0.0	Deactivated
	Internal Page Zone Overview	10	1009	0.0.0	Deactivated
	Internal Page Zone(118)	11	1010	0.0.0	Deactivated
	PTT Group Access(119)	12	1011	0.0.0	Deactivated
	Preset Call Forward(120)	13	1012	0.0.0.0	Deactivated
	Idle Line Selection(121)	14	1013	0.0.0.0	Deactivated
	Station IP Attributes(122)	15	1014	0.0.0	Deactivated
		16	1015	0.0.0.0	Deactivated
	Station Timers(123)	17	1016	0.0.0.0	Deactivated
	Linked Station(124)	18	1017	0.0.0.0	Deactivated
	Station ICM Group(125)	19	1018	0.0.0.0	Deactivated
	Station VM Attributes (127)	20	1019	0.0.0.0	Deactivated
	Station Personal CCR(128)	20	1020	0.0.0.0	Deactivated
	Station Name Overview	21	1021	0.0.0.0	Deactivated
	Station Name Display	22	1021	0.0.0.0	Deactivated
	Station User Greeting	23	1022	0.0.0.0	Deactivated
	Station Data Copy	24	1023	0.0.0.0	Deactivated
	Station CTI IP Address				
	Station Recording Infomation	26	1025	0.0.0.0	Deactivated
		27	1026	0.0.0.0	Deactivated
	Board Based Data	28	1027	0.0.0.0	Deactivated
	Duaru Daseu Data	29	1028	0.0.0.0	Deactivated
		▼ 30	1029	0000	Deactivated

Figure 6.2.22-1 Station CTI IP Address

The system supports 1st party TAPI (Telephony Application Programming Interface) for CTI (Computer Telephony Integration). The system will send specific TAPI information to the IP address for activity by the associated station.

6.2.23 Station Recording Information

Selecting Station recording information displays the following figure. Enter a Station Range and click **[Load]** to display and check the current recording information on each station.

PGM Base Function Base		Favorite PGM	Statio	n Recordi <mark>x</mark>		
Q PGM Search	C Ente	r Station Range			P Load	
System ID & Numbering Plans	Stati	on Range 1000-1	045			
		ex Station Numl	per Greeting	Company Directory Name		
Station Data	¥ 1	1000	Х	Х		
Station Trans(110)	2	1001	Х	Х		
Station Type(110)	3	1002	Х	Х		
Common Attributes(111)	4	1003	Х	Х		
Terminal Attributes(112)	5	1004	Х	Х		
CLI Attributes(113)	6	1005	Х	Х		
Flexible Buttons(115/129)	7	1006	Х	Х		
Station COS(116)	8	1007	Х	Х		
CO/IP Group Access(117)	9	1008	Х	Х		
Internal Page Zone Overview	10	1009	Х	Х		
Internal Page Zone(118)	11	1010	Х	Х		
PTT Group Access(119)	12	1011	Х	Х		
Preset Call Forward(120)	13	1012	Х	Х		
Idle Line Selection(121)	14	1013	Х	Х		
Station IP Attributes(122)	15	1014	Х	Х		
Station Timers(123)	16	1015	Х	Х		
Linked Station(124)	17	1016	Х	Х		
Station ICM Group(125)	18	1017	Х	Х		
Station VM Attributes (127)	19	1018	Х	Х		
Station Personal CCR(128)	20	1019	Х	Х		
Station Personal CCR(126) Station Name Overview	21	1020	Х	Х		
	22	1021	Х	Х		
Station Name Display	23	1022	х	Х		
Station User Greeting	24	1023	х	Х		
Station Data Copy	25	1024	Х	Х		
Station CTI IP Address	26	1025	х	Х		
Station Recording Infomation	27	1026	х	Х		
	28	1027	х	Х		
Board Based Data	29	1028	x	Х		
	▼ 30		X	X		

Figure 6.2.23-1 Station Recording Information

The {Station Recording information} displays the recording state of voice mail greeting and company directory name with O and X. (O: recorded, X: not recorded)

6.3 Board Based Data

Selecting the Board Based Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

	PGM Base Function Base	< Favorite PGM			\times
٩	PGM Search				Edit
	System ID & Numbering Plans	System Overview System ID & Numberi	System IP Plan(102) System ID & Numberi	Device IP Plan(103) System ID & Numberi	Common Attributes(Station Data
	Station Data				
	Board Based Data V	Flexible Buttons(115 Station Data	Common Attributes(CO Line Data	CO/IP Ring Assignm CO Line Data	CID/CPN Attributes(1 CO Line Data
	H.323 VoIP Attributes(130) T1/E1/PRI Attributes(131) Board Base Attributes(132)	System Attributes(16 System Data	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attrib Station Group Data
	CO Line Data	Station Authorizatio	System Authorizatio	Flexible DID Conver	
	System Data	Tables Data	Tables Data	Tables Data	
<	Station Group Data				
	ISDN Line Data				
	SIP Data				
	Tables Data				
	Networking Data				
	H.323 Routing Table				
	T-NET Data				
	Zone Data				
	Device Login				
	UCS Standard				
	DECT Data				
	Hotel Data				

Figure 6.3-1 Board Based Data Main Page

6.3.1 H.323 VoIP Attributes - PGM 130

Selecting H.323 VoIP Attributes will display the H.323 VoIP Attributes data input page. Enter the Vo IP gateway Sequence number (refer to '*Device IP Plan*' if you want to find the sequence number) and click **[Load]** to enter VoIP data. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favo	H.323 VoIP At	trib <mark>×</mark>		
PGM Search	Enter Dev	ice/GW Slot Sequence Number (1 - 3688) : (Load	S
System ID & Numbering Plans		teway Sequence(Slot) Number 2	404		
Station Data	Order <u>↓</u> a	Attribute		Value	Range
Station Data	1	H323 Setup Mode		•	
Board Based Data V	2	H323 Tunneling Mode	ON T		
	3	H323 Early Media (earlyH245)		Proceeding Alerting	
H.323 VoIP Attributes(130)	4				
T1/E1/PRI Attributes(131)	5	DiffServe	4		0-63
Board Base Attributes(132)	6	6 TCP Keep Alive ON V			
CO Line Data				ekeeper Attributes	
	1	RAS Usage OFF			
System Data	2	RAS MultiCast IP Port	1718		1-65535
Station Group Data		RAS MultiCast IP Address	224.0.1.41		
Station Gloup Data	4	RAS UniCast IP Port	1719		1-65535
ISDN Line Data	5	RAS UniCast IP Address	82.134.80.2		
SIP Data	6	RAS Keep Alive Time	120		001-999(1sec)
oir Data	7	RAS Number Plan Prefix	9		Max 23 Digits
Tables Data	8	RAS Light RRQ Usage	OFF •		
Networking Data	9	RAS GateWay ID(128Char)			
	10	Fail Over Usage	OFF •		
H.323 Routing Table	11	Call Setup No Response Time	5		0, 3 - 15 sec
T-NET Data	12	FailOver CO Group Number			1 - 201 CO Group
· ···E· Cata			VO	P GW Port Usage	
Zone Data	1	Q.931 Port Range	2048	- 2559	TCP Port(1-65535)
Device Login	2	H.245 Port Range	2560	- 3071	TCP Port(1-65535)
20100 20gm	3	RAS Port Range	2048	- 3071	UDP Port(1-65535)
UCS Standard	4	Media Port Range	6000	- 19972	UDP Port(1-65535)
DECT Data	5	Data Sharing Port Range	8500	- 8548	TCP Port(1-65535)
		с с		DEC Priority Configuration	· · · · ·

Figure 6.3.1-1 H.323 VoIP Attributes

The VOIP channels may be used for Distributed Networking, access to SIP or H.323 networks, and for remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established.

Also for H.323 support, a RAS (Registration, Admissions and Status) channel can be defined. The RAS channel IP addresses (uni-cast and multi-cast) as well as the IP port numbers and other H.323 set-up characteristics are defined.

This page also allows setting the IP TOS bit for Diffserv, a commonly recognized packet prioritization protocol. Higher priority packets are given priority in the Default gateway or Layer 3 Switch queue. However, they are the first to be discarded in the event of long queue delays, which may cause excess packet loss and poor voice quality.

Refer to the following table for a description of the features and the input required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H323 Setup Mode	IP calls can be set-up using the H.323 normal or Fast Start mode.	Normal Fast	Fast
H323 Tunneling Mode	IP calls can be set-up using the H.245 encapsulation (Tunneling).	OFF ON	ON
H.323 Early Media (early H245)	This feature is the ability of two user endpoints to communicate before call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast'. * Setup: Caller party tries to open early media on receiving the Setup message. * Proceeding: Calling party tries to open early media on receiving the Proceeding message. * Alerting: Calling party tries to open early media on receiving the Alerting message.	Setup, Proceeding, alerting	
H323 DTMF Path	During a call, DTMF can be sent in-band, out-of-band (H.245) or employ RFC2833.	Out-band In-band 2833	IN
DIFFSERV	This feature sets DiffServ pre-tagging for Voice packet. Note high values may cause high packet discard levels.	0~63	4
TCP Keep-Alive	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	OFF ON	ON
	Gatekeeper Attributes		
RAS Usage	When this feature is ON, the VoIP channel is used as the Gatekeeper.	OFF ON	OFF
RAS Multicast IP Port	This field defines the Multicast TCP/IP Port for RAS Information of Gatekeeper.	TCP/IP Port	1718
RAS Multicast IP Address	This field defines the Multicast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS Unicast IP Port	This parameter defines the Unicast IP Port for RAS Information of Gatekeeper.	TCP/IP Port	1719
RAS Unicast IP Address	This parameter defines the Unicast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
RAS Keep Alive Time	To maintain a connection, the system and GateKeeper must exchange RAS Information prior to expiration of this timer.	001-999 (seconds)	120
RAS Number Plan Prefix	The number of digits for an outgoing call used in RAS Setup messages.	Max. 23 digit	9
RAS Light RRQ Usage	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	OFF ON	OFF
RAS Gateway ID	This field is the Gatekeeper ID.	128 characters	
Fail Over Usage	If an H.323 call fails to set up in the 'Call Setup No Response time' below, the system will attempt to place the call on the Failover CO/IP group also defined below.	OFF ON	OFF

Table 6.3.1-1 H.323 VOIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT						
Call Setup No Response Time	When Failover is enabled, the system places the fail- over call if this timer expires before the system receives a response to setup messages.	0, 3-10 Sec.	5						
Failover CO Group Number	The system will place the Fail-over call employing a CO/IP line from the assigned CO/IP Line Group.	1-201 CO group							
	VOIP GW Port Usage								
Q.931 Port Range	IP-Binding H.323 signaling option: Q.931 TCP Port Range.	TCP port	2048-2559						
H.245 Port	IP-Binding H.323 signaling option: H.245 TCP Port Range.	TCP port	2560-3071						
RAS Port Range	IP-Binding H.323 signaling option: RAS UDP Port Range.	UDP port	2048-3071						
Media Port Range	IP-Binding media option: Media UDP Port Range.	UDP port	6000-19972						
Data Sharing Port Range	IP-Binding option: Data Sharing TCP Port Range.	TCP port	8500-8548						
	External CODEC Priority configuration								
External CODEC Priority Configuration (1 ST ~ 5 th priority)	The system supports five Codecs and, for negotiating purposes, the priority of each can be defined. Codecs not assigned a consecutive priority are not available during negotiations with the host.	None g.711-u g.711-a g.723.1 g.729 g.729-a	none						

Table 6.3.1-1 H.323 VOIP ATTRIBUTES

6.3.2 T1/PRI Attributes - PGM 131

Selecting T1/PRI Attributes will display the T1/PRI Attributes data input page. Enter the Device Sequence number (refer to '*Device IP Plan*' if you want to find the sequence number) and click **[Load]** to enter T1/PRI data. Click **[Save]** button after changing Value.

	< Favo	rite PGM T1/E1/PRI Attr	×	
PGM Search O	Enter Dev	ce/GW Slot Sequence Number (1 -	3688) :	Load
ystem ID & Numbering Plans	Device/Ga	teway Sequence(Slot) Number 2402	2	
	Order <u>↓</u> a	Attribute	Value	
tation Data	1	T1 setup Mode	D4 •	
oard Based Data	2	T1 line Mode	B8ZS T	
	3	PRI Line Mode	TE T	
H.323 VoIP Attributes(130)	4	PRI/E1 CRC Check	ON T	
T1/E1/PRI Attributes(131)	5	E1 R2DSP Check	OFF •	
Board Base Attributes(132)	6	DCO PX Type	Standard •	
	7	Caller Name Type (PRI(T1) only)	FACILITY •	

Figure 6.3.2-1 T1/PRI Attributes

Each T1/PRI module can be assigned for various attributes of the interface. The T1 interface framing and line coding can be selected and, for the PRI, TE or NT operation can be selected. Refer to the following table for a description of the features and the input required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
T1 Setup Mode	Select T1 Setup mode, D4 frame: Use In-Band Control Protocol ESF: Use Data link Message.	ESF D4	D4
T1 Line Mode	Select T1 line coding (AMI/B8ZS).	AMI B8ZS	B8ZS
PRI Line Mode	Select TE/NT Mode for PRI.	TE/NT	TE
PRI /E1 CRC Check	Enable CRC (Cyclical Redundancy Check).	OFF ON	ON
E1 R2DSP check	Enables DSP check for R2-El or E1 interface.	OFF ON	OFF
DCO PX Type	Reserved for future usage for R2 E1 Device.	S1240 TDX1B STANDARD CONGES_DIS	STANDARD
Caller Name Type(PRI(T1) only)	If the caller has a name, the Caller Name is sent to the network according to the option (FACILITY, DISPLAY). (USA only)	FACILITY, DISPLAY	FACILITY

6.3.3 Board Base Attributes - PGM 132

Selecting Board Base Attributes will display the Board Base Attributes data input pag. Enter the Sequence number (refer to '*Device IP Plan*' if you want to find the sequence number) and click **[Load]** to enter attribute values. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of devices when saved. Click **[Save]** button after changing Value.

PGM Base Function Bas	e	< Fav	vorite PGM	Board Base Attri X				
Q PGM Search	0	Enter Devi	ice/GW Slot	Sequence Range (1 - 3688) :			2 Load	Sa
System ID & Numbering Plans		Device/Ga	iteway Seque	ence(Slot) Range 1				
Station Data		Order <u>↓</u> a	Check All	Attribute	Value	Range		
otation Data		1		Router IP Address		IP Address		
Board Based Data	~	2		Device Codec Type	System Codec 🔻			
H.323 VoIP Attributes(130)		3		Firewall IP Address		IP Address		
T1/E1/PRI Attributes(131)		4		RTP Packet Relay Firewall IP Address		IP Address		
Board Base Attributes(132)		5		RTP Security	ON T			
	_	6		T-NET Enable	OFF V			
CO Line Data		7		T38 Enable	OFF V			
System Data		8		USE Board IP for SIP	OFF •			
System Data	_	9		T38 Port Usage	DIFF WITH VOICE			
Station Group Data		10		RFC2833 Payload	101	0-127		
ISDN Line Data		11		RFC2833 Volume	10	0-36(-dB)		
TODA ENO Data		12		RFC2833 Redundancy	4	1-8		
SIP Data								
Tables Data								

Figure 6.3.3-1 Board Base Attributes

Appliances (Devices and IP Phones) can be connected to the iPECS over a managed WAN without the need to employ a VoIP channel. In this case, the system does not implement security (IPSec) or QoS treatment over the link. To implement the managed WAN connectivity, the iPECS must be assigned with the IP address of the router for all appliances that may attempt a point-to-point connection over the managed WAN, including devices on the iPECS LAN. Note that if the device's Router IP address is not defined, the system will use the Router IP address defined in System IP Plan.

The default codec employed by each device can be specifically defined as G.711, G.729, G.723, G.722, or the system default codec assigned.

Appliances include support for SRTP (Secure Real-Time Protocol), which employs Advanced Encryption Standard (AES) to secure RTP packets. If RTP security is enabled then IPSEC or SRTP is implemented for RTP packet.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Router IP Address	Enter the Default gateway (Router) IP address associated with the selected devices.	IP Address	
Device Codec Type	Select the Codec type for each device.	G.711 G.723.1 G.729 G.722	System Codec

Table 6.3.3-1 BOARD BASE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		System Codec	
Firewall IP Address	Enter the Firewall IP address of the selected devices.		
RTP Packet Relay Firewall IP Address	When a VoIP channel of a VOIM is used for both RTP Relay for remote devices and SIP signaling, enter the Firewall IP address associated with the VOIM.		
RTP Security	SRTP implements AES (Advanced Encryption Standard) for packets between other devices with RTP Security enabled. To reduce bandwidth use or to use an external VPN, this parameter must be OFF.	OFF ON	ON
TNET Enable	When a module or station is to be connected in a Centralized Control network (TNET), the device must be enabled for TNET operation.	OFF ON	OFF
T38 Enable	FAX over IP Lines is supported when T38 mode is ON.	OFF ON	OFF
USE Board IP for SIP	When the VoIP channels of a VOIM are used for SIP, such as a SIP Trunk, the IP address of the VOIM must be used for the SIP messages (ON).	OFF ON	OFF
T38 Port Usage	The TCP/IP port employed for T38 packets is negotiated and the system can allow the port to be the same as or different from the preceding Voice packets. The system can also employ NAT to determine the port.	Different from Voice Same as Voice NAT Triggered	DIFF WITH VOICE
RFC2833 Payload	Payload value for RFC2833	0~127	101
RFC2833 Volume	Volume(Gain) of RFC2833 payload	0~36(-dB)	10
RFC2833 Redundancy	Sending time of end packet of RFC2833	1~8	4

Table 6.3.3-1 BOARD BASE ATTRIBUTES

6.4 CO Line Data

Selecting the CO Line Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

	PGM Base Function Base	< Favorite PGM				×
¢	Q PGM Search					Edit
	System ID & Numbering Plans	System Overview System ID & Numbering	System IP Plan(102) System ID & Numbering	Device IP Plan(103) System ID & Numbering	Common Attributes(111) Station Data	
	Station Data					
	Board Based Data	Flexible Buttons(115/129) Station Data	Common Attributes(140) CO Line Data	CO/IP Ring Assignment(CO Line Data	CID/CPN Attributes(151) CO Line Data	
	CO Line Data ~					
	CO Line Overview Common Attributes(140)	System Attributes(160~1 System Data	System Password(162) System Data	Station Group Assignme Station Group Data	Station Group Attributes Station Group Data	
<	Analog Attributes(141) VoIP Attributes(142) ISDN Attributes(143) CO/IP Ring Assignment(144) DID Service Attributes(145) DISA Service Attributes(146) CO/IP Preset FWD Attributes(147) MATM Attributes(149) NA ISDN Line Attributes(150) CID/CPN Attributes(151) T1 C0 Line Attributes(152) DCOB C0 Line Attributes(153)	Station Authorization Co Tables Data	System Authorization C Tables Data	Flexible DID Conversion Tables Data		
	System Data					
	Station Group Data					
	ISDN Line Data					
	SIP Data					
	Tables Data					
	Networking Data					

Figure 6.4-1 CO Line Data Main Page

Selecting CO Line Overview will show the current overview of CO line. The information may vary depending on installed modules.

PGM Base Function Base	<	Favorite PGN	CO	Line Overview	Q
PGM Search	0	Device Type <u>↓</u> a	CO Line <u>↓</u> a	CO Type <u>↓</u> ª	CO Group <u>↓</u> ª
		BRIM4 GW	1	DID	1
System ID & Numbering Plans		BRIM4 GW	2	DID	1
		BRIM4 GW	3	DID	1
Station Data	_	BRIM4 GW	4	DID	1
Board Based Data		BRIM4 GW	5	DID	1
	- 11	BRIM4 GW	6	DID	1
CO Line Data	~	BRIM4 GW	7	DID	1
		BRIM4 GW	8	DID	1
CO Line Overview		T1IM GW	9	Normal	1
Common Attributes(140)		T1IM GW	10	Normal	1
Analog Attributes(141)		T1IM GW	11	Normal	1
VoIP Attributes(142)		T1IM GW	12	Normal	1
ISDN Attributes(143)		T1IM GW	13	Normal	1
CO/IP Ring Assignment(144)		T1IM GW	14	Normal	1
DID Service Attributes(145)		T1IM GW	15	Normal	1
DISA Service Attributes(146)		T1IM GW	16	Normal	1
CO/IP Preset FWD Attributes(147)		T1IM GW	17	Normal	1
MATM Attributes(149)		T1IM GW	18	Normal	1
NA ISDN Line Attributes(150)		T1IM GW	19	Normal	1
CID/CPN Attributes(151)		T1IM GW	20	Normal	1
T1 CO Line Attributes(152)		T1IM GW	21	Normal	1
DCOB CO Line Attributes(153)		T1IM GW	22	Normal	1
DOOD OO Eme Attributes(100)		T1IM GW	23	Normal	1
System Data		T1IM GW	24	Normal	1
System Data		T1IM GW	25	Normal	1
Station Group Data		T1IM GW	26	Normal	1
		T1IM GW	27	Normal	1
ISDN Line Data		T1IM GW	28	Normal	1
SIP Data		T1IM GW	29	Normal	1
on Data		T1IM GW	30	Normal	1
Tables Data		T1IM GW	31	Normal	1
		T1IM GW	32	Normal	1

Figure 6.4-2 CO Line Overview

6.4.1 Common Attributes - PGMS 140

Selecting Common Attributes will display the Common Attributes data input page. Enter a valid CO range and click **[Load]** to enter the Common Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base	< Fa	avorite PGM	Common Attr X			
PGM Search	Enter C	O Range (1 -	998) :		2 Load	Save
System ID & Numbering Plans	CO Rar	nge 1				
Station Data		Check All	Attribute <u>↓</u> ^a	Value		Range
5 15 15 1	1		CO Type	Normal 🔻		
Board Based Data	2		CO/IP Group	1		0-201 (0:Private, 201:Unused)
CO Line Data ~	3		CO Line COS	COS 1 V		2011.0114004,
CO Line Overview	4		CO Line Type	CO V		
Common Attributes(140)	5		Universal Answer	OFF V		
Analog Attributes(141)	6		CO/IP Group Authorization	OFF V		
VoIP Attributes(142)	7		CO Tenancy Group	0		0-100
ISDN Attributes(143)	8		CO/IP Name Display	OFF V		
CO/IP Ring Assignment(144)	9		CO Name Assign			Max 12 Characters
DID Service Attributes(145)	10		DISA Account Code	ON V		
DISA Service Attributes(146)	11		DISA CO Access	OFF •		
CO/IP Preset FWD Attributes(147)	12		Wait If VSF Busy	ON V		
MATM Attributes(149)	13		SMS Outgoing	Disable V		
NA ISDN Line Attributes(150)	14		SMS Received Station			
CID/CPN Attributes(151)	15		Reject Anonymous Incoming Call	OFF V		
T1 CO Line Attributes(152) DCOB CO Line Attributes(153)	16		Prefix Table ID	0		0-6
DOOD OO Line / Minbaco(100)	17		LDT Table Index	1		0-32
System Data	18		LDT Zone Number	1		1-100
Station Group Data	19		ENBLOCK Sending	ON V		
·	20		DID Preserve Name	OFF T		
ISDN Line Data	21		Burst Tone To Caller	OFF T		
SIP Data	22		Collect Call Blocking	Disable 🔻		
Tables Data	23		Collect Call Answer Timer	10	*100ms	1-250
Tables Dala	24		Collect Call Idle Timer	20	*100ms	1-250
Networking Data	26		Tone Table Index	1		1-5

Figure 6.4.1-1 Common Attributes

Common Attributes define various characteristics of CO lines facilities under control of the system. Most characteristics require an ON/Off setting; refer to the following table. Specific descriptions for Class-of-Service are provided in Table 6.4.1-2.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT	
		Normal		
СО Туре	Each CO Line is assigned a type: Normal, DID, TIE Line,	DID	DID	
	or Unused.	TIE		
		Unused		
		0-201	1	
CO/IP Group	Each CO/IP Line is assigned to a group; grouping should	(0: Private, 201:		
	be based on the Line type, technology and COS.	Unused)		

Table 6.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line COS	Each CO/IP Line is assigned a Class-of-Service that interacts with the Station COS, refer to Table 6.4.1-2 CO COS 1: Station COS applies CO COS 2: Exception Table A governs CO COS 3: Exception Table B governs CO COS 4: Restricts LD calls & Exception Table C CO COS 5: Overrides Station COS 2~6 with no restrictions	COS 1~5	COS 1
CO Line Type	Each CO/IP Line can be assigned a type that indicates connection to a CO Line or a PBX/CTX Line.	PBX CO	со
Universal Night Answer	Universal Night Answer (UNA) allows any station user to answer a call on the CO/IP line by dialing the UNA code.	OFF ON	OFF
CO/IP Group Authorization	Each CO/IP Group can be assigned to require the user enter an Authorization Code.	OFF ON	OFF
CO Tenancy Group	Only stations in the assigned ICM Tenancy group are permitted access to the defined CO Line.	0-100	0
CO/IP Name Display	The IP Phone display can indicate the CO line/IP channel number or the twelve (12) character name, if assigned below.	OFF ON	OFF
CO Name Assign	Each CO Line and IP group can be assigned a twelve (12) character name for display purposes.	Max. 12 characters	
DISA Account Code	With DISA Account Code "ON", users are required to enter a DISA Authorization code. Codes are entered in <i>Authorization Code Table section</i> .	OFF ON	ON
DISA CO Access	When enabled, DISA users may access the CO/IP Lines in the system.	OFF ON	OFF
Wait If VSF Busy	When a DID/DISA call assigned to receive a System announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or route to the DID/DISA Destination -PGM 167	OFF ON	ON
SMS Outgoing	Each CO line can be assigned to support PSTN SMS.	Disable Enable	Disable
SMS Received Station	When a PSTN SMS is received, the system delivers the message to the assigned station.	Station	
Reject Anonymous Incoming Call	When REJECT ANONYMOUS is enabled, incoming calls without Caller ID are rejected.	OFF ON	OFF
Prefix Table ID	When the Prefix Dialing Table (PGM 206) feature is used, this Prefix Table ID is employed. If this value is set to 0, the Prefix Table feature is disabled.	0 – 6 0: disable	0
LDT Table Index	When LCR is configured, this LDT Table index is referenced for outgoing calls on this CO/IP Line.	0-32 (LDT Table index) 0: Unused	1
LDT Zone Number	If the LDT Zone Number of a LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this CO Line.	1-100	1
ENBLOCK Sending	This entry determines if the system sends dialed digits to the ISDN line as they are received (OFF), or collects all digits and forwards them in a block. (ON).	OFF ON	ON

Table 6.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ATTRIBUTE		RANGE	DEFAULT
DID preserve Name	For DID lines, the CLI (Calling Line Identification) is normally displayed only during ringing. If enabled here, the CLI will be displayed for the entire call duration.	OFF ON	OFF
Burst Tone to Caller	When DID Call Wait is assigned for the station, the system can send audible off-hook signals as a short burst of tone for DID calls from this CO/IP Line.	OFF ON	OFF
Collect Call Blocking	This parameter defines the type of Collect Call Blocking supported for E1 CO lines with R2 signaling. (Intended for Brazil only)	Disable Double Answer Double Answer w/Indication	Disable
Collect Call Answer Timer	These parameters determine treatment of an incoming call when Collect Call Blocking Double Answer is	1-250 (100ms)	10
Collect Call Idle Timer	assigned. In this case, the system answers the call and maintains the connection for the Call Answer time then the system will disconnect for the Call Idle time before finally reconnecting the call.	1-250 (100ms)	20
Gain table index	One of three Gain tables can be configured for TDM connections.	1-3	1
Tone table index	One of the five Tone table can be configured for use with the CO/IP Line.	1-5	1
Digit Conversion Table index	One of the 100 Digit Conversion Tables can be configured for use with this CO/IP Line for incoming DID call digit conversion.	1-32	1
Prepaid Call	The Pre-paid Call feature must be enabled for use by a station. User can set the budget for the station call charge in advance.	OFF ON	OFF
Prepaid Money (0- 999999) & Used Prepaid Money	An amount can be associated with the station as prepayment for outgoing calls. The assigned "Pre-paid Money" is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining budget for outgoing calls. Prepaid Money is often used in small hospitality businesses. The "Used Pre-paid Money" displays the money that has been used.	0-999999	0
Automatic call recording destination	When desired, the IPCR server can be used to record calls on the CO/IP Line. This value defines the Station Group of the IPCR server. The IPCR Agent object, see PGM 237, must be assigned as CO Line for proper operation.		
ICLID Usage	An incoming call can be routed to the destination based on Calling Name. Disable - ICLID feature is disabled CLI - ICLID feature is operated with CLI Name - ICLID feature is operated with Name	Disable, CLI, Name	CLI
PBX Code Insertion for Emergency call	System can insert PBX code automatically if pre- configured when a user make an emergency call.	Disable, PBX code1~4	Disable
	Timer Attributes		
CO Cut Off Timer	When Call Time Restriction is assignment to the station, this timer defines the allowed call duration.	00-99 minutes 00 = disable	0

Table 6.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
DISA Delay Timer	Once answered, the system attaches a DTMF receiver to the DISA call to receive caller-dialed digits. User can set the delay time before attaching the DTMF receiver to the CO line. (Intended for Russia only)	0-9 seconds	0				
DISA Answer Timer	When a call is received on a CO line with DISA service, the system will answer the call when the DISA Answer Timer expires. (Intended for Russia only)	0-9 seconds	0				
	Tone Attributes						
CO Line MOH	A held call can be connected to one (1) of ten (10) possible audio sources while on Hold as Music-on-Hold (MOH).	Refer to Sys Hold, Internal/External Music1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Refer to Sys Hold				
CO Dial Tone		OFF ON	ON				
CO Ring Back Tone	ISDN Lines may provide a digital signal rather than actual tones. In this case, the iPECS can provide the tones. If	OFF	OFF				
CO Error Tone	the ISDN provides the tone, the Tone is "ON", for an iPECS UCP-generated tone, the tone is set to "OFF".	OFF ON	OFF				
CO Busy Tone		OFF ON	OFF				
CO Line Dial Tone Source	One of eleven sources can be defined as dial tone for use by the CO line.	Dial Tone, Internal/External Music1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Dial Tone				
CO Line Ring Back Tone Source	One of eleven sources can be set as ring back tone for use by the CO line.	Ring Back Tone, Internal/External Music1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Ring Back Tone				
COL Ring Tone	One of sixteen Ring Tones can be set for use by this CO Line.	00-16 0: NA	0				

Table 6.4.1-1 Common Attributes

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 5	Local Call only (LD Code, "1" or "0") and Table C	Local Call only (LD Code, "1" or "0") and Table C	Local Call only (LD Code, "1" or "0") & Table C	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 9	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction

Table 6.4.1-2 STATION/CO LINE TOLL RESTRICTIONS

6.4.2 Analog Attributes - PGMS 141

Selecting Analog Attributes will display the Analog Attributes data input page. Enter a valid CO range and click **[Load]** to enter the Analog (PSTN) Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Search	Enter C	:O Range (1 - 9	8) :	2	Load	
System ID & Numbering Plans	CO Rar	nge 1				
Station Data	Order	Check All	Attribute <u>↓</u> ª	Value		Range
Station Data	1		CO Line Signal	DTMF V		
Board Based Data	2		Data(Fax) Station Number			
CO Line Data V	3		SMDR Metering Unit	None 🔻		
	4		Line Drop (CPT)	OFF •		
CO Line Overview	5		Maintain CPT on Talking (answered by User)	OFF •		
Common Attributes(140)	6		Flash Timer	10	(*10ms)	000-300
Analog Attributes(141)	7		Open Loop Detect Timer	0	(*100ms)	00-20
VoIP Attributes(142)	8		ICLID Ring Timer	0 (*1sec)		00-20
ISDN Attributes(143)	9		PROCTOR SERVICE ON/OFF	OFF •		
CO/IP Ring Assignment(144) DID Service Attributes(145)	10		Analogue Line Monitor	OFF T		
DISA Service Attributes(146)	11		LD Inter Digit Timer	0	(*1sec)	00-20
CO/IP Preset FWD Attributes(147)	12		LD Pause Count	0		0-10
MATM Attributes(149)						
NA ISDN Line Attributes(150)						
CID/CPN Attributes(151)						

Figure 6.4.2-1 Analog Attributes

Analog Attributes define various characteristics of Analog CO Lines under control of the system. Most characteristics require an On/Off setting; refer to the following table. Specific descriptions for CO Line (SMDR) Call Metering tones are provided in Table 6.4.2-2.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT			
CO Line Signal	Each analog CO Line can be assigned to send either DTMF or Pulses for dialed digits to the PSTN.	DTMF, Pulse	DTMF			
Data(Fax) Station Number	Each CO line can be assigned to recognize a FAX call when a specified station answers.	Station Number				
SMDR Metering Unit	This field selects the call-metering signal from the PSTN to indicate call cost, refer to Table 6.4.2-2.	See Table 6.4.2-2	None			
Line Drop (CPT)	Each CO Line can be programmed to disconnect if error tone is detected.	OFF ON	OFF			
Maintain CPT on talking (Answer by User)	The system can continuously monitor the CO Line during a call and, if error tone is detected, drop the call.	OFF ON	OFF			
Flash Timer	User can set the flash time.	000-300 (*10 msec)	50			

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Open Loop Detect Timer	This filed sets the duration of open loop that will be recognized as a "Disconnect Signal".	00-20 (*100 msec)	4
ICLID Ring Timer	When a call is received, the system may use ICLID (Incoming Caller ID) to route the call. The system will delay routing a call for this duration while awaiting ICLID. Set 00 for disabling ICLID routing.	00-20 (*Sec)	4
Proctor Service ON/OFF	Each analog CO line can be assigned to send the station number as DTMF digits for Proctor service.	OFF ON	OFF
Analog Line monitor	The system can monitor and report faults on an	OFF ON	ON
LD Inter Digit Timer	This time is for setting the duration between digits for LD (Long Distance) call.	00-20 (*1sec)	0
LD Pause count	This count sets the number of Pause for Long distance call.	0-10	0

Table 6.4.2-1 Analog ATTRIBUTES

Table 6.4.2-2 CALL METERING FUNCTION

ENTRY	SMDR METERING UNIT TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

6.4.3 VoIP Attributes - PGMS 142

Selecting VoIP Attributes will display the VoIP mode data input page. Enter a valid CO range and click **[Load]** to enter the VoIP Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base	< Favorite PGM V	olP Attribut 🔀			×
Q PGM Search	Enter CO Range (1 - 998) :			2 Load	Save
System ID & Numbering Plans	CO Range 1				
Station Data	Check All Attribute La CO VolP Mod	Value Common	Range		
Board Based Data					
CO Line Data ~					
CO Line Overview					
Common Attributes(140)					
Analog Attributes(141)					
VoIP Attributes(142)					
ISDN Attributes(143)					
CO/IP Ring Assignment(144)					
< DID Service Attributes(145)					
DISA Service Attributes(146)					
CO/IP Preset FWD Attributes(147)					
MATM Attributes(149)					
NA ISDN Line Attributes(150)					
CID/CPN Attributes(151)					
T1 CO Line Attributes(152)					
DCOB CO Line Attributes(153)					

Figure 6.4.3-1 VoIP Attributes

Table 6.4.3-1 VoIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		COMMON	
	The VoIP channels can support iPECS,	H323 only	
CO VoIP Mode	H.323 or SIP protocols. This field selects the	SIP only	COMMON
CO VOIF MODe	protocol for the VoIP channel(s) according to	RTP-Packet-Relay only	CONNON
	the user's situation.	H323 & RTP-Packet-Relay	
		SIP & RTP-Packet-Relay	

6.4.4 ISDN Attributes - PGMS 143

Selecting ISDN Attributes will display the ISDN Attributes data input page. Enter a valid CO range and click **[Load]** button to enter the ISDN Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base		avorite PGM O Range (1 -	ISDN Attribute ×		2	Load
System ID & Numbering Plans	CO Rar	nge 1				
	Order	Check All	Attribute <u>↓</u> ª	Value	Range	
Station Data	1		TEI Type	Automatic 🔻		
Board Based Data	2		ISDN-SS CD/CR(CFU)	No Service 🔻		
	3		Advice of Charge	No Service 🔻		
CO Line Data ~	4		ISDN Line Type	u-Law 🔻		
CO Line Overview	5		Calling Sub-address	OFF V		
Common Attributes(140)	6		Screening Indicator	User Provided, NO S 🔹		
Analog Attributes(141)	7		ISDN Plus Code		Max 4 Digits	
VoIP Attributes(142)	8		CP/Alert inband	OFF V		
ISDN Attributes(143)	9		Disconnect inband	OFF •		
CO/IP Ring Assignment(144)	10		Disconnect with Inband Info	Ignore Inband Information		
DID Service Attributes(145) DISA Service Attributes(146) CO/IP Preset FWD Attributes(147) MATM Attributes(149) NA ISDN Line Attributes(150) CID/CPN Attributes(151) T1 CO Line Attributes(152) DCOB CO Line Attributes(153)						

Figure 6.4.4-1 ISDN Attributes

This programming assigns attributes as shown in the following table for the ISDN lines in the entered range.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ТЕІ Туре	The TEI (Terminal Endpoint Identifier) is a unique identifier for each device connected to the ISDN line. When the system shares an ISDN connection with other devices, the TEI should be automatic to avoid conflicting with the other connected devices. Otherwise, the Fixed identifier option should be employed.	Fixed, Automatic	Automatic
ISDN – SS CD/CR(CFU)	Permits a user to access to ISDN Supplementary Call Deflection Service. (Except USA version).	No Service, Call Deflection, Call Rerouting	No Service
Advice of Charge	When assigned, the system will analyze the Advice of Charge information in the Facility Message according to the ETSI specifications with appropriate regional protocol support.	No AOC, Italy & Spain, Finland, Australia, Belgium, ETSI STD	No Service

Table 6.4.4-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ISDN Line Type	The system will encode voice using the A-law or u- law PCM format to match the installed ISDN backbone.	µ-Law, A-Law	µ-Law
Calling Sub-address	For outgoing calls, the user's station number may be included in the ISDN call SETUP message Sub- address field.	OFF ON	OFF
Screening indicator	The ISDN Screening Indicator can be configured.	User Provided- No Service, User Provided- Pass, User Provided- Fail, Network Provided.	User Provided, No Service
ISDN PLUS Code	When the incoming CLI starts with "+", the value assigned for this attribute is inserted in place of the "+" sign.	Max. 4 digits	
CP/Alert inband	When enabled, the system will send progress indication with in-band information in Call proceeding and Alerting messages.	OFF ON	OFF
Disconnect inband	When enabled, the system will send progress indication with in-band information in Disconnect messages.	OFF ON	OFF
Disconnect with Inband Info	 When system receives DISCONNECT message with Inband information from PSTN, the following option can be applied: Ignore Inband information: Line is disconnected Bypass Inband information: Progress Information is transferred Wait Release: System wait to send Release message till the other party is disconnected 	Ignore Inband information, Bypass Inband information, Wait Release	Ignore Inband information

Table 6.4.4-1 ISDN ATTRIBUTES

6.4.5 CO/IP Ring Assignment - PGM 144

Selecting CO/IP Ring Assignment will display the CO/IP Ring Assignment data input page. Enter a valid CO range and click **[Load]** to enter the CO/IP Ring Assignment data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

	PGM Base Function Base	< Favorite	PGM	CO/IP Ring Assi	gn <mark>x</mark>		×
٩	PGM Search	Enter CO Range	(1 - 998) :			2 Load	Save
Sy	stem ID & Numbering Plans	CO Range 1					
Sta	ation Data	Check All	At	ttribute	Value	Range	Station Delay Value [Station:Delay]
Во	ard Based Data			Station Range	Range :	0~9	[1000:0]
cc	Line Data v			Station Group			
-	CO Line Overview		Day	○ VSF	Announcement : Auto Drop : 🔲	0 - 200 (0 : Unused)	
	Common Attributes(140)			AA Ring Time		0~30	
4	Analog Attributes(141)			Net Station			
	/oIP Attributes(142) SDN Attributes(143)		Night	Station Range	Range : Delay :	0~9	[1000:0]
<u>ر</u>	CO/IP Ring Assignment(144)			Station Group			
	DID Service Attributes(145) DISA Service Attributes(146)			● VSF	Announcement : Auto Drop : □	0 - 200 (0 : Unused)	
	CO/IP Preset FWD Attributes(147)			AA Ring Time		0~30	
	MATM Attributes(149) NA ISDN Line Attributes(150)			Net Station			
(CID/CPN Attributes(151)			Station Range	Range : Delay :	0~9	[1000:0]
	DCOB CO Line Attributes(152)			Station Group			
	stem Data		Timed Ring	© ∨SF	Announcement : Auto Drop : □	0 - 200 (0 : Unused)	
Sy	Stelli Data			AA Ring Time		0~30	
Sta	ation Group Data			Net Station			

Figure 6.4.2-1 CO/IP Ring Assignment

Each "Normal" CO/IP line is assigned to signal (Ring) a station, station group or VSF Announcement for an incoming call. Separate ring assignments can be set for Day, Night, and Timed Ring mode.

A delay from 1 to 9 Ring cycles can also be assigned, based on this assignment, the station/Station group will receive audible ring after a delay of the number of Ring cycles entered. In addition, when assigned to ring a VSF Announcement, the system can be programmed to disconnect after the announcement, 'Auto Drop'.

When CO/IP Lines are programmed to ring the built-in Auto Attendant, a delay of 0 to 30 seconds can be assigned as the AA Ring Time. The delay allows stations to be assigned Ring and to answer prior to signaling the AA. At expiration of the AA Ring Time, the call is sent to the assigned VSF announcement or announcement 1 when no VSF announcement is assigned.

6.4.6 DID Service Attributes - PGM 145

Selecting DID Service Attributes will display the DID Service Attributes data input page. Enter a valid CO range and click **[Load]** button to enter the DID Service Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

	PGM Base Function Base	Er		avorite PGM :O Range (1 -	DID Service A × 998) :	0	oad Save
	System ID & Numbering Plans	C	0 Rar	nge 1			
	Station Data)rder ⊥a	Check All	Attribute	Value	Range
	Board Based Data	1	1		DID Start Signal	Wink •	
	Doard Dased Data		2		DID Conversion Type	DID Digit Mask	
	CO Line Data v		3		Number of Digits Expected from DID Circuit	4	2 - 4
	CO Line Overview Common Attributes(140) Analog Attributes(141)		4		DID Digit Mask	****	Must be 4 digits (include ** and '#') #: ignore digit, *: any kind of digit
	VoIP Attributes(142) ISDN Attributes(143)						
	CO/IP Ring Assignment(144)						
<	DID Service Attributes(145)						
	DISA Service Attributes(146)						
	CO/IP Preset FWD Attributes(147)						
	MATM Attributes(149)						
	NA ISDN Line Attributes(150)						
	CID/CPN Attributes(151)						
	T1 CO Line Attributes(152) DCOB CO Line Attributes(153)						

Figure 6.4.6-1 DID Service Attributes

DID lines can be assigned as the type of "Start" signaling and treatment of received digit. Digits can be used "as is" to route the call within the system, digits can be converted and used to route the call, or digits can be converted to a Table index to determine the call routing from a Table look-up. Refer to the following table for additional description of attributes and values.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
DID Start Signal	Assigns the type of DID start signaling: Immediate, Wink or Delayed dial for the CO/IP Line.	Immediate, Wink, Delayed dial	Wink				
DID Conversion Type	The received DID digits can be treated to determine call routing, simple conversion (Convert), use "as is" (no treatment), or modify using Flexible DID Conversion Table (Look-up).	DID Digit Mask, Use 'as is', Modify using Flexible DID conversion table	DID Digit Mask				
Number of Digits Expected from DID Circuit	The number of digits expected from the PSTN DID circuit.	2~4	4				
DID Digit Mask	DID digit modification sequence: "#" deletes the digit, "*" accepts the digit "as is", a digit (0~9) replaces the digit. The modification is based on the position of the digit (1~4) in the received number.	(0~9, *, #)	***				

Table 6.4.6-1 DID SERVICE ATTRIBUTES

6.4.7 DISA Service Attributes - PGM 146

Selecting DISA Service Attributes will display the DISA Service Attributes data input page. Enter a valid CO range and click **[Load]** to enter the DISA Service Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base		< Favo	orite PGM	DISA Servic	e Att		
Q PGM Search	Θ	Enter CO	Range (1 - 998)	:		? Load	
System ID & Numbering Plans		CO Range	1				
Station Data		Order <u>↓</u> a	Check All	Feature	Value	Range	
Board Based Data	-1	1		Day	VSF Announcement : 0 Auto Drop :	0 - 201 (0:Service OFF, 201:Only Tone Mode)	
CO Line Data	~	2		Night	VSF Announcement : 0 Auto Drop :	0 - 201 (0:Service OFF, 201:Only Tone Mode)	
CO Line Overview Common Attributes(140)		3		Timed Ring	VSF Announcement : 0 Auto Drop :	0 - 201 (0:Service OFF, 201:Only Tone Mode)	
Analog Attributes(141)							
VoIP Attributes(142)							
ISDN Attributes(143)							
CO/IP Ring Assignment(144)							
DID Service Attributes(145)							
DISA Service Attributes(146) CO/IP Preset FWD Attributes(147)							
MATM Attributes(149)							
NA ISDN Line Attributes(150)							
CID/CPN Attributes(151)							
T1 CO Line Attributes(152)							

Figure 6.4.7-1 DISA Service Attributes

DISA Service can be enabled on CO lines based on the system operation mode (Day, Night, and Timed). DISA calls may be routed to dial tone and await user dialing (simple routing) or through a multi-layered Audio Text menu assigning a System announcement and a Customer Call Route (CCR) Table Index. The system can be programmed to disconnect after the announcement, 'Auto Drop', or follow the CCR Table routing with a user-recorded System announcement requesting specific inputs from the user.

6.4.8 CO/IP Preset Forward Attributes - PGM 147

Selecting CO/IP Preset Forward Attributes will display the CO/IP Preset Forward Attributes data input page. Enter a valid CO range and click **[Load]** to enter the CO/IP Preset Forward Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Ba		vorite PGM) Range (1 - 9	CO/IP Preset X		
System ID & Numbering Plans	CO Rang	je 1			
Station Data		a Check All	Attribute	Value	Range
	1		PRESET FWD TIMER	0 (*1sec)	00-99
Board Based Data	2		PRESET ICLID RING TBL INDEX		Max 3 Digits(001-250)
CO Line Data	~ 3		PRESET VMID DIGIT		Mailbox ID (Max 4 digit)
CO Line Overview Common Attributes(140) Analog Attributes(141) VoIP Attributes(142) ISDN Attributes(143) CO/IP Ring Assignment(144) DID Service Attributes(145) DISA Service Attributes(146) CO/IP Preset FV/D Attributes(146) CO/IP Preset FV/D Attributes(147) MATM Attributes(149) NA ISDN Line Attributes(150) CID/CPN Attributes(151) T1 CO Line Attributes(152) DCOB CO Line Attributes(153)					

Figure 6.4.8-1 CO/IP Preset Forward Attributes

The CO/IP Preset Call Forward feature enables a CO/IP call to initially ring at multiple stations and forward to a pre-determined destination. A separate timer can be defined for each CO/IP line for no-answer. The destination can be any index to the *'ICLID Ring Table section'* or a Voice Mailbox. The VMID (Voice Mail ID) field selects a specific mailbox when the call forwards to an external VM group.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Preset FWD Timer	An incoming call, which remains unanswered for this timer, is routed as defined in the ' <i>ICLID Ring Table Index section</i> '.	00-99 (Sec.)	0
Preset ICLID Ring Table Index	If an incoming call remains unanswered after the Preset Fwd time above, the call is routed as defined in the ' <i>ICLID Ring Table index</i> ' defined here.	001-250	
Preset VMID Digit	Each CO/IP line can be assigned a VMID (Voice Mail Id) that is sent to the external VM group to identify the desired Mailbox for the call.	Mailbox ID (Max. 4 digits)	

Table 6.4.8-1 CO/IP PRESET FORWARD ATTRIBUTES

6.4.9 MATM Attributes - PGM 149

Selecting MATM Attributes will display the MATM Attributes data input page. These attributes are only valid when the Nation Code is Korea. Enter a valid CO range and click **[Load]** to enter the MATM Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

These attributes are available for Country code 82.

PGM Base Function Base	< Favorite	PGM MATM Attri	but X		
Q PGM Search	Enter CO Rar	nge (1 - 998) :		? Load	Save
System ID & Numbering Plans	CO Range 1				
Station Data	Check All	Attribute		Value	Range
		MATM Sub Type	LCO T		
Board Based Data		MATM Start Signal Type	Send Wink(IC)		•
CO Line Data V		2W OR 4W	4W •		
		DLY START TMR	6 (*50ms)		0-25
CO Line Overview		WINK TMR	6 (*50ms)		0-25
Common Attributes(140)		SND ANS TMR	6 (*50ms)		0-25
Analog Attributes(141)		OSND RLS TMR	13 (*50ms)		0-25
VoIP Attributes(142)		SND RING ON TMR	20 (*50ms)		4-25
ISDN Attributes(143)	_		40 (*50ms)		
CO/IP Ring Assignment(144)		SND RING OFF TMR			4-25
DID Service Attributes(145)		SND RING RPT CNT CO	8		0-25
DISA Service Attributes(146)		SND Ring RPT CNT RD	2		01-2
CO/IP Preset FWD Attributes(147)		CO Ring STOP TIMER	30 (*1sec)		0-25
MATM Attributes(149)					
NA ISDN Line Attributes(150)					
CID/CPN Attributes(151)					
T1 CO Line Attributes(152)					
DCOB CO Line Attributes(153)					

Figure 6.4.9-1 MATM Attributes

Table 6.4.9-1 MATM ATTRIBUTES	Table	6.4.9-1	MATM	ATTRIBUTES
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ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MATM Sub Type	This is the analog trunk type for the MATM option board. COIU : LCO RDIU : RD (ring down, only for national army) LDIU : LD (loop dial, only for national army) EMC = E&M continuous, EMD = E&M discontinuous)	LCO, RD, LD, EMC, EMD, Unused	LCO
MATM Start Signal Type	This is the signal type for the analog trunk. This should be set with alternate trunk type. These can be set by testing with available values.	Send Wink (IC), Wait Seize Ack(OG), Send Wink (IC) and Wait Seize Ack(OG), Send Sub Answer (IC) and Wait Sub Answer(OG)/ Send Wink and	Send Wink (IC)

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Send Sub	
		Answer(IC)/	
		Wait Ack and Wait	
		Sub Answer(OG)/	
		Send Wink and	
		Send Sub	
		Answer(IC) & Wait	
		Wink and wait sub	
		answer(OG)/	
		Unused Type	
2W or 4W	For E&M Lines, this value should be set as 2 wire	2W/	4W
	or 4wire to match the line.	4W	
DLY Start Timer	This is timer value for analog signaling.	0~255	6
Wink Timer	This is timer value for analog signaling.	0~255	6
SND ANS Timer	This is timer value for analog signaling.	0~255	6
OSND RLS Timer	This is timer value for analog signaling.	0~255	13
SND RING ON Timer	This is timer value for analog signaling.	4~255	20
SND RING OFF Timer	This is timer value for analog signaling.	4~255	40
SND RING RPT CNT		0~255	8
со	This is timer value for analog signaling.		
SND RING RPT CNT		01~20	2
RD	This is timer value for analog signaling.		2
CO Ring STOP Timer	This is timer value for analog signaling.	0~255	30

Table 6.4.9-1 MATM ATTRIBUTES

6.4.10 NA ISDN Line Attributes - PGM 150

Selecting NA (North America) ISDN Line Attributes will display the NA ISDN Line Attributes data input page. Enter a valid CO range and click **[Load]** to enter the NA ISDN Line Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base	< Favo	ite PGM	NA ISDN Line Att			
PGM Search O	Enter CO F	Range (1 - 998)	:		2	Load
System ID & Numbering Plans	CO Range	1				
Station Data	Order <u>l</u> a	Check All	Attribute	Value	Range	
lion Data	1		Local Exchange Type	NI2 T		
rd Based Data	2		SPID Number		Max 20 Digits	
Line Data V	3		Directory Number		Max 20 Digits	
	4		EKTS Mode	None 🔻		
CO Line Overview	5		Type for 1 2 3	Unknown 🔻		
Common Attributes(140)	6		Type for 4 5 6	Unknown •		
Analog Attributes(141)	7		Type for 7 8 9	Unknown •		
VoIP Attributes(142)	8		Type for 10 11	Unknown •		
DN Attributes(143)						
CO/IP Ring Assignment(144)						
DID Service Attributes(145) DISA Service Attributes(146)						
D/IP Preset FWD Attributes(147)						
/ATM Attributes(149)						
NA ISDN Line Attributes(150)						
CID/CPN Attributes(151)						
T1 CO Line Attributes(152)						
COB CO Line Attributes(153)						

Figure 6.4.10-1 NA ISDN Line Attributes

To comply with the North American ISDN standards, certain attributes must be defined for the system. These include Directory (telephone) Number and Service Profile Id (SPID) for the device. Note that this programming is required only for "Country Code" 1, USA installations. Refer to the following table for information on individual attributes.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local Exchange Type	The type of ISDN determines several specifics of the protocol and is required for proper operation.	NI 1, NI 2, 5 ESS, Nortel	NI 2
SPID Number	The Service Profile Identifier (SPID) is a number assigned to a fully initializing ISDN terminal and enables the Stored Program Control switching System (SPCS) to identify the ISDN terminal at layer 3 of the D-channel signaling protocol. The SPID is a free-formatted numeric string composed of 9 to 20 numeric {0-9} and International Alphabet (IA5) characters. The SPID uniquely identifies a	Max. 20 digits	

Table 6.4.10-1 NA ISDN LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	particular set of subscription parameters assigned to a TSP.		
Directory Number	Initializing terminals are required to store a 7-digit DN in order to perform the compatibility checking procedures that are part of call termination.	Max. 20 digits	
EKTS Mode	The EKTS (Electronic Key Telephone Service) terminal permits a user to operate those features that are specific to EKTS, as well as voice features that may function distinctly in the EKTS environment. EKTS allows a DN to be shared by more than one terminal on the same or on different interfaces.	None, EKTS	None
Type for 1/2/3	ISDN CALLED NO uses the International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 1~3digits.	Unknown, International, National, Network, Subscriber, Abbreviated	Unknown
Type for 4/5/6	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 4~6 digits.	Unknown, International, National, Network, Subscriber, Abbreviated	Unknown
Type for 7/8/9	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 7~9 digits.	Unknown, International, National, Network, Subscriber, Abbreviated	Unknown
Type for 10/11	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials more than 10 digits.	Unknown, International, National, Network, Subscriber, Abbreviated	Unknown

Table 6.4.10-1 NA ISDN LINE ATTRIBUTES

6.4.11 CID/CPN Attributes - PGMS 151

Selecting CID/CPN Attributes will display the CID/CPN Attributes data input page. Enter a valid CO range and click **[Load]** to enter the CID/CPN Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base	< F	avorite PGM	CID/CPN Attribute		
PGM Search	Enter C	O Range (1 - 998)		2 Load	Save
System ID & Numbering Plans	CO Ran	ge 1			
Station Data	Order	Check All	Attribute <u>↓</u> ª	Value	Range
			CID Password	Go to Setting	Max 12 Characters
Board Based Data	1		COLP Table Index	Station CLI •	
CO Line Data	, 2		CLIP Table Index	Station CLI •	
	3		Type of Number for Calling Party Info	National •	
CO Line Overview	4		Incoming Prefix Code Insertion	OFF •	
Common Attributes(140)	5		Outgoing Prefix Code Insertion	ON V	
Analog Attributes(141)	6		International Access Code		Max 4 Digits
VoIP Attributes(142)	7		My Area Code	1	Max 6 Digits
ISDN Attributes(143) CO/IP Ring Assignment(144)	8		My Area Prefix Code		Max 4 Digits
DID Service Attributes(145)	9		CLI TRANSIT	CFW T	
DISA Service Attributes(145)	10		ISDN Redirecting number	No Service	
CO/IP Preset FWD Attributes(147)	11		Choice Incoming CLI	Transit Point CLI V	
MATM Attributes(149)	12		Calling Party Numbering Plan	ISDN/Telephony	
NA ISDN Line Attributes(150)	13		Called Party Numbering Plan	Unknown 🔻	
CID/CPN Attributes(151)	14		Station CLI Type	Station CLI 1 V	
T1 CO Line Attributes(152)	15		DID Remove Number	0	00-99
DCOB CO Line Attributes(153)	16		One Digit Remove	Disable T	00.00
	17		CID Mode	FSK T	
System Data	18		RCID Detect	All T	
station Group Data	19		RCID Request	AUTO V	
PDN Line Date	20		RCID Request RCID Request First Delay Timer	30 *10ms	10-150
SDN Line Data			RCID Request First Delay Timer RCID No-Answer Timer		1-300
IP Data	21			20 *sec	
ables Data	22		RCID Digit Number	7	4-10
ables Data	23		RCID Request Count	1 •	

Figure 6.4.11-1 CID/CPN Attributes

Refer to the following table for information on individual attributes. COLP: Connected Line Presentation / CLIP: Calling Line Identification Presentation

Table 6.4.11-1 C	ID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
COLP Table Index	When an incoming call on a CO/IP Line is answered, the system will send connected party ID using the number from the CLIP/COLP Table entry defined by this parameter with the "Station CLI" as a suffix. The "Station CLI" is the Station CLI Type (1~5) entered below. If Station CLI is selected in the table, only the Station CLI is sent.	N/A, 0-49, Station CLI	Station CLI
CLIP Table Index	When a call is placed on a CO/IP Line, the system will send caller ID using the number from the CLIP/COLP Table entry defined by this parameter with the "Station	N/A, 0-49, Station CLI	Station CLI

Table 6.4.11-1	CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	CLI" as a suffix. The "Station CLI" is the Station CLI Type (1~5) entered below. If Station CLI is selected in the table, only the Station CLI is sent.		
Type of Number for Calling Party Info	For outgoing calls on an ISDN Line, this parameter defines the "Type of Number Plan" provided in Calling Party Information Element of the ISDN call SETUP message.	Unknown, International, National, Unused, Subscriber	National
Incoming Prefix Code Insertion	Regional ISDN providers may use the Local Area Prefix code for special services. In cases where the code is not provided in the incoming call SETUP message, the system can insert the My Local Prefix and My Area Code below in SMDR, LNR, displays etc.	OFF ON	OFF
Outgoing Prefix Code Insertion	Regional ISDN providers may use the Local Area Prefix code for special services. The system can insert the "My Area Code" and "My Local Prefix Code" in the Connect message as defined in those items below.	OFF ON	ON
International Access Code	When an incoming call includes the international Country code in the ISDN call SETUP message, the Country code can be included in the station display. To include the Country code, Incoming Prefix insertion, and CLI display in Station Data must be ON.	Max. 4 digits	-
My Area Code	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Area Code in the call SETUP messages defined under the Incoming/Outgoing Prefix Code Insertion entries above.	Max. 6 digits	-
My Area Prefix Code	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will use this code for insertion of the Local Prefix Code in the call SETUP messages if Local Prefix Insertion is enabled above.	Max. 4 digits	-
CLI Transit	When the system must send CLI to the ISDN for an off- net call, the CLI can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station.	ORI, CFW	CFW
ISDN Redirecting Number	When the system needs to send a Redirecting number to the ISDN for an off-net call, the Redirecting number can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station. If set as "No Service", the system will not send the CLI information. If configured for OGR CLI (original CLI), the system will send original CLI that is received from incoming CO line. If set to CFW CLI, the system will send the redirecting CLI that is the CLI of the off-net call forwarding station.	NO SERVICE, ORG CLI, CFW CLI	NO SERVICE
Choice incoming CLI	Incoming CLI Choice – When ISDN setup message has two CLIs (Transit Point CLI & Original CLI), this option determines the CLI the system will recognize.	Original CLI, Transit Point CLI	Transit point CLI

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling party numbering Plan	ISDN Calling Party Numbering Plan can be programmed.	Unknown, ISDN/Telephony, Data/Numbering, Telex, National Std, Private, Reserved	ISDN/ Telephony
Called party numbering Plan	ISDN Calling Party Numbering Plan can be programmed.	Unknown, ISDN/Telephony, Data/Numbering, Telex, National Std, Private, Reserved	Unknown
Station CLI Type	The Station CLI used with the CLIP or COLP Table index is one of the five Station CLIs defined in ' <i>CLI Attributes-PGM 113</i> ' section as selected here.	Station CLI 1 – Station CLI 5	Station CLI 1
DID Remove Number	When a DID call is received on an ISDN Line, this field determines the number of digits that will be removed starting at the first received digit.	00~99	0
One Digit Remove	Selects One-digit remove mode in ISDN Called Digits for Italy DID.	Enable Disable	Disable
CID mode	The type of CID signal can be assigned according to the type of CID from the carrier.	Disabled, FSK, DTAS FSK, DTMF, RCID	FSK
RCID detect	Russia CID Detect Mode.	LOCAL, ALL	ALL
RCID request	Russia CID Request Mode.	USER, AUTO	AUTO
RCID Request First Delay Timer	Russia CID First Delay Timer.	010–150 (*10 msec)	30
RCID No-Answer Timer	Russia CID NO-Answer Timer.	001–300 (*seconds)	20
RCID Digit Number	Russia CID Digit Number.	4–10	7
RCID Request Count	Russia CID Request Count.	1–3	1
RCID Request Retry Delay Timer	Russia CID Retry Delay Timer.	10–30 (*10 msec)	10

Table 6.4.11-1 CID/CPN ATTRIBUTES

6.4.12 T1 CO Line Attributes - PGM 152

Selecting T1 CO Line Attributes will display the T1 Line Attributes data input page. Enter a valid CO range and click **[Load]** to enter the T1 Line Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Search	Enter CO	Range (1 - 99	98) :				2 Load	
System ID & Numbering Plans	CO Range	1						
Station Data	Order <u>↓</u> a	Check All	Attribute	Va	lue	Range		
	1		Pause Timer	2	(*1sec)	1-9		
Board Based Data	2		RELEASE GUARD	20	(*100ms)	1-60		
CO Line Data ~	3		DT DELAY	10	(*100ms)	2-50		
	4		INTER DIGIT	15	(*20ms)	15-30		
CO Line Overview	5		WINK Timer	10	(*20ms)	07-15		
Common Attributes(140)	6		OP RATE	60-40 (10	Opps) 🔻			
Analog Attributes(141)	7		SEZ DTC	3	(*20ms)	0-127		
VoIP Attributes(142) ISDN Attributes(143)	8		RELEASE	7	(*20ms)	0-127		
CO/IP Ring Assignment(144)	9		IASG TY	DTMF	•			
DID Service Attributes(145)	10		RING DTC	2	(*100ms)	2-9		
DISA Service Attributes(146)	11		RING STOP	60	(*100ms)	10-60		
CO/IP Preset FWD Attributes(147)	12		COLLECT DIGIT	3		1-6		
MATM Attributes(149)	13		STORE TIME	15	(*1sec)	01-15		
NA ISDN Line Attributes(150)								
CID/CPN Attributes(151)								

Figure 6.4.12-1 T1 CO Line Attributes

North American T1 standards require that the T1 terminating device, in this case the iPECS UCP, include various "adjustable" timers and counters as described below.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Pause Timer	A timed pause may be included in a Speed Dial number, in	1~9	2
Fause filler	which case, the pause time is defined by this entry.	(seconds)	2
	The release guard timer defines the length of time the		
RELEASE GUARD	system will maintain a Line as busy after the call has been	01~60	20
RELEASE GUARD	terminated to assure the PSTN has sufficient time to 'clear	(100 ms)	20
	down' the circuit.		
DT DELAY	The DT (Dial tone) Delay timer defines the duration dial	02~50	10
DIDELAT	tone must be received for DT recognition.	(100 ms)	10
INTER DIGIT	The Inter Digit timer defines the duration between digit	15~30	15
INTER DIGIT	transmissions.	(20 ms)	15
	For TIE or DID Lines the Wink timer defines the length of	7~15	10
WINK Timer	time the 'wink' (T1 TIE line circuit reversal) will last.	(20 ms)	10
	For Pulse signaling, defines the duration and make/break	60-40(10pps),	60-40
OP RATE	ratio of each pulse.	66-33(10pps),	(10pps)

Table 6.4.12-1 T1 CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT	
		60-40(20pps),		
		66-33(20pps)		
SEZ DTC	This timer defines the length of a valid 'line seizure' signal.	0~127	3	
362 010		(20 ms)	5	
	For Ground Start, this timer defines the minimum length of	0~127		
RELEASE	time ground will not be applied to the TIP side from the	-	7	
	PSTN.	(20 ms)		
	Incoming Address Signaling Type defines the type of	PULSE	DTME	
IASG TY	signaling (DTMF or Pulse) expected.	DTMF	DTMF	
	The Ring DTC (Detect) timer defines the minimum	2~9	2	
RING DTC	acceptable length of the Ring-on time during a ring cycle.	(100 ms)	2	
RING STOP	The Ring Stop timer defines the maximum Ring-off time	10~60	60	
RING STOP	during a ring cycle.	(100 ms)	60	
	Collect DGT (digits) defines the number of digits expected	4.0	2	
COLLECT DGT	on a DID line.	1~6	3	
	For DID lines, this timer defines the maximum delay	1~15	45	
STORE TIME	between incoming DID digits.	(second)	15	

Table 6.4.12-1 T1 CO LINE ATTRIBUTES

6.4.13 DCOB CO Line Attributes - PGM 153

Selecting DCOB CO Line Attributes will display the DCOB Line Attributes data input page. Enter a valid CO range and click **[Load]** button to enter the DCOB Line Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

PGM Base Function Base	< Favor	ite PGM	DCOB CO Li X				×
Q PGM Search	Enter CO I	Range (1 - 99	8) :			2 Load	Save
System ID & Numbering Plans	CO Range	1					
Station Data	Order <u>↓</u> a	Check All	Attribute	Value	Range		
	1		Line Status	6	1-9		
Board Based Data	2		DNIS Service	OFF T			
CO Line Data ~	3		Number of CLI Digits	10	1-15		
	4		DCOB Type	DID			
CO Line Overview	5		Call Category	1	1-9		
Common Attributes(140)	6		Number of Digits Expected from DID Circuit	0	0-32		
Analog Attributes(141)							
VoIP Attributes(142)							
ISDN Attributes(143)							
CO/IP Ring Assignment(144)							
< DID Service Attributes(145)							
DISA Service Attributes(146)							
CO/IP Preset FWD Attributes(147)							
MATM Attributes(149) NA ISDN Line Attributes(150)							
CID/CPN Attributes(151)							
T1 CO Line Attributes(151)							
DCOB CO Line Attributes(152)							

Figure 6.4.13-1 DCOB CO Line Attributes

Table 6.4.13-1 DCOB LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Line Status	This parameter defines the code that the system will send to indicate idle line status in accordance with E1R2 specifications.	1~9	6
DNIS Service	In R2, this field determines whether system will send caller information to PX or not.	OFF ON	OFF
Number of CLI Digits	This parameter defines the number of digits expected as the Calling Line Identification from digital CO lines.	01~15	10
DCOB Туре	According to this type, the line can be restricted to the type of service, incoming DID and outgoing calls (DOD).	DID/DOD, DOD, DID	DID
Call Category	This parameter defines the code sent in response to a call category request from the network in accordance with E1R2 specifications.	1~9	1
Number of Digits Expected from DID circuit	This parameter defines the number of DID digits expected from digital CO lines. If set to "0", the number of digits defined in PGM 145 is used.	0~32	0

6.5 System Data

Selecting the System Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

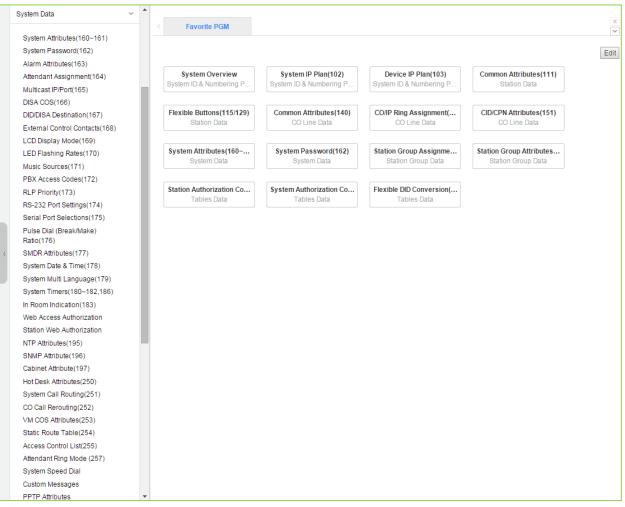


Figure 6.5-1 System Data Main Page

6.5.1 System Attributes - PGM 160 & 161

Selecting System Attributes will display the System Attributes data entry page.

PGM Base Function Base	< Fa	vorite PGM System Attri *		1
Q PGM Search				Save
System ID & Numbering Plans	Order <u>↓</u> ª	Attribute <u>↓</u> ª	Value	Range
Station Data	1	Attendant Call Queued Ringback Tone	MOH	
Board Based Data	2	Camp-On MOH/Ring-Back Tone	MOH 🔻	
Duald Dased Data	3	CO Dial Tone Detect	OFF V	
CO Line Data	4	CO Line Choice	Last T	
System Data V	5	DISA Retry Count	3 •	
	6	External Night Ring	OFF T	
System Attributes(160~161)	7	Hold Preference	System •	
System Password(162)	8	Print LCR Converted Digits	LCR V	
Alarm Attributes(163)	9	Attendant Call Queuing	OFF V	
Attendant Assignment(164)	10	USE PGM_0 IN ALL ATD	OFF V	
Multicast RTP/RTCP(165)	11	Off-Net Prompt Usage	OFF V	
DISA COS(166) DID/DISA Destination(167)	12	CO to CO Unsupervised Conference Timer Extend	OFF V	
External Control Contacts(168)	13	ACD Manager Print	OFF V	
LCD Display Mode(169)	14	CALL LOG Num	15 (Num)	15-50
LED Flashing Rates(170)	15	Repeat DTMF Tone	ON V	
Music Sources(171)	16	Off-Hook Ring Type	Mute V	
PBX Access Codes(172)	17	Page Warning Tone	ON V	
RLP Priority(173)	18	Automatic Privacy	ON V	
RS-232 Port Settings(174)	19	Privacy Warning Tone	ON V	
Serial Port Selections(175)	20	ACD Print Enable	OFF V	
Pulse Dial (Break/Make) Ratio(176)	21	ACD Print Timer	10 (*1sec)	001-255
SMDR Attributes(177)	22	Clear ACD Database	OFF T	
System Date & Time(178)	23	Override First CO Group	ON V	
System Multi Language(179)	24	Codec Type	G.711 T	
System Timers(180~182,186) In Room Indication(183)	25	G.711 Packetization	20 v (*1ms)	
Web Access Authorization	26	G.723 Packetization	30 V (*1ms)	
Station Web Authorization	• 27	Network Time & Date	Disable T	

Figure 6.5.1-1 System Attributes

System Attributes define settings that affect system-wide features and functions. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to the following table for a description of the Attributes and the data entries required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attendant Call Queued Ring Back Tone	When Attendant is busy with receiving call, the system will provide either Ring-back tone or Background music (MOH). If MOH is selected, the Music Source must be defined in ' <i>Music source – PGM171</i> '.	MOH, Ring-Back Tone	МОН
Camp-On MOH/Ring- Back Tone	When Camp-On is used, the calling station will receive either ring-back tone or Background music (MOH). If MOH is selected, a source must be defined in ' <i>Music</i> <i>source – PGM171</i> '.	MOH, Ring-Back Tone	МОН
CO Dial Tone Detect	The system can use dial-tone detection or a timed pause for Speed Dial numbers that contain a Pause.	OFF ON	OFF

Table 6.5.1-1	SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Choice	CO Lines can be selected among Round robin, Last, or First according to groups assigned by System.	ROUND, Last, First	Last
DISA Retry Count	A DISA user is allowed to retry erroneous authentication code entries. This entry sets the number of retry count before the system disconnects.	1~9	3
External Night Ring	CO/IP calls, which are assigned UNA (Universal Night answer), can activate the Loud Bell Contact. While in the Night mode, an incoming call will activate the contact.	OFF ON	OFF
Hold Preference	A single depression of the [Hold] button places the call on the preferred hold, System or Exclusive.	System, Exclusive	System
Print LCR Converted digits	SMDR will print out the number dialed by either the system's LCR or the user.	LCR, User	LCR
Attendant Call Queuing	The system can be configured to queue incoming calls until Attendant is available.	OFF ON	OFF
USE PGM_0 IN ALL ATD	This field allows Main Attendants to activate Day/Night mode and other System Attendant menus except PGM 06 – Record system announcement.	OFF ON	OFF
Off-net Prompt Usage	When a call is routed to a destination external to the iPECS, the Off Net routing prompt can be played.	OFF ON	ON
CO to CO Unsupervised Conference Timer Extend	When an Unsupervised Conference is established with DISA, Off-Net Fwd etc., the Unsupervised Conference timer determines the duration of the call. If enabled here, the user may extend the duration.	OFF ON	OFF
ACD Manager Print	When the optional ACD Event messages are required, the system must be enabled here to send the events.	OFF ON	OFF
CALL LOG Num	The Call Log saves the Outgoing call, Received call, or Lost call information and can be displayed by pressing Call Log Display Button. The maximum number of Call Log per station can be set.	15~50	15
Repeat DTMF tone	If enabled, the system will repeat DTMF tones to the caller's station when the call is routed to an off-net location.	OFF ON	OFF
Off-Hook Ring Type	Off-hook ring can be a single tone burst or muted normal ring.	Burst Mute	Mute
Page Warning Tone	A warning tone can be sent prior to a page announcement.	OFF ON	ON
Automatic Privacy	Automatic Privacy can be disabled, allowing stations to join an active CO/IP call. A warning tone can be provided, see Privacy Warning Tone below.	OFF ON	ON
Privacy Warning Tone	If desired, a warning tone can be provided when privacy is overridden.	OFF ON	ON
ACD Print Enable	ACD statistics can be periodically sent to the assigned serial port. To provide periodic reports, this feature must be ON.	OFF ON	OFF
ACD Print Timer	This field defines the time, in 10-second increments,	001~255	10

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	between the periodic ACD reports assigned above.	(1 sec)	
Clear ACD Database	When a periodic report is sent, the ACD database can be cleared automatically, if "ON".	OFF ON	OFF
Override First CO Group	When a user dials '9', the system can search all CO/IP Groups for the first available CO/IP line.	OFF ON	ON
Codec Type	The default codec can be defined as G.711, G.729, G.722 or G.723.1 for decreased bandwidth needs. The selected codec will be used on all internal communications as well as for remote iPECS devices.	G.711, G.723.1, G.729, G.722	G.711
G711 Packetization	The G.711 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.711 codec is used.	10, 20, 30 (1 msec)	20
G723 Packetization	The G.723.1 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.723.1 codec is used.	30, 60 (1 msec)	30
Network Time & Date	The system can use ISDN Network time or NTP to synchronize time with the ISDN or data network. ISDN sync is not available in USA version.	Disable, ISDN CLOCK, NTP	Disable
Incoming Toll Check	The system can invoke COS dialing restrictions when a user dials while connected to incoming call.	OFF ON	ON
Web Server Port/TLS for Web	This field determines the TCP port employed to access the system WEB server. This field also enables Transport Layer Security (TLS) for access to Web Admin.	00001-65535/ Enable/Disable	80/Disable
Auth Retry Count	When an Authorization code is required, the user may attempt to enter a Valid code up to the maximum available count.	1-9	3
Simple Auth Code Usage	System Authorization codes are entered by the user as "*" and the code (ON) or "*"+ the Auth code index and the code (OFF).	OFF ON	ON
COS 7 when Auth Fail	If a user fails to enter a valid Authorization code in the number of attempts assigned in Auth Retry Count above, the station is disconnected or the Station COS is changed to COS 7. In the latter case, the user must employ COS Restore in Station User PGM to return the station to the normal COS.	OFF ON	OFF
Unified Message Format	System Integration Messages are sent out the defined serial or TCP channel.	OFF ON	OFF
Conference Room CO Tel Number	The telephone number associated with a Conference Room can be assigned allowing an external party to access the room Conference room,	Max. 15 digits	
Record warning tone	When call recording is active, a tone can be sent to all connected parties to indicate the conversation is being recorded.	OFF ON	ON
UCP DIFF SERVE	Diff-Serv Code Point applied to packets from LAN port of the UCP.	00-63	46
Device Upgrade Mode	Transfer mode for upgrades from UCP to an iPECS device.	FTP TFTP	FTP

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Transfer Tone	When a CO call is transferred to a busy extension, Ring Back Tone or Music On Hold will be played to the CO Line. For MOH, define the 'Music source'.	MOH Ring Back Tone	Ring Back Tone
Conference Warning Tone	When a new member joins a conference room, the system provides warning tone to conference members who already joined the conference.	OFF ON	ON
Dummy Dial Tone	When a CO line does not provide dial tone, the system can provide dummy dial tone.	Unused Use	Unused
SIP Station Mode	SIP phones may set up a point-to-point RTP connection (PTP) or to assure a controlled connection, RTP can be routed via a VoIP channel (Routed).	Routed PTP	Routed
SMS Center Number	When the PSTN will be used to send SMS, the phone number of the Short Message Service Center must be entered.	Max. 23 digits	
SMS Center CLI	When the CO/IP Line will be used to receive SMS, the Caller ID expected from the Short Message Service Center must be defined.	Max. 23 digits	
SMS Protocol	The Short Message Service Protocol must be selected to support SMS.	None, ETSI-P1, ETSI-P2, KT-LivingNet, SIP-Text, SIP-XML, KT IP-PBX, SKN IP-PBX, KT XML	None
G.722 Packetization	The G.722 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.722 codec is used.	10, 20, 30 (1 msec)	20
Transit-out security	The system will check IP address for transit-out calls in the master system. If not valid, the transit-out call is denied.	Unused Use	Use
Emergency call Attendant Notify	The Attendant can be notified when another user in the system dials an Emergency number	Unused Use	Use
3-Way Conference Preference	When 3-way conference calling, the system uses the selected device to establish the conference mixing. When "Local" is assigned, the device, such as a SIP phone, must provide the mixing.	Local MCIM	Local
First digit * in SPD	Normally, when "*" is the first digit in a Speed Dial number, the Display Security feature is activated so that the number is not shown in the LCD of iPECS IP or LDP Phones. Otherwise, the "*" is sent as the first digit to the carrier.	Display Security Digit *	Display Security
Use Strong Password	When enabled, passwords in PGM 162 must be specified as long and random as you make it with more than 6 digits including both numbers and characters.	OFF ON	ON
VSF SMTP port	SMTP port used for the VSF and UVM gateway.	00001~65535	25

Table 6.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CTI IP	When assigned, the system will accept 3 rd party TAPI messages only from assigned IP address.		0.0.0.0
Intercom Busy Service	When busy, an intercom call may use Off-hook Voice- Over or Intrusion to connect to the called intercom party.	Voice-over Intrusion	Voice over
Auto save new message	After listening to a voice message, if the user takes no action, the system can automatically save the message or leave the message in the new message category.	Unused Use	Unused
IGMP query usage	The system employs multi-cast packets for registration and certain general functions such as MOH. With some multicast snoop enabled Layer 2 switches, multicast packets will not forward unless an IGMP query device exists in the network. This field enables the IGMP query option and the system sends periodic IGMP query messages to avoid multicast blocking.	OFF ON	OFF
IGMP query interval timer	This timer defines the interval for each IGMP query message.	0~3600 (Sec.)	180
IGMP query all host	IGMP queries are sent to all IP hosts (ON) in the network or to iPECS devices only. For All Hosts, IP address 224.0.0.1 is used, otherwise the iPECS specific 239.20.19.50 IP address is used. If problems occur MOH, the "All Hosts" may correct the problem.	OFF ON	ON
IGMP query generic	This attribute specifies a group address being queried. If ON is selected, all multicast groups are queried. If OFF is selected, the iPECS registering device group (239.20.19.50) is queried only. This should be ON when there is a MOH problem.	OFF ON	OFF
Restrict star and pound	If enabled, calls using "*" or "#" as the first digit are prohibited by the system.	OFF ON	OFF
Restricted Dialing Display After Answer	If a restricted number is called, the system will output an SMDR record for the call after the call is answered.	OFF ON	ON
IP BIND USAGE	If ON, the VoIP channel will apply IP-Binding with the Media port assigned in PGM 130 and 133.	OFF ON	OFF
New 5 Wake Up Usage	With the "New Wake-Up" option, the user can assign five alarm notification times, otherwise only one Wake- Up time can be set.	OFF ON	OFF
Easy 5 Wake Up Usage	If this field is set to ON and New 5 Wake Up Usage is also set to ON, each station user can enter a wake up time without entering wake up type or wake up index.	OFF ON	OFF
Station VM Feature Usage	Enhanced features of the VSF/UVM can be disabled. Features controlled by this setting include as below: - Company Directory - Remote Announcement Recording - Administrator Mailbox - Distribution List - Mark a Message as Private, Urgent, or Delivery Confirmation - Record Greeting through CCR - Voice Mail Class of Service	OFF ON	ON

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
End code(#) usage in System Auth Code	If this filed is set to ON, the End code (#) must be entered when a system Auth code is entered.	OFF ON	OFF
Remote VM Access	If this value is OFF, the user cannot access the built-in Voice Mail via an external CO/IP Line.	OFF ON	ON
Transfer Tone Usage	If this value is ON, a Warning tone is served to a station receiving a screened call transfer.	OFF ON	OFF
CID Password Usage CID Password	If this value is ON, a user must enter the CID password to modify a CID setting in admin.	OFF ON	OFF
LCR Dial Tone Detect	If this value is set to ON, the system first checks dial tone on analog CO Lines then LCR dialing is completed. If no dial tone is detected, the call is rerouted to Alternate DMT Index. If LCR type is set to M13, LCR dial tone detect option is not applied.	OFF ON	OFF
ICM Call Log	If this value is set to ON, the system provides an ICM Call log for iPECS IP and LDP Phones.	OFF ON	OFF
Mobile Phone Presence Service port	This is for an interface between UCP and external server that sends http/xml data. Currently the first usage of this port is 'mobile phone presence' service. If set to a valid port, the presence service will be implemented and the system will await messages for presence from the external server.	00001~65535	0
Mobile Phone Presence State Sync	When the system receives presence information for a Mobile extension from an external server, the system synchronizes the station's call state with this presence information. A busy presence will set the station to busy.	OFF DSS LED only Station Status	Station Status
Mobile Phone Presence Force Idle Timer	The system will return a station's state to idle if there is no updated presence information from the external server for the duration of this timer.	0~3600 (Sec.)	0
Attendant Password Usage	If this value is set to ON, system requests a password when a user enters Attendant program ([PGM] + 0, an Attendant enters Speed program, or a user assigns Attendant program code ([PGM] + 0) to Flexible button,	OFF ON	OFF
Pick-up station name usage	When picking up a call for a station, the Name of the station is displayed.	OFF ON	ON
Display LCR mode	The LCD of iPECS IP and LDP Phones can display "LCR MODE" when LCR is activated.	OFF ON	ON
VM Notify to Mobile Extension over CO	If this value is set to ON, an analog Loop Start CO Line can be used for the VM notification call to the Mobile Extension.	Disable Enable	Disable
Display {MEET ME} Soft button	If this value is set to OFF, {MEET ME} soft button is not displayed during a paging.	OFF ON	ON
Number of CLI Wait List	The number of records in the missed call log (CLI Msg Wait List) is determined by this value. If the number of missed calls reaches this value, the oldest record is deleted and the new record is added to the list.	0-255	0
Emergency Mailbox	When an Emergency Mailbox Station is assigned, an emergency call placed by a station is recorded		

Table 6.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station	automatically to the assigned mailbox.		
MSVC XML Port	The XML port used to support Web callback, call- through and iPECS ClickCall application for MSVC (Mobile Service) must be defined.	00001~65535	7878
IPCR Announce for recording warning	When ON, the IPCR server Call Recording notification announcement is played to the caller in place of the warning tone.	OFF ON	OFF
IPCR Announce for only incoming	User can choice IPCR Announce when it's incoming by setting ON.	OFF ON	OFF
Mobile EXT CO Access Password Check	When a mobile extension places an external call using an iPECS CO/IP Line, the user may be required to enter a valid Authorization code to place the call.	OFF ON	OFF
Hold key usage on paging	When ON, the Hold button is used for paging.	OFF ON	ON
Device Info Request Interval	The system checks the status of each device with a polling message at intervals of this timer.	15 ~ 255 seconds	15
Dial By Name List	The Dial by Name feature can allow stations in any ICM tenancy groups to call a station any in ICM Tenancy group. When desired, Dial by Name can be limited to function within allowed Tenancy calling groups, PGM 125.	All Accessible ICM Group only	ALL
Dial By System Speed Name List	If this value is set to "Accessible System Speed Zone Only", the system speed dial number of Accessible system speed zone (System Speed Zone (232)) is displayed in {Dial by Name}.	All, Accessible System Speed Zone Only	ALL
Default Web Language	The user can select the display language used in the Web pages. Either English or the "Local" language can be selected. Note the "Local Language" must be entered in the Multi-Language file in Maintenance section.	English, Local Language	English
No Range Load Limit on Web Admin	OFF: Limited index range will be accepted (eg, 1-100) ON: No limitation of table index (eg, 221, 222, 270, etc)	OFF/ON	ON
Forward limitation by caller COS	Caller (internal station) call to a station offnet forwarded. It can be forwarded by caller COS if it's ON.	OFF/ON	OFF
No CLI Call Log	Leave system Call log even though there is no CLI information if it is ON. Otherwise Call log is not leaved.	OFF ON	OFF
Remote VM Forward Access	If the value is ON, Call Forwarding setting from remote access is enabled. If the value is OFF, Call Forwarding setting from remote access is disabled.	OFF ON	ON
DB Backup to USB monthly	System downloads the database to USB periodically. The user can access, copy and delete files in USB drive	N/A, 1, 15	
DB Backup to USB weekly	via web admin. So you can back up DB by choosing the specific date for Monthly or Weekly.	N/A, Mon ~ Sun	
	SMDR/ACD/Alarm Mail Attribute		
	Common SMTP Attributes	40 15 15	0.000
SMTP Server IP	When the system must send E-Mail SMDR, ACD	12-digits	0.0.0.0

Table 6.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Address	reports or Alarms, the SMTP Mail server IPv4 address for the systems E-mail account is required.		
SMTP Server Domain Address	The URI associated with the SMTP sever domain can be assigned in place of the SMTP Mail IP address above.	Max. 100 characters	
SMTP Port	This field defines the TCP/IP port that system will employ when communicating with the SMTP E-mail server.	1-65535	25
SMTP Security Connection	The system can support basic security policies when communicating with the SMTP E-mail server. Note the server must also be configured for the selected security protocol.	No security SSL TLS	No security
E-Mail Account ID	This field defines the ID for the system's account in the SMTP Mail server. If ID and password are assigned, the SMTP Mail server can check the validity of the user ID and password.	Max. 40 characters	
E-Mail Account Password	This field defines the password for the system's account in SMTP Mail server. If ID and password are assigned, the SMTP Mail server can check the validity of user ID and password.	Max. 20 characters	
Sender E-Mail Address (From)	E-Mail address used by the system as the "From" address when sending Database, SMDR, ACD, and Alarm reports	Max. 40 characters	
Sender System Domain Name	This field is the Domain name of the system used to send the various system SMDR, ACD, and Alarm reports.	Max. 18 characters	
	Database Attributes [Send Mail]		
[Sen	d Mail] button is used for sending the mail after filling out t	he below menu	
Database Mail Send Monthly Set	Sets day of the month for Database to be sent on a monthly basis (NA for no monthly reports, select the day for 1 or 15).	NA/ 1/ 15	NA
Database Mail Send Weekly Set	Sets day of the week to send Database weekly.	Day-of week	N/A
Database Type	Select the desired database type: All database, System speed, Station speed, LCR etc.		All Database
Database Receiver E- Mail Address (To)	E-mail address to receive the Database E-mail reports.	Max. 40 characters	
	SMDR Attributes [Send Mail]		
[Sen	d Mail] button is used for sending the mail after filling out t	he below menu	
SMDR Mail Send Weekly Set	Sets day of the week to send SMDR data weekly.	Day-of-Week	N/A
SMDR Mail Send Daily Set	Sets time-of-day for SMDR data to be sent on a daily basis (00 for no daily reports, 01-23 for hour of the day).	00-23	
SMDR Mail Auto Send Set	If the SMDR buffer is full, the system can send a notification by E-mail automatically.	OFF ON	OFF

Table 6.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SMDR Mail Auto Delete Set	When set, the system will delete SMDR records after sending the E-mail.	OFF ON	OFF
SMDR Receiver E-Mail Address (To)	E-mail address to receive the SMDR E-mail reports.	Max. 40 characters	
	ACD Attributes [Send Mail]		
[Sen	d Mail] button is used for sending the mail after filling out t	he below menu	
ACD Mail Send Weekly Set	Sets day of the week to send ACD statistic data weekly.	Day-of-Week	N/A
ACD Mail Send Daily Set	Sets time-of-day for ACD statistic data to be sent on a daily basis (00 for no daily reports, 01-23 for hour of the day).	00-23	
ACD Database Delete After Mail Send	When set, the system will delete ACD statistic data after sending E-mail.	OFF ON	OFF
ACD Receiver E-Mail Address (To)	E-mail address to receive the ACD E-mail reports.	Max. 40 characters	
	Alarm Attributes [Send Mail]		
Alarm Receiver E-Mail Address(To) & Notification Receiver E-Mail Address(To)	The system will send email to saved E-Mail Address when system alarm is occurred or system restarts.	Max. 40 characters	
	LDAP Server Settings		
Server Display Name	When the UCS Client requires access to an LDAP server, the system will provide the LDAP server information to the client. The server name is defined in this field.	15 characters	LDAP Server
Server IP	When an LDAP server is employed, the IP address of the server must be defined.		0.0.0.0
Server Port	When an LDAP server is employed, the TCP/IP port of the server must be defined.	0001-65535	
Require Login	The UCS Client ID and Password may be required for log in to the LDAP server.	OFF ON	ON
Use SSL	When supported by the server, the client can employ SSL (Secure Sockets Layer) for added security.	OFF ON	OFF
Search Base	Server base means Search option. You can get the search option from LDAP Server manager. For example, if OU (Organization Unit) is OC and DC (Directory Company) are ucapp and com, you can give the option "OU=OC, DC=ucapp, DC=com" in this field. You will get the desired directory.		
LDAP User ID LDAP User Password	The ID and Password must be required to connect to LDAP Server.		

Table 6.5.1-1 SYSTEM ATTRIBUTES

6.5.2 System Password - PGM 162

Selecting System Password will display the System Password data entry page. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the Keyset Admin, Remote Access Password, or CID password when saved.

It is important to use strong password for lowering overall risks of a security breach. The best way to choose good password are designed to make passwords less easily discovered by intelligent guessing. In addition, we recommend that you change the password frequently.

PGM Base Function Base	< Favorite PGM System Pas X
Q 162	
System ID & Numbering Plans	Keyset Admin Password (Save :)
	Enter Current Keyset Admin Password
Station Data	Enter New Keyset Admin Password (MAX 12 digits)
Board Based Data	Confirm New Keyset Admin Password
CO Line Bete	Remote Access Password (Save :)
CO Line Data	Enter Current Remote Access Password
System Data V	Enter New Remote Access Password (MAX 12 digits)
System Attributes(160~161)	Confirm New Remote Access Password
System Password(162)	CID Password (Save :)
Alarm Attributes(163)	Enter Current CID Password
Attendant Assignment(164)	Enter New CID Password (MAX 12 digits)
Multicast RTP/RTCP(165)	Confirm New CID Password
DISA COS(166)	
DID/DISA Destination(167)	
External Control Contacts(168)	
LCD Display Mode(169)	

Figure 6.5.2-1 System Password

Access to the system database and maintenance functions can be protected by passwords up to twelve (12) digits. Three passwords can be defined, Keyset Admin, Remote Access and CID.

Check the save box and enter the password and click the save button.

The following success message is displayed if the password is correct and saved successfully.

Keyset Admin Password (Save : 📄)	
Enter Current Keyset Admin Password	
Enter New Keyset Admin Password (MAX 12 digits)	Success
Confirm New Keyset Admin Password	
Remote Access Password (Save :)	
Enter Current Remote Access Password	
Enter New Remote Access Password (MAX 12 digits)	
Confirm New Remote Access Password	
CID Password (Save :)	
Enter Current CID Password	
Enter New CID Password (MAX 12 digits)	
Confirm New CID Password	

6.5.3 Alarm Attributes - PGM 163

Selecting Alarm Attributes will display the Alarm Attributes data entry page. Click **[Save]** button after changing Value.

	< Favo	rite PGM Alarm Attributes	C	
/stem Attributes(160~161)				
ystem Password(162)				
larm Attributes(163)	Order ↓ª	Attribute	Value	
ttendant Assignment(164)	1	Alarm Enable	OFF T	
ulticast IP/Port(165)	2	Alarm Contact Type	Close •	
SA COS(166)	3	Alarm Mode	Alarm V	
D/DISA Destination(167)	4	Alarm Signal Mode	Repeat V	
ternal Control Contacts(168)	5	Emergency Call Notify	ON T	
CD Display Mode(169)	6	DCOB Fault Notify	ON T	
D Flashing Rates(170)	7	SIP Registration Fault Notify		
usic Sources(171)	8	- ·		
3X Access Codes(172)	-	Station Capacity Full Notify	ON T	
P Priority(173)	9	CO Capacity Full Notify		
S-232 Port Settings(174)	10	SMDR Full Notify	ON V	
erial Port Selections(175)	11	VM Memory Full Notify	ON T	
ulse Dial (Break/Make) Ratio(176)	12	WTIM Base Fault Notify	ON T	
IDR Attributes(177)	13	WTIM Chain Fault Notify	ON T	
stem Date & Time(178)	14	I SMDR Full Notify	ON V	
stem Multi Language(179)	15	Cabinet Fault Notify	ON T	
stem Timers(180~182,186)	16	Bar Full Notify	ON T	
Room Indication(183)	17	IPCR Fault Notify	ON T	
eb Access Authorization	18	IP Watch Fault Notify	ON V	
ation Web Authorization	19	Bath Alarm Notify	ON V	
P Attributes(195)	20	Temp License Expiry Notify	ON V	
MP Attribute(196)	21	License Expire Notify	ON T	
binet Attribute(197)	22	License Over Notify	ON T	
t Desk Attributes(250)	23	T-NET LCM License Expire Notify	ON T	
stem Call Routing(251)	24	TAPI Disconnected Notify	ON T	
Call Rerouting(252)	24	TALL DISCONNECTED NOTING		

Figure 6.5.3-1 Alarm Attributes

The system can monitor an external contact. This contact is frequently employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the external contact. For the Alarm, the signal to assigned stations can be repeating or a single burst, the former is often desired. For the Doorbell, a single tone is sent each time the contact activates. Refer the following table for a description of the features and the data entries required for each attribute.

Additional alarms events can be provided to the Attendant station for various conditions such as an Emergency call or SIP CO registration failure.

When 'Alarm Mode' attributes set 'Alarm', the system sends an email to the address that set in PGM 160 Alarm Attributes 'Alarm Receiver E-Mail Address (To) & Notification Receiver E-Mail Address (To)'.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Alarm Enable	This field enables/disables the contact monitoring circuitry.	OFF ON	OFF

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Alarm Contact Type	This field establishes the contact state that will activate the	Close/	Close
	Alarm, close or open.	Open	
Alarm Mode	The contact can be configured to function as a doorbell or an	Alarm/	Alarm
	alarm.	Door-Bell	
Alarm Signal Mode	The assigned stations will receive a repeating signal or single	Repeat/	Repeat
	burst (Once) of alarm tone.	Once	
Emergency Call Notify	This field enables/disables the Emergency call notification.	OFF ON	ON
DCOB Fault Notify	This field enables/disables DCOB Fault notification.	OFF ON	ON
SIP Registration Fault Notify	This field enables/disables SIP Registration Fault notification.	OFF ON	ON
Station Capacity Full	This entry enables user to get the notification as alarm when	OFF	
Notify	Station Capacity is over the capacity.	ON	ON
CO Capacity Full	This entry enables user to get the notification as alarm when	OFF	
Notify	CO Capacity is over the capacity.	ON	ON
	This entry enables user to get the notification as alarm when	OFF	
SMDR Full Notify	SMDR is over the capacity.	ON	ON
VM Memory Full	This entry enables user to get the notification as alarm when	OFF	
Notify	the memory of Voice Mail is full.	ON	ON
WTIB Base Fault	This entry enables user to get the notification as alarm when	OFF	
Notify	WTIB base gets the fault.	ON	ON
WTIB Chain Fault	This entry enables user to get the notification as alarm when	OFF	
Notify	WTIB chain gets the fault.	ON	ON
literity	This entry enables user to get the notification as alarm when I	OFF	
I SMDR Full Notify	SMDR is over the capacity.	ON	ON
	This entry enales user to get the notification as alarm when the	OFF	
Cabinet Fault Notify	cabinet has fault.	ON	ON
	This entry enables user to get the notification as alarm when	OFF	
Bar Full Notify	Bar is full.	ON	ON
	This entry enables user to get the notification as alarm when	OFF	
IPCR Fault Notify	IPCR gets the fault.	ON	ON
	This entry enales user to get the notification as alarm when IP	OFF	
IP Watch Fault Notify	Wathch has fault.	ON	ON
	This entry enables user to get the notification as alarm about	OFF	
Bath Alarm Notify	Bath Alarm.	ON	ON
Temp License Expire	This entry enables user to get the notification before expiring	OFF	
Notify	Temp license.	ON	ON
	This entry enables user to get the notification as alarm before	OFF	
License Expire Notify	License expires.	ON	ON
<u> </u>	This entry enables user to get the notification as alarm before	OFF	
License Over Notify	License is over.	OFF	ON
T-NET LCM License	This entry enables user to get the notification as alarm before	OFF	
Expire Notify	T-NET LCM license expires.	OFF	ON
TAPI Disconnected		OFF	
	This entry enables user to get the notification as alarm when		ON
Notify	TAPI is disconnected.	ON	

Table 6.5.3-1 ALARM ATTRIBUTES

6.5.4 Attendant Assignment - PGM 164

Selecting Attendant Assignment will display the Attendant Assignment data entry page. Click **[Save]** button after changing Value.

c			Favorite PGM	Attendant Z
	PGM Search	D		
	System ID & Numbering Plans		Attendant Type	Station Number
		- 11	System Attendant	1000
	Station Data		Main Attendant	
	Board Based Data		Main Attendant	
			Main Attendant	
	CO Line Data		Main Attendant	
	System Data 🗸		Main Attendant	
	System Attributes (160-161)		Main Attendant	
	System Attributes(160~161) System Password(162)		Main Attendant	
	Alarm Attributes(163)		Main Attendant	
	Attendant Assignment(164)		Main Attendant	
	Multicast RTP/RTCP(165)		Main Attendant	
	DISA COS(166)		Main Attendant	
	DID/DISA Destination(167)		Main Attendant	
	External Control Contacts(168)		Main Attendant	
	LCD Display Mode(169)		Main Attendant	
	LED Flashing Rates(170)		Main Attendant	
	Music Sources(171)		Main Attendant	
	PBX Access Codes(172)		Main Attendant	
	RLP Priority(173) RS-232 Port Settings(174)		Main Attendant	
	Serial Port Selections(175)			
	Pulse Dial (Break/Make) Ratio(176)		Main Attendant	
	SMDR Attributes(177)		Main Attendant	
	System Date & Time(178)		Main Attendant	
	System Multi Language(179)		Main Attendant	
	System Timers(180~182,186)		Main Attendant	
	In Room Indication(183)		Main Attendant	
	Web Access Authorization		Main Attendant	

Figure 6.5.4-1 Attendant Assignment

A maximum of fifty (50) Attendants can be assigned with the iPECS UCP. One is the System Attendant and the rest (49) are Main Attendants. The System Attendant has higher priority in call handling and system management functions. As a default, the System Attendant is assigned as the first Station (1000). Main Attendants are not assigned by default.

6.5.5 Multi-cast RTP/RTCP - PGM 165

Selecting Multi-cast RTP/RTCP will display the Multi-cast RTP/RTCP data entry page.

PGM Base Function Base	< Favorite PGM	Multica		×		
PGM Search						
System ID & Numbering Plans	Attribute	RTP Value	RTCP Va	lue Range		
	BGM Internal	8100	8101	0000 - 99	99	
Station Data	BGM External 1	8102	8103	0000 - 99	99	
Board Based Data	BGM External 2	8104	8105	0000 - 99	99	
	Internal Page 1	8106	8107	0000 - 99	99	
CO Line Data	Internal Page 2	8108	8109	0000 - 99	99	
System Data 🗸 🗸 🗸	Internal Page 3	8110	8111	0000 - 99	99	
0	Internal Page 4	8112	8113	0000 - 99	99	
System Attributes(160~161)	Internal Page 5	8114	8115	0000 - 99	99	
System Password(162) Alarm Attributes(163)	Internal Page 6	8116	8117	0000 - 99		
Attendant Assignment(164)	Internal Page 7	8118	8119	0000 - 99		
Multicast RTP/RTCP(165)	Internal Page 8	8120	8121	0000 - 99		
DISA COS(166)	Internal Page 9	8122	8123	0000 - 99		
DID/DISA Destination(167)	Internal Page 10	8124	8125	0000 - 99		
External Control Contacts(168)						
LCD Display Mode(169)	Internal Page 11	8126	8127	0000 - 99		
LED Flashing Rates(170)	Internal Page 12	8128	8129	0000 - 99		
Music Sources(171)	Internal Page 13	8130	8131	0000 - 99		
PBX Access Codes(172)	Internal Page 14	8132	8133	0000 - 99	99	
RLP Priority(173)	Internal Page 15	8134	8135	0000 - 99	99	
RS-232 Port Settings(174)	Internal Page 16	8136	8137	0000 - 99	99	
Serial Port Selections(175)	Internal Page 17	8138	8139	0000 - 99	99	
Pulse Dial (Break/Make) Ratio(176)	Internal Page 18	8140	8141	0000 - 99	99	
MDR Attributes(177)	Internal Page 19	8142	8143	0000 - 99	99	
System Date & Time(178) System Multi Language(179)	Internal Page 20	8144	8145	0000 - 99	99	
System Timers(180~182,186)	Internal Page 21	8146	8147	0000 - 99	99	
In Room Indication(183)	Internal Page 22	8148	8149	0000 - 99	99	
Web Access Authorization	Internal Page 23	8150	8151	0000 - 99	99	
Ptation Web Authorization	· · · · · · · · · · · · · · · · · · ·	0450	0450	-	00	

Figure 6.5.5-1 Multi-cast RTP/RTCP

Multi-cast is employed by the system to send BGM, MOH, paging and Push-To-Talk packets. Employing a single multi-cast packet reduces the overall LAN traffic. In some cases, specifically when multiple systems are connected to the same default gateway (router) it may be advantageous to define different IP ports for each system.

ATTRIBUTE	ATTRIBUTE DESCRIPTION		DEFAULT
BGM Internal	RTP and RTCP ports for internal BGM.	0000-9999	8100
BGM Internal	RTF and RTCF poils for internal bolm.		(8101)
BGM External 1	RTP and RTCP ports for external BGM 1.	0000-9999	8102
BOMEXIEMAN			(8103)
PCM External 2	DTD and DTCD parts for outernal PCM 1	0000 0000	8104
BGM External 2	RTP and RTCP ports for external BGM 1.	0000-9999	(8105)

Table 6.5.5-3 MULTI-CAST RTP/RTCP

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Internal Page 1 ~ Internal Page 100	RTP and RTCP ports for Internal Page 1.	0000-9999	8106~8304 (8107~8305)
Internal Page All	RTP and RTCP ports for Internal All Call Page	0000-9999	8306 (8307)
External Page 1	RTP and RTCP ports for External Page 1.	0000-9999	8308 (8309)
External Page 2	RTP and RTCP ports for External Page 2.	0000-9999	8310 (8311)
External Page All	RTP and RTCP ports for External All Call Page.	0000-9999	8312 (8313)
Page All	RTP and RTCP ports for All Call Page.	0000-9999	8314 (8315)
PTT 1	RTP and RTCP ports for PTT group 1.	0000-9999	8316 (8317)
PTT 2	RTP and RTCP ports for PTT group 2.	0000-9999	8318 (8319)
PTT 3	RTP and RTCP ports for PTT group 3.	0000-9999	8320 (8321)
PTT 4	RTP and RTCP ports for PTT group 4.	0000-9999	8322 (8323)
PTT 5	RTP and RTCP ports for PTT group 5.	0000-9999	8324 (8325)
PTT 6	RTP and RTCP ports for PTT group 6.	0000-9999	8326 (8327)
PTT 7	RTP and RTCP ports for PTT group 7.	0000-9999	8328 (8329)
PTT 8	RTP and RTCP ports for PTT group 8.	0000-9999	8330 (8331)
PTT 9	RTP and RTCP ports for PTT group 9.	0000-9999	8332 (8333)
PTT All	RTP and RTCP ports for PTT group ALL	0000-9999	8334 (8335)
BGM Internal VSF	RTP and RTCP ports for VSF BGM (VSF MOH)	0000-9999	8336 (8337)
SLT MOH 1	RTP and RTCP ports for SLT MOH1	0000-9999	8338 (8339)
SLT MOH 2	RTP and RTCP ports for SLT MOH2	0000-9999	8340 (8341)
SLT MOH 3	RTP and RTCP ports for SLT MOH3	0000-9999	8342 (8343)
SLT MOH 4	RTP and RTCP ports for SLT MOH4	0000-9999	8344 (8345)
SLT MOH 5	RTP and RTCP ports for SLT MOH5	0000-9999	8346 (8347)
VSF MOH2	RTP and RTCP ports for VSF MOH2	0000-9999	8348 (8349)
VSF MOH3	RTP and RTCP ports for VSF MOH3	0000-9999	8350 (8351)

Table 6.5.5-3 MULTI-CAST RTP/RTCP

6.5.6 DISA COS - PGM 166

Selecting DISA COS will display the DISA COS data entry page. Click **[Save]** button after changing Value.

	PGM Base Function Base	Favorite P	GM DISA COS(×
	Q PGM Search			
	System ID & Numbering Plans	Order <u>↓</u> a	Attribute	Value
	Shatian Data	1	Day COS	7 •
	Station Data	2	Night COS	7 •
	Board Based Data	3	Timed Ring COS	7 •
	CO Line Data			
	System Data ~			
	System Attributes(160~161)			
	System Password(162)			
h	Alarm Attributes(163)			
	Attendant Assignment(164)			
<	Multicast IP/Port(165)			
	DISA COS(166)			
	DID/DISA Destination(167)			
7	External Control Contacts(168)			
	LCD Display Mode(169)			
	LED Flashing Rates(170)			
	Music Sources(171)			
	PBX Access Codes(172)			
	RLP Priority(173)			
	RS-232 Port Settings(174)			

Figure 6.5.6-1 DISA COS

A DISA user is subject to the dialing restrictions assigned in the DISA Class-of-Service (COS). The restrictions applied are the same as with the corresponding Station COS levels 1~11 and interact with the CO/IP COS in the same manner. An assignment can be selected among Day, Night, and Timed Ring mode of system operation. The default for all three modes (Day, Night, Timed ring) of DISA COS is 7, allowing internal calls only.

6.5.7 DID/DISA Destination - PGM 167

Selecting DID/DISA Destination displays the DID/DISA Route table. Enter the desired ICM Tenant Group and the system will display the DID/DISA Destination Attributes. Click **[Save]** button after changing Value.

PGM Base Function Base	< Fav	orite PGM DID/DISA	0		
Q PGM Search	Enter IC	CM Tenancy Group Number (0 - 1	00) :	Load	Save
System ID & Numbering Plans	DID/DIS	SA Route Table (Tenancy Group :	1)		
Station Data	Order	Attribute	Value		
			 Tone Attendant (Ring Assign) 		
Board Based Data	1	Busy Destination	Station Group		
CO Line Data			VSF Announcement		
System Data V			 Tone 		
·			Attendant (Ring Assign)		
System Attributes(160~161)	2	Error Destination	Station Group		
System Password(162)			VSF Announcement		
Alarm Attributes(163)			Tone		
Attendant Assignment(164) Multicast IP/Port(165)			 Attendant (Ring Assign) 		
DISA COS(166)	3	No Answer Destination	Station Group		
DID/DISA Destination(167)			○ VSF Announcement		
External Control Contacts(168)			 Tone 		
LCD Display Mode(169)			 Attendant (Ring Assign) 		
LED Flashing Rates(170)	4	DND Destination	Station Group		
Music Sources(171)			VSF Announcement		
PBX Access Codes(172)			Busy Prompt Usage	ON T	
RLP Priority(173)			Error Prompt Usage	ON V	
RS-232 Port Settings(174)	5	VSF Prompt Usage	Dnd Prompt Usage	ON V	
Serial Port Selections(175)			No Ans Prompt Usage	ON T	
Pulse Dial (Break/Make) Ratio(176)			Atd Xfer Prompt Usage	ON V	
SMDR Attributes(177)			Tone		
System Date & Time(178)	6	Reroute Busy Destination	Attendant (Ring Assign)		
System Multi Language(179)			Station Group		
System Timers(180~182,186)			Tone		
In Room Indication(183)	7	Reroute Error Destination	 Attendant (Ring Assign) 		
Web Access Authorization			Station Group		

Figure 6.5.7-1 DID/DISA Destination

When a DID line or DISA user dials to the destination (Busy, Error, No Answer, DND, VSF Prompt, Reroute Busy, Reroute Error, Reroute No Answer, Reroute Net CO Busy), the caller will be sent to the assigned destination that is selected according to the ICM Tenancy group of the DID/DISA line. The available destination is separately defined for the current condition and can be routed as Tone, Attendant, Station Group or a VSF (System) Announcement.

For calls on a DID line to a busy station, DID Call Wait can be assigned, refer to '*Common Attributes section*', and the call will queue for the station for the No-Answer time. After the No-answer time, the call routes to the DID/DISA Destination unless forwarded. Also, for DID calls only, announcements (prompts) can be sent from the VSF or UVM gateway to the caller for various conditions, busy, error, DND, No Answer, or Attendant Transfer.

6.5.8 External Control Contacts - PGM 168

Selecting External Control Contacts will display the External Control Contact data entry page. Click **[Save]** button after changing Value.

(PGM Base Function Base		< Favorite PGM Ex	ternal C X
	Q PGM Search	0		
	System ID & Numbering Plans		External Control Contact	Value
		- 1		Unused
	Station Data			LBC
	Board Based Data		First	Door Open
		- 1		External Control Device 1
	CO Line Data			External Control Device 2
	System Data	~		
		-11		
	System Attributes(160~161)			
	System Password(162)			
	Alarm Attributes(163)			
	Attendant Assignment(164)			
<	Multicast IP/Port(165)			
	DISA COS(166)			
	DID/DISA Destination(167) External Control Contacts(168)			
	LCD Display Mode(169)			
	LED Flashing Rates(170)			
	Music Sources(171)			
	PBX Access Codes(172)			
	RLP Priority(173)			
	RS-232 Port Settings(174)			
	Serial Port Selections(175)			
	Pulse Dial (Break/Make) Ratio(176)			
	SMDR Attributes(177)			
	SMDR Attributes(117)			

Figure 6.5.8-1 External Control Contact

The system includes a programmable contact, which can be used to control external devices. Refer to the table '*System capacity*' for number of available contacts. Each contact is assigned to activate under one of several conditions. As a Loud Bell Contact (LBC), the contact will activate when the assigned station or group receives an external call. For LBC, when the system is in the Night or Timed Ring mode, the contact will activate for incoming UNA (Universal Night Answer) calls and will ignore any station assignment. The contact may alternatively activate as a Door Lock Release contact, when External Page Zone 1 is accessed or when External Page Zone 2 is accessed.

6.5.9 LCD Display Mode - PGM 169

Selecting LCD Display Mode will display the data entry page. Click **[Save]** button after changing Value.

PGM Base Function B	ase	< Favori	te PGM LCD Displa	×C
Q PGM Search	0			
System ID & Numbering Plans		Order <u>↓</u> a	Attribute	Value
		1	LCD Date Display Mode	MM-DD-YY 🔻
Station Data		2	LCD Time Display Mode	12 Hour Mode 🔻
Board Based Data		3	Language Display Mode	English •
Doard Dased Data		4	LCD Weekday Display Mode	Follow - PGM169 BTN1 V
CO Line Data				
System Data	~			
System Attributes(160~161)				
System Password(162)				
Alarm Attributes(163)				
Attendant Assignment(164)				
Multicast IP/Port(165)				
DISA COS(166)				
DID/DISA Destination(167)				
External Control Contacts(168)				
LCD Display Mode(169)				
LED Flashing Rates(170)				
Music Sources(171)				
PBX Access Codes(172)				

Figure 6.5.9-1 LCD Display Mode

The LCD display mode sets the time (12/24 hr.), date (day/month order) and language. Refer to the following table for a description of the modes and the data entries required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCD Date Display Mode	Sets the Date display as month/day/year or day/month/year.	MM-DD-YY DD-MM-YY	MM-DD-YY
LCD Time Display Mode	Sets the Time display mode as 12 hour or 24-hour (military) time.	12 Hour Mode 24 Hour Mode	12 Hour Mode
Language Display Mode	Sets the Language used in the LIP or LDP Phone display.	Refer to the below table	English
LCD Weekday Display Mode	Sets the Day-of-Week (DoW) display mode: no DoW display mm/dd/DoW display alpha month as mm/dd/DOW, overrides setting of button 1 above display mm/dd/DoW, numeric month display, overrides setting of button 1 above.	No Display, Follow – button 1 above, Type1- (mm/dd/DOW), Type 2-(mm dd/DOW)	Follow - PGM169 BTN1

Table 6.5.9-1 LCD DISPLAY MODES

LANGUAGE
English
Italian
Finnish
Dutch
Swedish
Danish
Norwegian
Hebrew
German
French
Portuguese
Spanish
Korean
Estonian
Russian
Turkish
Polish
Greek
Arabic

Table 6.5.9-2 LCD LANGUAGE SELECTION

6.5.10 LED Flashing Rate - PGM 170

Selecting LED Flashing Rate will display the data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favor	ite PGM LED Flashi		
PGM Search				Sav
System ID & Numbering Plans	Order <u>↓</u> a	Attribute	Value	
	1	CO Incoming Ring	Flash 30 IPM	
Station Data	2	CO Transfer Ring	Flash 120 IPM	
Board Based Data	3	COL Queue Ring	Flash 240 IPM Flutter	•
Doard Dased Data	4	COL RCL RIng	Flash 480 IPM Flutter	•
CO Line Data	5	COL I Hold Ring	Flash 30 IPM Wink	•
	6	COL System Hold Ring	Flash 60 IPM	•
System Data ~	7	COL Exclusive Hold Ring	Flash 120 IPM	•
System Attributes(160~161)	8	COL Outgoing Disabled	Flash 240 IPM Flutter	•
System Password(162)	9	COL Incoming Offnet CFW	Flash 240 IPM Flutter	•
Alarm Attributes(163)	10	COL DISA Indication	Flash 240 IPM	
Attendant Assignment(164)	11	COL Supplementary Call Waiting	Flash 240 IPM Flutter	
Multicast IP/Port(165)	12	COL Supplementary Call Hold	Flash 480 IPM	
DISA COS(166)	13	DSS CO Ring	Flash 30 IPM	•
DID/DISA Destination(167)	14	DSS All Ring	Flash 60 IPM	
External Control Contacts(168)	15	DSS Associated Ring	Flash 120 IPM	
LCD Display Mode(169)	16	DSS In DND	Flash 60 IPM	
LED Flashing Rates(170)	17	DSS Lock Out	Flash 480 IPM Flutter	
Music Sources(171)	18	DSS Pre-select Message	Flash 30 IPM	
PBX Access Codes(172)	19	DSS Camp On ICM Hold	Flash 60 IPM	
RLP Priority(173)	20	DSS Other	Flash 120 IPM	•
RS-232 Port Settings(174)	21	ACD Queue Ring 2	Flash 60 IPM	-
Serial Port Selections(175)	22	ACD Queue Ring 6	Flash 120 IPM	
Pulse Dial (Break/Make) Ratio(176)	23	ACD Queue Ring 7-X	Flash 240 IPM	
SMDR Attributes(177)	24	ACD DND (Off Duty)	Flash 120 IPM	
System Date & Time(178)	25	ACD Warning	Flash 120 IPM	Ĩ
System Multi Language(179)	26	ACD Help	Flash 120 IPM	Ī
System Timers(180~182,186)	27	Feature Record	Flash 240 IPM	-
In Room Indication(183)	28	Feature Message Wait		
Web Access Authorization	29	DSS Out-Of-Service State		
Station Web Authorization	30	On-Demand Ring Mode		

Figure 6.5.10-1 LED Flashing Rate

The LED flash rate for various functions and states can be assigned any one of the system's 14 signals. The various functions and states are shown in the following table. The 14 flash signals available in the system are shown in the table '*LED flash rate*'.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Incoming Ring	CO button Incoming ring flashing rate	00-14	FLASH 30 IPM (2)
CO Transfer Ring	CO button transfer ring flashing rate	00-14	FLASH 120 IPM (10)
COL Queue Ring	CO button queue call back ring flashing rate	00-14	FLASH 240 IPM FLUTTER (6)

Table 6.5.10-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
COL RCL Ring	CO button recall ring flashing rate	00-14	FLASH 480 IPM FLUTTER (8)
COL I Hold Ring	CO button I hold flashing rate	00-14	FLASH 30 IPM WINK (12)
COL System Hold Ring	CO button system hold flashing rate	00-14	FLASH 60 IPM (3)
COL Exclusive Hold Ring	CO button exclusives hold flashing rate	00-14	FLASH 120 IPM (10)
COL Outgoing Disabled	CO button outgoing disabled flashing rate	00-14	FLASH 240 IPM FLUTTER (6)
COL Incoming Off-net CFW	CO button incoming off-net call forward flashing rate	00-14	FLASH 240 IPM FLUTTER (6)
COL DISA Indication	CO button DISA indication flashing rate	00-14	FLASH 240 IPM (5)
COL Supplementary Call Waiting	CO button supplementary call waiting flashing rate	00-14	FLASH 240 IPM FLUTTER (6)
COL Supplementary Call Hold	CO button supplementary hold flashing rate	00-14	FLASH 480 IPM (8)
DSS CO Ring	DSS button CO ring flashing rate	00-14	FLASH 30 IPM (2)
DSS All Ring	DSS button ICM ALL ring flashing rate	00-14	FLASH 60 IPM (3)
DSS Associated Ring	DSS button ICM ring associate device flashing rate	00-14	FLASH 120 IPM (10)
DSS In DND	DSS button station is in DND	00-14	FLASH 60 IPM (3)
DSS Lock Out	DSS button station is in lock out	00-14	FLASH 480 IPM FLUTTER (8)
DSS Pre-select Message	DSS button station is in pre-selected message	00-14	FLASH 30 IPM (2)
DSS Camp On ICM Hold	DSS button station is in Camp On ICM hold	00-14	FLASH 60 IPM (3)
DSS Other	DSS button station is in other state	00-14	FLASH 120 IPM (10)
ACD Queue Ring 2	CIQ #1 Threshold	00-14	FLASH 60 IPM (3)
ACD Queue Ring 6	CIQ #2 Threshold	00-14	FLASH 120 IPM (10)
ACD Queue Ring 7-X	CIQ #3 Threshold	00-14	FLASH 240 IPM (5)
ACD DND (Off Duty)	ACD an agent is off duty (ACD DND)	00-14	FLASH 120 IPM (10)
ACD Warning	ACD warning tone	00-14	FLASH 120 IPM (10)
ACD Help	ACD help request/response	00-14	FLASH 120 IPM (10)
Feature Record	FEATURE voice record button	00-14	FLASH 240 IPM (5)

Table 6.5.10-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT	
Feature Message Wait	FEATURE message wait	00-14	FLASH 30 IPM (2)	
DSS Out-of-service state	DSS button a station is in out-of-service state	00-14	FLASH OFF (00)	
On-demand Ring mode	DND led of attendant station for ring mode	00-14	FLASH 60 IPM (3)	
Night Ring mode	DND led of attendant station for ring mode	00-14	FLASH Steady	
Timed Ring mode	DND led of attendant station for ring mode	00-14	FLASH 240 IPM (5)	
Auto Ring mode	DND led of attendant station for ring mode	00-14	Flash Off	
Page Hold Button	HOLD LED for paging	00-14	FLASH 60 IPM (3)	
DSS Station DND(off duty)	DSS button station in Station DND	00-14	FLASH 120 IPM (10)	

Table 6.5.10-1 LED INDICATION

Table 6.5.10-2 LED FLASH RATE TABLE

Flash Rate	DESCRIPTION			
1	Steady On			
2	30 ipm flash (30% On)			
3	60 ipm flash (30% On)			
4	60 ipm double wink (30% On-Off-On-Off & 70% On)			
5	240 ipm flash (30% On)			
6	240 ipm flutter (30% On-Off-On-Off-On & 70% Off)			
7	480 ipm flash (30% On)			
8	480 ipm flutter (30% On-Off-On-Off-On & 70% Off)			
9	15 ipm flash (30% On)			
10	120 ipm flash (30% On)			
11	120 ipm flutter (30% On-Off-On-Off-On & 70% Off)			
12	30 ipm double flash (30% On-Off-On & 70% Off)			
13	480 ipm double wink (30% On-Off-On-Off & 70% On)			
14	480 ipm double flash (30% On-Off-On & 70% Off)			

6.5.11 Music Sources - PGM 171

Selecting Music Sources will display the Music Sources data entry page. Click **[Save]** button after changing Value.

System Data 🗸 🗸	< Fav	orite PGM Music S	ources(1×
System Attributes(160~161)			0
System Password(162)			
Alarm Attributes(163)	Order ↓ª	Attribute	Value
Attendant Assignment(164)		BGM Type	Internal/External Music 1
Multicast IP/Port(165)	2	MOH Type	
DISA COS(166)	3	Internal/External Music	Internal/External Music 1
DID/DISA Destination(167)	4		Internal Music
External Control Contacts(168)	4	Internal Music Type	First
LCD Display Mode(169)		SLT MOH TYPE	Station Number
LED Flashing Rates(170)	1	SLT MOH 1	
Music Sources(171)	2	SLT MOH 2	
PBX Access Codes(172)	3	SLT MOH 3	
RLP Priority(173)	4	SLT MOH 4	
RS-232 Port Settings(174)	5	SLT MOH 5	
Serial Port Selections(175)		EXT VSF MOH ASSIGN	VSF Number
Pulse Dial (Break/Make) Ratio(176)	1	VSF MOH 2	(1 - 200)
SMDR Attributes(177)	2	VSF MOH 3	(1 - 200)
System Date & Time(178)			
System Multi Language(179)			
System Timers(180~182,186)			
In Room Indication(183)			
Web Access Authorization			
Station Web Authorization			
NTP Attributes(195)			
SNMP Attribute(196)			
Cabinet Attribute(197)			
Hot Desk Attributes(250)			
System Call Routing(251)			

Figure 6.5.11-1 Music Sources

Music inputs are provided for use as the Background Music and/or Music-On-Hold source inputs. Up to three VSF announcements may be recorded and played as MOH to the connected caller. The "VSF MOH" selection employs System announcement number 201, and for the VSF MOH 2 and VSF MOH 3 selections, any unused announcement can be employed. In addition, up to five SLT ports may be used as MOH to the held caller.

6.5.12 PBX Access Codes - PGM 172

Selecting PBX Access Codes will display the PBX Access Codes data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favori	te PGM PBX Acc	ces X	
Q PGM Search				
System ID & Numbering Plans	Order <u>↓</u> a	Attribute	Value	Range
	1	PBX Access Code 1		max 2 digits (include '*' and '#')
Station Data	2	PBX Access Code 2		max 2 digits (include '*' and '#')
Board Based Data	3	PBX Access Code 3		max 2 digits (include '*' and '#')
CO Line Data	4	PBX Access Code 4		max 2 digits (include '*' and '#')
System Data ×				
System Attributes(160~161)				
System Password(162)				
Alarm Attributes(163)				
Attendant Assignment(164)				
Multicast IP/Port(165)				
DISA COS(166)				
DID/DISA Destination(167)				
External Control Contacts(168)				
LCD Display Mode(169)				
LED Flashing Rates(170)				
Music Sources(171)				
PBX Access Codes(172)				
RLP Priority(173)				
RS-232 Port Settings(174)				
Serial Port Selections(175)				

Figure 6.5.12-1 PBX Access Codes

When the system is used "behind" a PBX/CTX, the system needs to recognize the PBX/CTX Trunk access codes to implement proper dialing restriction, tone detection sequences and Flash timing. A maximum of four (4) Trunk Access Codes of one (1) or two (2) digits can be entered.

6.5.13 Ringing Line Preference Priority - PGM 173

Selecting Ring Line Preference Priority will display the Ringing Line Preference Priority data entry page. Click **[Save]** button after changing Value.

PGM Base Function Ba	ise <	Favorite P	GM RLP Priorit ×	
Q PGM Search	0			5
System ID & Numbering Plans		Priority	Value	
Station Data		1	Transfer CO/IP Call CO/IP Recall	
Board Based Data		3	Incoming CO/IP Call	
CO Line Data		4	Queued CO/IP Call	
System Data	~			
System Attributes(160~161)				
System Password(162)				
Alarm Attributes(163)				
Attendant Assignment(164)				
Multicast RTP/RTCP(165)				
DISA COS(166)				
DID/DISA Destination(167)				
External Control Contacts(168)				
LCD Display Mode(169)				
LED Flashing Rates(170)				
Music Sources(171)				
PBX Access Codes(172)				
RLP Priority(173)				
RS-232 Port Settings(174)				
Serial Port Selections(175)				
Pulse Dial (Break/Make) Ratio(176	i)			
SMDR Attributes(177)				

Figure 6.5.13-1 Ringing Line Preference Priority

When multiple calls are ringing at the same time to a station assigned Ringing Line Preference, the order of preference is based on the type of call: CO/IP Transfer, CO/IP Recall, Incoming CO/IP call, Queue CO/IP call. A queued CO/IP call are always assigned the lowest priority.

6.5.14 RS-232 Port Settings - PGM 174

Selecting RS-232 Port and USB 1&2 port Settings will display the RS-232 Port and USB 1&2 port Settings data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favorite PGM	RS-232 Port	· ×		
Q PGM Search					
System ID & Numbering Plans	Attribute	Value		Range	
, ,		Baudrate	115200 BAUD 🔻		
Station Data		CTS/RTS	OFF V		
Board Based Data	Serial 1 Port Setting	Page Break	OFF V		
		Line Per Page	66	001-199	
CO Line Data		XON/XOFF	XOFF •		
System Data 🗸		Baudrate	115200 BAUD V		
		CTS/RTS	OFF V		
System Attributes(160~161)	USB 1 Port Setting	Page Break	OFF •		
System Password(162)		Line Per Page	66	001-199	
Alarm Attributes(163) Attendant Assignment(164)		XON/XOFF	XOFF •		
Multicast RTP/RTCP(165)		Baudrate	115200 BAUD V		
DISA COS(166)	USB 2 Port Setting	CTS/RTS	OFF V		
DID/DISA Destination(167)		Page Break	OFF V		
External Control Contacts(168)		Line Per Page	66	001-199	
LCD Display Mode(169)		XON/XOFF	XOFF •		
LED Flashing Rates(170)					
Music Sources(171)					
PBX Access Codes(172)					
RLP Priority(173)					
RS-232 Port Settings(174)					
Serial Port Selections(175)					
Pulse Dial (Break/Make) Ratio(176)					
SMDR Attributes(177)					

Figure 6.5.14-1 RS232 Port and USB 1&2 port Settings

Certain characteristics of each port are programmable including baud rate, RS 232 control, and page settings. Refer to the following table for a description of the settings and the data entries available.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Baud Rate	This field set the BAUD rate for the RS-232 serial port.	Unknown, 9600, 19200, 38400, 57600, 115200	115200
CTS/RTS	The system's RS232 port can support Clear-to-Send (CTS) and Ready-to-Send (RTS), control leads.	OFF ON	OFF
Page Break	The system can send a page break command over the serial port at the end of each page using the "Lines Per Page" below.	OFF ON	OFF
Line Per Page	This field sets the page length, the number of lines that the system will send before sending the page break.	001~199	66
XON/XOFF	This field enables/disables XON/XOFF protocol.	XON XOFF	XOFF

Table 6.5.14-1 RS232 PORT and US	B 1&2 port Settings
----------------------------------	---------------------

6.5.15 Serial Port Selections - PGM 175

Selecting Serial Port Selections will display the Serial Port Selections data entry page. For each function select the desired output from the drop-down menu and, if a TCP channel is assigned, enter the TCP port. Click **[Save]** button after changing Value.

PGM B	Base Function Base		< Favori	e PGM Serial Port	x	
Q PGM S	earch (D				
System ID	& Numbering Plans		Order $\underline{1}^a$	Attribute	Value	TCP PORT
		- 1	1	Off-line SMDR/Statistics Print	Serial Port 1 🔻	NULL
Station Da	ta		2	ADMIN Data Print	Serial Port 1 🔻	NULL
Board Bas	ed Data		3	Traffic Print	Serial Port 1 🔻	NULL
		- 1	4	SMDI Print	Serial Port 1 <	NULL
CO Line D	ata		5	Call Information Print	Serial Port 1 V	NULL
System D	ata 🗸 🗸		6	On-line SMDR Print	Serial Port 1 V	NULL
Custom	Att-ibut (100, 101)		7	Trace Print	Serial Port 1 🔻	NULL
	Attributes(160~161) Password(162)		8	Debug Print	Serial Port 1 🔻	NULL
	tributes(163)		9	ACD Package Print	Serial Port 1 🔻	NULL
	t Assignment(164)		10	SMDR Interface Data Print	Null	NULL
	IP/Port(165)					
DISA CO	OS(166)					
DID/DISA	A Destination(167)					
External	Control Contacts(168)					
LCD Disp	blay Mode(169)					
	hing Rates(170)					
	purces(171)					
	ess Codes(172)					
RLP Prio						
	Port Settings(174)					
	ort Selections(175)					
	al (Break/Make) Ratio(176)					
SMDR A	ttributes(177)					

Figure 6.5.15-1 Serial Port Selections

The system has six (6) serial ports (1 RS232, 3 TCP Channels and 2 USB serial). A serial port is assigned to each function that requires a serial output.

6.5.16 Break/Make Ratio - PGM 176

Selecting Break/Make Ratio will display the Break/Make Ratio data entry page. Click **[Save]** button after changing Value.

	PGM Base Function Base	<	Favorite	PGM Pulse Dial .	×
	Q PGM Search				
	System ID & Numbering Plans		Order <u>↓</u> a	Attribute	Value
	Station Data		1	Break/Make Ratio	60/40 % 🔻
	Board Based Data				
	CO Line Data				
	System Data ~				
	System Attributes(160~161)				
	System Password(162)				
ŝ	Alarm Attributes(163)				
	Attendant Assignment(164)				
	Multicast IP/Port(165)				
	DISA COS(166)				
	DID/DISA Destination(167)				
7	External Control Contacts(168)				
	LCD Display Mode(169)				
	LED Flashing Rates(170)				
	Music Sources(171)				
	PBX Access Codes(172)				
	RLP Priority(173)				
	RS-232 Port Settings(174)				
	Serial Port Selections(175)				
	Pulse Dial (Break/Make) Ratio(176)				
	SMDR Attributes(177)				
	System Date & Time(178)				
	System Multi Language(179)				

Figure 6.5.16-1 Break/Make Ratio

For Pulse dial CO Lines, the system supports 10pps and break/make ratios of 60/40% or 66/33%.

6.5.17 SMDR Attributes - PGM 177

Selecting SMDR Attributes will display the SMDR Attributes data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Fav	vorite PGM SMDR Attri			
PGM Search					Save
System ID & Numbering Plans	Order	Attribute		Value	Range
	1	Save Enable	OFF 🔻]	
itation Data	2	Print Enable	ON 🔻		
oard Based Data	3	Record Type	Long Di	stance 🔻	
	4	Long Distance Call Digit Counter	7		07-15
O Line Data	5	Print Incoming Call	OFF 🔻		
ystem Data 🗸 🗸	6	Print Lost Call	ON T		
ystem batd V	7	Records In Detail	ON 🔻		
System Attributes(160~161)	8	Hidden Dialed Digit	0		0-9
System Password(162)	9	Dialed Digit Hide Option	Right •	·	
Alarm Attributes(163)	10	SMDR Currency Unit			Max 3 characters
Attendant Assignment(164)	11	SMDR Cost Per Metering Pulse	000000		Must be 6 digits
Multicast IP/Port(165)	12	SMDR Decimal Location	0		0-5
DISA COS(166)	13	Start Timer	0	(*1sec)	000-250
DID/DISA Destination(167)		otart mildi	1 0		Max 2 Digits
External Control Contacts(168)					
LCD Display Mode(169)			2		Max 2 Digits
LED Flashing Rates(170)	14	Long Distance Call Code	3		Max 2 Digits
Music Sources(171)			4		Max 2 Digits
PBX Access Codes(172)			5		Max 2 Digits
RLP Priority(173)	15	SMDR Ring/CLI/CPN Service-I	Ring •]	
RS-232 Port Settings(174)	16	SMDR Ring/CLI/CPN Service-II	CPN •	•	
Serial Port Selections(175)	17	Print MSN	OFF 🔻		
Pulse Dial (Break/Make) Ratio(176)	18	Print Serial No	OFF 🔻		
SMDR Attributes(177)	19	SMDR Interface Service	OFF	T	
System Date & Time(178)	20	SMDR ICM Save	OFF 🔻		
System Multi Language(179)	21	SMDR ICM Print	OFF •		
System Timers(180~182,186)	22	SMDR Disconnect Cause	OFF •		
n Room Indication(183)	23	Long Time Call	0	(*10min)	000-144
Web Access Authorization	24	SMDR Output Limit from any CO to NET Call	OFF V]	

Figure 6.5.17-1 SMDR Attributes

Station Message Detail Recording (SMDR), which is output over an RS 232 port or TCP channel, contains details on both incoming and outgoing calls. Various SMDR attributes can be assigned including; output records for all calls or LD only, call cost per pulse when using call metering etc. Refer to the following table for a description of each Attribute and the data entries required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Save Enable	The system can output all outgoing call records (ON) or, to allow for PSTN call set-up times, only records for calls that exceed the SMDR Timer (OFF). For SMDR Timer settings refer to "Start Timer", below.	OFF ON	OFF
Print Enable	The system can output SMDR records automatically as they occur (real-time) or only when requested. When this attribute is ON, SMDR is sent at call completion.	OFF ON	ON

Table 6.5.17-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Record Type	The system can record all outgoing calls or only long distance calls. Long distance calls are identified by the LD digit count and LD codes assigned in "Long Distance code".	Long Distance, ALL call	Long Distance
Long Distance Call Digit Counter	Dialed numbers which exceed the assigned LD digit count are considered long distance calls for SMDR and COS purposes.	07-15	7
Print Incoming Call	The system can print the records for Incoming calls as well as outgoing calls. If enabled, incoming as well as outgoing calls are recorded.	OFF ON	OFF
Print Lost Call	When incoming call records are enabled, the system can also provide records for unanswered incoming (abandoned) calls.	OFF ON	ON
Records In Detail	The system can print the detailed call records (ON) or summary call information (total number of calls, cost and cost for each station).	OFF ON	ON
Hidden Dialed Digit	For security purposes, digits dialed for an outgoing call can be hidden and replaced with "*". This field defines the number of digits to hide. The Dialed Digit Hide Option below defines whether leading or trailing digits are hidden The station must be assigned for SMDR Hidden digits in <i>Common Attributes section</i> '.	0~9	0
Dialed Digit Hide Option	When "HIDDEN DIALED DIGIT" is enabled above, this field determines if leading or trailing digits are hidden or not.	Right Left	Right
SMDR Currency Unit	The unit of currency for call charge can be selected as up to 3 characters for easy reference.	Max. 3 characters	
SMDR Cost Per Metering Pulse	When call metering is provided by the PSTN, the cost per metering pulse can be assigned. The SMDR cost is also employed to estimate the call cost when metering is not available.	6-digits	000000
SMDR Decimal Location	This filed determines the position of the decimal in the Cost per Pulse entry above, starting from the right most digits.	0~5	0
Start Timer	To allow for call set-up times through the PSTN, a "Valid call timer" can be set.	000~250 (msec)	0
Long Distance Code	For SMDR and COS purposes, five (5) Long Distance codes of up to two (2) digits each can be assigned. If dialed as the 1st digits, the call is considered an LD call.	5 - two digit LD codes, use * as wild card (any digit)	
SMDR CLI or Ring Service I	For incoming calls, the system will send the defined data item for "Field I". The data item may be CLI, CPN or Ring Service Time. Note the User dialed number is always provided for an outgoing call.	Ring, CLI, CPN	Ring
SMDR Ring/CLI/CPN Service II	For incoming calls, the system will send the defined data item for "Field II". The data item may be CLI, CPN or Ring Service Time.	Ring, CLI, CPN None	CPN
Print MSN	For an ISDN call involving an MSN number, the MSN number Information can be included in the SMDR Record.	OFF ON	OFF
Print Serial No	Each SMDR Record can include a record number starting at 1 and incrementing until the records are deleted. The record number will reset to 1 when SMDR capacity is reached or SMDR Mail Auto Delete Set is enabled under System Attributes.	OFF ON	OFF

Table 6.5.17-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SMDR Interface Service	When enabled, the system stores SMDR data to send to applications including NMS (Network Management System) upon request.	OFF, CO CALL, CO & ICM CALL	OFF
SMDR ICM Save	When enabled, intercom call data is stored as part of the SMDR data.	OFF ON	OFF
SMDR ICM Print	When enabled, intercom call data is printed as part of the On-line SMDR.	OFF ON	OFF
SMDR Disconnect Cause	When enabled, the disconnect cause is stored in Off-line SMDR data and printed as parted of the On-line SMDR.	OFF ON	OFF
Long time call	To monitor external calls for long duration, a "Long Time Call" can be set. If CO call duration exceeds this value, a notification will be sent to NMS server and an alarm generated. If set to "000" the feature is disabled.	000 ~ 144 (10 min.)	0
SMDR Output Limit from any CO to NET call	When a CO call is transferred to a Net transit-out CO, the local SMDR record is deleted.	OFF ON	OFF
Transfer Call Charge Rate	 When a call is transferred by a station, the SMDR record can be charged based on the following options. 1. INDIVIDUAL: When a call is transferred to another station, the transferred call is charged to both stations based on the time for the call. 2. INTEGRATE XFERING: When a call is transferred to another station, the call is charged to the transferring station. 3. INTEGRATE XFERED: When a call is transferred to another station, the call is charged to the station receiving the transfer. 	Individual Station, Integrate Transferring Station, Integrate Transferred Station	Individual Station
Attendant Transfer Charge Rate	 When a call is transferred by an Attendant, the SMDR record can be charged based on the following options. 1. INDIVIDUAL: When the Attendant places an outgoing call and transfers the call to a station, the transferred call is charged to both stations based on the time for the call. 2. ATD CHARGING: When Attendant places an outgoing call and transfers this call to a station, the call is charged to the Attendant. 3. XFERED CHARGING: When the Attendant places an outgoing call outgoing call and transfers this call to a station, the call is charged to the Attendant. 	Individual Charging, Attendant Station charging, Transferred Station Charging	Individual charging
International Access	The system will recognize the digits assigned as the International	Max. 4 digits	
Code Mobile Access Code	access code digit sequence when dialed as the first digits. The system will recognize the digits assigned as the Mobile network access code digit sequence when dialed as the first digits.	Max. 4 digits	
VSF Voice mail indication	Calls to the built-in Voice Mail may be shown as "I" for Incoming call or "V" for Voice Mail in the SMDR record.	I (Incoming call), V (Voice Mail call)	I(Incoming call)
Display Nxxxx for Net number	An "N" can be included in the SMDR to identify the call as a Network call.	OFF ON	OFF

Table 6.5.17-1 SMDR ATTRIBUTES

6.5.18 System Date & Time - PGM 178

Selecting System Date & Time will display the System Date & Time and DST data entry page. Click **[Save]** button after changing Value.

System Data	× 1	. Ea	vorite PGM	System Da	×		
System Attributes(160~161)		- rav	/onte PGM	System Da	 C		
System Password(162)							
Alarm Attributes(163)							
Attendant Assignment(164)		Order	Attribute		Value	Range	
Multicast IP/Port(165)			Time & I	Date (Don't	Save : 🖌)		
DISA COS(166)		1	Time	Hour	15	00-23	
DID/DISA Destination(167)		1	Time	Minute	51	00-59	
External Control Contacts(168)				Month	02	01-12	
LCD Display Mode(169)		2	2 0	Date	Day	13	01-31
LED Flashing Rates(170)				Year	15	00-99	
Music Sources(171)			Davli	ght Saving		00 33	
PBX Access Codes(172)		1	DST Mode	ON V	Time		
RLP Priority(173)		-	Donimode	Month	03	01-12	
RS-232 Port Settings(174)				WORT		01-12	
Serial Port Selections(175)		2	DST Start Time	Weekdav	Second	•	
Pulse Dial (Break/Make) Ratio(176)				· · ·	Sunday		
SMDR Attributes(177)				Hour	02	00-23	
System Date & Time(178)				Month	11	01-12	
System Multi Language(179)		3	DST End Time		First •		
System Timers(180~182,186)		, in the second	Dor Lind fille	Weekday	Sunday	•	
In Room Indication(183)				Hour	02	00-23	
Web Access Authorization							
Station Web Authorization							

Figure 6.5.18-1 System Date & Time

The System Date and Time are established by the [Time & Date] menu. The date and time are employed for several features and functions including; LCR, LCD displays, SMDR outputs, Auto Ring mode Selection, Wake-up Alarm etc.

If Daylight Savings Time is enabled, the system time will be adjust one-hour forward or back at the DST start and end times, respectively.

6.5.19 System Multi Language - PGM 179

Selecting System Multi Language will display the System Multi Language data entry page. Click **[Save]** button after changing Value.

System Data V		avorite PGM	Current Mar	×	
System Attributes(160~161)	< Fa	avorite PGM	System Mu	× C	
System Password(162)	Entor	Doviso/GW Slo	t Sequence Number	(1 3688) -	
Alarm Attributes(163)	Linter	Device/Ow Old	Coequence Mumber	(1 - 3000).	
Attendant Assignment(164)	Devic	e/Gateway Sequ	ence(Slot) Number	3001	
Multicast IP/Port(165)	Inde	x L	anguage	Usage	
DISA COS(166)	1	English(No	rth America) 🔻	OFF T	
DID/DISA Destination(167)	2	Unknown	•	OFF T	
External Control Contacts(168)	3	Unknown	•	OFF •	
LCD Display Mode(169)	4	Unknown	•	OFF T	
LED Flashing Rates(170)	5	Unknown	•	OFF •	
Music Sources(171)	6	Unknown	•	OFF T	
PBX Access Codes(172)					
RLP Priority(173)					
RS-232 Port Settings(174)					
Serial Port Selections(175)					
Pulse Dial (Break/Make) Ratio(176)					
SMDR Attributes(177)					
System Date & Time(178)					
System Multi Language(179)					
System Timers(180~182,186)					
In Room Indication(183)					

Figure 6.5.19-1 System Multi-Language

The VSF and UVM support multiple languages (18 languages); up to six languages may be supported simultaneously. Once the prompts are downloaded to the VSF and UVM, the caller receives the Language selection announcement for DISA and CCR calls as well as preceding a Station Group announcement or DID error announcement. The Language selection announcement will only affect the language prompts enabled for use with the device indicated by the Sequence number.

6.5.20 System Timers - PGMS 180 ~ 182 & 186

Selecting System Timers will display the System Timers data entry page. Click **[Save]** button after changing Value.

tem Attributes(160~161)	< Favorit	e PGM System Ti X			
tem Password(162)					
m Attributes(163)					
ndant Assignment(164)	Order <u>↓</u> a	timer <u>↓</u> ª	V	/alue	Range
ticast RTP/RTCP(165)	1	Attendant Recall Drop Timer	1	(*1min)	00-60
COS(166)	2	Call Park Recall Timer	120	(*1sec)	000-600
ISA Destination(167)	3	Camp-on Recall Timer	30	(*1sec)	000-600
al Control Contacts(168)	4	Exclusive Hold Recall Timer	60	(*1sec)	000-600
isplay Mode(169)	5	I-Hold Recall Timer	30	(*1sec)	000-600
ashing Rates(170)	6		30	(*1sec)	000-600
Sources(171)	-	System Hold Recall Timer			
Access Codes(172)	7	Transfer Recall Timer	30	(*1sec)	000-600
Priority(173)	8	ACNR Delay Timer	30	(*1sec)	000-300
32 Port Settings(174)	9	ACNR Pause Timer	30	(*1sec)	000-300
Port Selections(175)	10	ACNR Retry Counter	3		01- 13
Dial (Break/Make) Ratio(176)	11	ACNR Tone Detect Timer	30	(*1sec)	001-300
Attributes(177)	12	Automatic CO Release Timer	30	(*1sec)	000-300
em Date & Time(178)	13	CCR Inter-Digit Timer	30	(*100ms)	000-300
n Multi Language(179)	14	CO Dial Delay Timer	5	(*100ms)	00-99
m Timers(180~182,186)	15	CO Release Guard Timer	20	(*100ms)	010-150
om Indication(183)					
Access Authorization	16	CO Ring Off Timer	60	(*100ms)	001-150
on Web Authorization	17	CO Ring On Timer	2	(*100ms)	1-9
Attributes(195)	18	Elapsed Call Timer	180	(*1sec)	005-900
P Attribute(196)	19	Web Password Guard Timer	5	(*1min)	001-999
et Attribute(197)	20	Call Forward No Answer Timer	15	(*1sec)	000-600
sk Attributes(250)	21	DID/DISA No Answer Timer	0	(*1sec)	000-255
n Call Routing(251)	22	VSF User Maximum Record Timer	0	(*1sec)	000-999
OS Attributes(253)	23	VSF Valid User Message Timer	4	(*1sec)	0-9
Route Table(254)	24	Door Open Timer	20	(*100ms)	00-99
s Control List(255)					
n Speed Dial	25	ICM Dial Tone Timer	10	(*1sec)	001-255
n Messages Attributes	26	Inter Digit Timer	5	(*1sec)	01-20

Figure 6.5.20-1 System Timers

A number of timers can be assigned to control and affect many features and functions. Refer to the following table for a description of the timers and the input required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attendant Recall Timer	Enter the desired time that Attendant receives recall after the system will disconnect the call.	00~60 (minutes)	1
Call Park Recall Timer	Enter the desired recall time for call park. Parked call will recall the station at a specified time.	000~600 (seconds)	120
Camp-on Recall Timer	When a call is transferred using Camp-On, this field determines the desired recall time for Camp-on. The station receives the call again with a specified time.	000~600 (seconds)	30

Table 6.5.20-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Exclusive Hold Recall	Enter the desired time for Exclusive hold. The station	000~600	60
Timer	receives the call again after a specified time.	(seconds)	00
Hold Recall Timer	Enter the desired time for Hold recall. The station receives	000~600	30
	the call again after a specified time.	(seconds)	
System Hold Recall	Enter the desired time for System hold recall time. The	000~600	30
Timer	station receives the call again after a specified time.	(seconds)	
Transfer Recall Timer	Enter the desired time for transferring the call again to the	000~600	30
	receiving station.	(seconds)	00
	If the ACNR Pause Timer expires and no CO/IP Line is		
ACNR Delay Timer	available for ACNR recall, in this filed, you can set the	000~300	30
	delay time before ACNR attempts to access a CO/IP line	(seconds)	
	again. This feature doesn't affect the ACNR retry counter.		
ACNR Pause Timer	Enter the desired time for pause between ACNR recall	000~300	30
	attempts.	(seconds)	
	Enter the number of ACNR retry attempts. ACNR will finish		
ACNR Retry Counter	after a specified times.	1~13	3
	Regarding CIS country, the range is from 1 to 9.		
ACNR Tone Detect	If call progress tones are not available for ACNR, the	000~300	
Timer	system will wait the specified time after dialing before	(seconds)	30
	considering the called party as "busy/no answer".		
Automatic CO Release Timer	If a user accesses a CO/IP Line and takes no action, the	000~300	
	system will automatically release the CO/IP Line when the	(seconds)	30
	specified time is over or expired.		
CCR Inter-digit Timer	This field defines the inter-digit time used with Customer	000~300	30
-	Call Routing function.	(100 ms)	
CO Dial Delay Timer	To prevent dialing when CO/PBX has slow response,	00~99 (100 ma)	5
	dialing by the system can be delayed using this timer.	(100 ms)	
CO Release Guard	When a CO/IP Line is returned to idle, the system will deny	010~150	20
Timer	access for the specified time to assure the PSTN returns	(100 ms)	20
	the CO/IP Line circuitry to be idle. This timer sets the maximum 'OFF' duration of the		
CO Ring Off Timer	incoming ring cycle for the Ring Detect circuitry of the	001~150	60
	system to detect an abandoned call.	(100 ms)	00
	This timer sets the 'ON' time of the incoming ring cycle for		
CO Ring ON Timer	the Ring Detect circuitry of the system to recognize an	1~9	2
	incoming call.	(100 ms)	2
	Users can receive a periodic tone indicating the length of		
	an outgoing call. This field sets the time before and	005~900	
Elapsed Call Timer	between the tones. Note CO Warning Tone must be	(1 sec)	180
	enabled for the station in 'Station Data section'.	()	
	If no data packet is received during a Web connection, after		
Web Password Guard Timer	this guard time a password check will be initiated by the	001~999	5
	system.	(minutes)	_
o	When a user activates No-Answer Forward, calls will ring		
Call Forward No	for this duration before being forward. The Station No-	000~600	15
Answer Timer	Answer Forward timer section 6.2.12 will take precedence.	(seconds)	
	A DID/DISA call to a busy station will forward to the		
DID/DISA No Answer	DID/DISA Destination assigned under section 6.5.7 should	000~255	0
Timer	this timer expires.	(seconds)	

Table 6.5.20-1 SYSTEM TIMERS

ATTRIBUTE

		-	_
VSF User Maximum Record Timer	This timer sets the maximum duration allowed for a Voice Message in the built-in VSF/UVM Voice Mail.	000~999 (seconds)	0
VSF Valid User Message Timer	This timer sets the minimum duration allowed for a Voice Message in the built-in VSF/UVM Voice Mail	0~9 (seconds)	4
Door Open Timer	This timer sets the minimum time the contact assigned as a door open contact must be active to be recognized.	00~99 (100 msec)	20
ICM Dial Tone Timer	If a user goes off-hook to receive Intercom dial tone and takes no action for this timer, the user will receive error tone.	001~255 (seconds)	10
Inter Digit Timer	This timer sets the maximum time allowed between each user-dialed digit. At expiration, the user will receive error- tone or, for a SIP trunk, the digits are dialed.	01~20 (seconds)	5
MSG Wait Reminder Tone Timer	An iPECS IP or LDP Phone user will receive periodic reminder tones of a message waiting at intervals of this timer.	00~60 (minutes)	0
Paging Timeout Timer	Determines the maximum duration of a page after which the caller and Page Zone are released.	000~255 (seconds)	15
Pause Timer	A Timed pause of this duration is used in Speed Dial and during other automatically dialed digits sent to the PSTN.	1~9 (seconds)	3
Soft auto RLS Timer	When a Soft Key is used on the 6000 or 7000 series iPECS IP or LDP Phone, after expiration of this timer, the display will return to the previous display.	01-30 (seconds)	10
VM Pause Timer	When the system sends a "Pause" to Voice Mail using in- band signals, this timer defines the Pause duration.	01-90 (1 msec.)	30
SLT Hook Switch Bounce Timer	This timer determines the duration the system considers an actual state change in the hook-switch and not a spurious contact bounce.	01~25 (100 msec.)	1
SLT Maximum Hook Switch Flash Timer	This timer sets the maximum time an SLT user can depress the hook-switch for a Flash signal.	01~25 (100 msec.)	10
SLT Minimum Hook Flash Timer	This time sets the minimum time an SLT user must depress the hook-switch for a Flash signal.	000~250 (10 msec.)	30
Station Auto Release Timer	For an internal call, the system will return a station to idle if the call remains unanswered for this duration.	000~300 (seconds)	60
Unsupervised Conference Timer	This timer determines the duration of an "Unsupervised Conference" before the conference is dropped. 00 means 10 minutes.	00~99 (minutes)	10
Prime Line Delay Timer	This timer sets the delay (no action duration) for delayed (Warm) Prime Line operation.	01~20 (seconds)	5
Wink Signal Timer	This timer sets the duration of the "Seize Acknowledge Signal" (Wink) sent to the PSTN on a DID line.	010~200 (10 msec.)	10
Enblock Inter Digit Timer	When an ISDN Line is assigned to send digits En-block, CO Attributes section 6.4.1, the system will send digits if the user dials "#" or this En-block inter-digit timer expires.	01~20 (seconds)	5
DTMF Duration Timer	This timer establishes the duration of DTMF tones sent on an analog CO line.	04~99 (10 msec.)	10
Flex DID Timer	The system will receive DID digits for this timer. After the timer expires, the system will use the last 2 to 4 digits	01~99 (100 msec)	30

Table 6.5.20-1 SYSTEM TIMERS

DESCRIPTION

received as DID digits.

DEFAULT

RANGE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
R2 Out Manage Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 In Manage Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 Disappear Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 Pulse Timer	Reserved for future usage for R2 timers.	01~30 (*20ms)	7
R2 Ready Timer	Reserved for future usage for R2 timers.	000~500 (*20ms)	7
Dial Tone Delay Timer	Reserved for future usage for R2 timers.	01~30 (*20ms)	20
Wake Up Fail Timer	At expiration of this timer, the system will notify the Attendant when a user does not respond to a Wake up alarm.	00~99 (seconds)	20
VSF Cut Error Tone Timer	The duration of Voice Messages in the built-in Voice Mail are reduced by this timer to remove error tone that may be sent by the carrier after disconnect.	00~90 (seconds)	0
On Hook Auto Idle Timer	When an iPECS IP or LDP Phone receives a disconnect message or signal from CO line the phone goes to idle after this timer.	00~99 (seconds)	0
IP Watch Timer	When Local redundancy is implemented, should the LAN cable fail, both call servers may attempt to be active. To protect against this "dual active" case, the system can periodically check for an active back-up UCP module.	0~250 (seconds)	0
Prepaid Call Drop Warning Timer	When the Prepaid funds are exhausted, the user will receive a warning tone indicating the call will be dropped after this timer expires.	00-99 (seconds)	10
Emergency retry timer	The system attempts to complete an Emergency call using the defined Emergency group. If, after this timer, a CO/IP Line is not available in the group, the system will select any available CO/IP Line to complete the call.	00~99 (seconds)	0
Record Warning Repeat Timer	When Call Record Warning tone, PGM 161 is ON, the tone can be repeated at intervals of this timer for the duration of the call.	000~999 (seconds)	0
Error Tone Timer	This timer sets the duration for Error Tone.	5~180 (seconds)	30
Howling Tone Timer	This timer sets the duration for Howling Tone.	0~180 (seconds)	30
VM Notify Play Delay Over LCO Timer	When VM notification to the mobile uses an analog CO Line, the system will treat the call as answered after this timer and play the new message prompt.	1~99 (1 sec.)	10
Fax Detect timer	It is maximum fax tone detection time to deliver FAX call to fax destination.	1~20 (1 sec.)	10
Auto Pause Release timer	IPCR Mute function will be released by this auto pause released timer.	0~255 (1 sec.)	0
Short Modem Timer	If {Short modem} of a SLT is ON, the SLT maintains the modem mode for this time.	01~60 (1 sec.)	10

Table 6.5.20-1 SYSTEM TIMERS

6.5.21 In-Room Indication - PGM 183

Selecting In-Room indication will display the In Room data entry page. Click **[Save]** button after changing Value.

System Data	< Favorite PGM	In Room In X	[
System Attributes(160~161)	Favorite PGivi	III KOOIII III C	
System Password(162)	Enter In Room Num	ber (1 - 10) : Load	Save
Alarm Attributes(163)			Save
Attendant Assignment(164)	In Room Number1		
Multicast RTP/RTCP(165)	Index	Station Number	
DISA COS(166)	Supervisor		
DID/DISA Destination(167)	Member 1		
External Control Contacts(168)	Member 2		
LCD Display Mode(169)	Member 3		
LED Flashing Rates(170)	Member 4		
Music Sources(171)	Member 5		
PBX Access Codes(172)			
RLP Priority(173)	Member 6		
RS-232 Port Settings(174)	Member 7		
Serial Port Selections(175)	Member 8		
< Pulse Dial (Break/Make) Ratio(176)	Member 9		
SMDR Attributes(177)	Member 10		
System Date & Time(178)	Member 11		
System Multi Language(179)	Member 12		
System Timers(180~182,186)	Member 13		
In Room Indication(183)	Member 14		
Web Access Authorization			
Station Web Authorization	Member 15		
NTP Attributes(195)	Member 16		
SNMP Attribute(196)	Member 17		
Cabinet Attribute(197)	Member 18		
Hot Desk Attributes(250)	Member 19		
System Call Routing(251) VM COS Attributes(253)	Member 20		

Figure 6.5.21-1 In-Room Indication

The Supervisor Station can set the In-Room Indication for all members in the In-Room indication group. Up to 10 Supervisors (groups) can be configured, and each can have up to 20 members in the group, excluding the Supervisor.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Supervisor	This entry assigns the Station number for the In- Room Group Supervisor.	Station number	
Member 01~20	This entry assigns stations as members of the In-Room Group.	Station number	

6.5.22 Web Access Authorization

Selecting Web Access Authorization will display the Web Access Authorization data entry page. This page is only displayed when a password is defined. Click **[Save]** button after changing Value. A user can select three authorization option (N/A, Read, Read/Write) only in Web Access & Station Web Authorization PGM of Web Admin.

System Data 🗸 🗸						
	< Fa	avorite PGM	Web Access Aut			
System Attributes(160~161)						
System Password(162)						
Alarm Attributes(163)	Order		PGM		ser	Admin
Attendant Assignment(164)		System II	D & Numbering Plans	== Chang	e All == 🔻	== Change All == 🔻
Multicast IP/Port(165)	1	System ID(100))	Read	T	Read/Write •
SA COS(166)	2	System Overv	iew	Read/Wri	ite 🔻	Read/Write •
ID/DISA Destination(167)	3	Device Port N	um Change(101)	N/A	•	Read/Write •
xternal Control Contacts(168)	4	System IP Pla	in(102)	Read	-	Read/Write •
CD Display Mode(169) ED Flashing Rates(170)	5	Device IP Plar		Read	•	Read/Write •
usic Sources(171)	6	CO Device Se	quence Number(104)	N/A	-	Read/Write •
BX Access Codes(172)	7		n Number(105)	Read	-	Read/Write •
LP Priority(173)	8	Flexible Numb	ering Plan(106~109)	Read	•	Read/Write •
RS-232 Port Settings(174)	9	8 Digit Extensi	v , ,	N/A	•	Read/Write V
rial Port Selections(175)		•	Station Data	== Chang	e All == 🔻	== Change All == 🔻
Ilse Dial (Break/Make) Ratio(176)	1	Station Type(1	10)	Read	•	Read/Write •
MDR Attributes(177)	2	Common Attrib		N/A	•	Read/Write V
stem Date & Time(178)	3	Terminal Attrib		N/A	•	Read/Write •
stem Multi Language(179)	4	CLI Attributes(N/A	•	Read/Write •
stem Timers(180~182,186)	5	Flexible Buttor		Read/Wri	ite 🔻	Read/Write
Room Indication(183)	6	Station COS(1		N/A	•	Read/Write
b Access Authorization	7	CO/IP Group A	· · · · · · · · · · · · · · · · · · ·	N/A	•	Read/Write
ation Web Authorization	8		Zone Overview	N/A		Read/Write •
Attributes(195)	9	Internal Page 2		N/A	•	Read/Write
Attribute(196)	10	PTT Group Ac		N/A		Read/Write
et Attribute(197)	11	Preset Call Fo		Read/Wri		Read/Write
esk Attributes(250)	12	Idle Line Selec	× /	N/A	v	Read/Write
m Call Routing(251)	13	Station IP Attr	· · ·	N/A	• •	Read/Write
all Rerouting(252)	14	Station Timers		Read/Wri		Read/Write
COS Attributes(253)	15	Linked Station	()	N/A	T	Read/Write
: Route Table(254)	16	Station ICM G		N/A		Read/Write
ss Control List(255)	17	Station VM At	1.5	Read/Wri		Read/Write
ndant Ring Mode (257) .	• 17	Station VIVI At	(127)	Reau/WII		Redu/Wille •

Figure 6.5.22-1 Web Access Authorization

Three different passwords can be assigned for the access to the iPECS Web administration so that the different levels of access to the Admin Web pages can be allowed. Two levels, the User and Admin level, have access to the assigned Web Admin pages and the Database, SMDR, and Voice Mail Delete pages under the Maintenance tab. The Maintenance password has access to all the Web pages and the Maintenance pages including trace settings, device log view, gain & cadence control, lock key install and device delete feature. In addition, the Maintenance level user can assign the authorities of the Admin and User levels.

6.5.23 Station Web Access Authorization

Selecting Station Web Authorization will display the Station Web Access Authorization data entry page. Click **[Save]** button after changing Value.

stem Data 🗸 🗸	< Fa	avorite PGM Station	Web Aut.					
ystem Attributes(160~161)			C					
ystem Password(162)								Sa
larm Attributes(163)		2011						
ttendant Assignment(164)	Order	PGM	Level 2		Level 3		Remark	
ulticast IP/Port(165)		Station Program	== Change All	== v	== Change A	_		
SA COS(166)	1	Station Attributes	Read/Write •		(<u> </u>		
D/DISA Destination(167)	2	Station Call Forward	Read/Write •			•		
ternal Control Contacts(168)	3	Preset Call Forward	N/A 🔻		N/A	•		
D Display Mode(169)	4	Station ICR Scenario	Read/Write •		N/A	•		
D Flashing Rates(170)	5	Station Speed Dial	Read/Write •		N/A	•		
sic Sources(171)	6	Pre Select Message	Read/Write 🔻		N/A	•		
X Access Codes(172)	7	Flexible Buttons	Read/Write •		N/A	•		
P Priority(173)	8	Send Internal SMS	Read/Write •		N/A	•		
-232 Port Settings(174)	9	Send External SMS	Read/Write •		N/A	•		
ial Port Selections(175)	10	Station Conference Group	Read/Write •		N/A	•		
se Dial (Break/Make) Ratio(176)	11	System Conference Group	Read/Write •		N/A	•		
DR Attributes(177)	12	SET 5 Wake Up Alarm	Read/Write •		N/A	•		
stem Date & Time(178)	13	Mobile Extension Table	Read/Write •		N/A	•		
stem Multi Language(179)	14	Attendant Ring Mode	Read/Write •		N/A	•	Attendant Only	
stem Timers(180~182,186)	15	Attendant Wake Up Alarm	Read/Write •		N/A	•	Attendant Only	
Room Indication(183)	16	Bar Cost Charge	N/A T		N/A	•		
b Access Authorization	17	Call Back	Read/Write •		N/A	•		
tion Web Authorization	18	ACD Call Traffic	Read/Write •		N/A	- -	ACD Supervisor	Only
P Attributes(195)					(1
MP Attribute(196)	Order	Attribute			Level 2		Level 3	Remark
pinet Attribute(197)		Station Attribu	tes	== Ch	ange All == 🔻	== Ch	ange All == 🔻	
Desk Attributes(250)	1	DND		Read	I/Write ▼	N/A	•	
stem Call Routing(251)	2	ICM Signaling Mode		Read	I/Write 🔻	N/A	T	
Call Rerouting(252)	3	Call Coverage Mode		Read	I/Write 🔻	N/A	•	
COS Attributes(253)	4	Delay Ring Cycle		Read	I/Write 🔻	N/A	•	
tic Route Table(254)	5	Headset Usage			I/Write ▼	N/A	•	
cess Control List(255)	6	Authorization Code			I/Write 🔻	N/A	•	
endant Ring Mode (257)	7	DID Call Wait			Write V	N/A	•	

Figure 6.5.23-1 Station Web Access Authorization

Three access levels can be assigned to each station for access to the Station Web pages in Station Data (Common Attributes (111): 'Station Web Level'). Level 1 has access to all Station pages and attributes. The pages and attributes for Levels 2 and 3 are programmable.

6.5.24 NTP Attributes - PGM 195

Selecting NTP Attributes will display the System NTP Attributes entry page.

iystem Data 🗸 🗸	<	Favorite PGM NT	P Attributes(195) X			
System Attributes(160~161)			0			
System Password(162)						Save Client & Server Attribute
Alarm Attributes(163)						Apply Server Attribute
Attendant Assignment(164)	Order 1ª			NTP Client Attributes		rippi) correr rambat
Aulticast IP/Port(165)	1	Network Time & Date	Disable •			
DISA COS(166)	2	NTP Primary Server Address				Check DNS server address(PGM102) if you use U
DID/DISA Destination(167)		÷				· · · · · ·
external Control Contacts(168)	3	NTP Secondary Server Address				Check DNS server address(PGM102) if you use U
LCD Display Mode(169)	4	Standard Time Zone	(GMT+09:00)Seoul		•	
ED Flashing Rates(170)				NTP Server Attributes		
fusic Sources(171)	1	NTP Server Service	Disable •			
BX Access Codes(172)	2	DDoS Protector	Disable •			
LP Priority(173)						
S-232 Port Settings(174)						
erial Port Selections(175)						
Pulse Dial (Break/Make) Ratio(176)						
MDR Attributes(177)						
system Date & Time(178)						
ystem Multi Language(179)						
ystem Timers(180~182,186)						
Room Indication(183)						
/eb Access Authorization						
tation Web Authorization						
TP Attributes(195)						
NMP Attribute(196)						
Cabinet Attribute(197)						
Hot Desk Attributes(250)						
System Call Routing(251)						

Figure 6.5.24-1 NTP Attributes

The system can employ the Network Time Protocol (NTP) to synchronize the system time with an NTP server. The system requests the time from the NTP server at 10-minute intervals and then determines the time differential. If the system time is more 2 seconds off the NTP time, the system time is adjusted to synchronize with the NTP server time.

6.5.25 SNMP Attribute - PGM 196

Selecting SNMP Attribute will display the SNMP Attributes entry page. Click **[Save]** button after changing Value.

System Data	avorite PGM	SNMP Attribute(196)			×
System Attributes(160~161)	avonte PGW	SNMP Attribute(196) ×			~
System Password(162)					Save
Alarm Attributes(163)					Save
Attendant Assignment(164) Order 1	a	SNMP Agent			
Multicast IP/Port(165) 1	SNMP Service	OFF •			
DISA COS(166) 2	SNMP MIB Type	iPECS-NMS V KT-Biz V			
DID/DISA Destination(167) 3	SNMP Port	161			
External Control Contacts(168)					
LCD Display Mode(169) Order 1		SNMP Security			
LED Flashing Rates(170)	Read Only Commun	ity : public			
Music Sources(171) 2	Read Write Commu	nity : private			
PBX Access Codes(172) 3	Accept SNMP	Packet from Any NMS Server			
RLP Priority(173)	Accept SNMP	Packet from These NMS Servers			
RS-232 Port Settings(174)			Read Only 🔻		
Serial Port Selections(175) 4					
< Pulse Dial (Break/Make) Ratio(176)			Read Only V		
SMDR Attributes(177)			Read Only V		
System Date & Time(178) Order L ^s		Ch	NMP Trap		
System Multi Language(179)	Trap Community : p		wir Trap		
System Timers(180~182,186)	Trap Community . p				
In Room Indication(183)				162	Notification V
Web Access Authorization 2	Trap Destinations			162	Notification Notification
Station Web Authorization				162	Notification •
NTP Attributes(195)				102	Notification
SNMP Attribute(196)					
Cabinet Attribute(197)					
Hot Desk Attributes(250)					
System Call Routing(251)					

Figure 6.5.25-1 SNMP Attribute

SNMP Attributes, as shown on the screen, are divided into three categories: SNMP Agent, SNMP Security, and SNMP Trap. The SNMP Service field enables the SNMP agent running in the iPECS call server. The SNMP port field defines the UDP port used for communications from the iPECS UCP for SNMP messages. This port should not be changed.

In SNMP Security are the Read Only and Read Write SNMP Community fields, 4 to 16 characters. The SNMP community designates an SNMP communication group to which an SNMP message belongs, and is a logical relationship between the SNMP agent (iPECS UCP) and SNMP manager (iPECS NMS). The SNMP community settings must be the same for the iPECS UCP and the iPECS NMS server.

- Read Only Community (default=Public)—Defines a community string used when the iPECS NMS reads data from the iPECS UCP.
- Read Write Community (default=Private)—Defines the community string used when iPECS NMS reads or writes data to the iPECS UCP.

Although the iPECS UCP can accept packets from any SNMP manger such as iPECS NMS, for improved security, the IP address of specific servers can be defined and allowed Read only or Read Write access. It is recommended that the system be assigned with the IP address of only one NMS server with Read Write access.

The SNMP Trap configuration defines the Trap Community, and the Trap Destination, which

includes the IP Address of the SNMP manager, iPECS NMS, and the .message type. The Trap Community designates a communication group to which a Trap message belongs, and is a logical relationship between the SNMP agent (iPECS UCP) and SNMP manager (iPECS NMS). This 4 to 16--character string should be the same as the Trap community string defined in the iPECS NMS. The Trap community should be the same for all the iPECS UCP systems registered to an iPECS NMS server whereas the SNMP community may be defined with different strings for each iPECS UCP.

The Trap Destination defines the IP address of the iPECS NMS server and the port, 162. Enter the IP address of the NMS server but do not change the port. The pull down menu next to the address is used to define the message type. Three values are available:

- Trap message type is defined in SNMPv1, but because iPECS-NMS and the iPECS UCP use SNMPV2, the Trap type message is not recommended.
- Notification message type sent from the SNMP agent once without checking the reception of the message.
- Inform message type requires an acknowledgement from the SNMP manager. If the agent does not receive a response, the message is resent. Inform messages are intended for use in environments with high packet loss however, use of the Inform message type may detrimentally affect the iPECS UCP performance.

The iPECS SNMP attributes are defined here. Refer to the following table for description and values that can be entered.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SNMP service	SNMP Service field is used to set the SNMP agent in the iPECS ON or OFF.	OFF ON	OFF
SNMP MIB Type	Select SNMP MIB specification. U-CEMS is for KOREA telecom speciation.	iPECS-NMS, U-CEMS	iPECS-NMS
SNMP Port	SNMP Protocol port number		161
Read Only Community	Read only community should be used when SNMP manager (NMS) is trying to read data from SNMP agent (UCP)	4 ~ 16 characters	public
Read Write Community	When the SNMP manager (NMS) needs to read and write data to the agent (iPECS UCP). This attribute should be enabled.	4 ~ 16 characters	private
Trap Community	For the SNMP agent (UCP), this field defines the destination IP address to receive trapped messages (Alarm/fault events).	4 ~ 16 characters	public
Trap Destination	IP address of iPECS NMS server, port 162 should not be changed.	IP address	Public
Message Type	Defines how the agent sends the Message.	Notification, Inform, Trap	Notification

Table 6.5.25-1 SNMP ATTRIBUTES

6.5.26 Cabinet Attribute - PGM 197

Selecting Cabinet Attribute will display the Cabinet Attributes entry page. Click **[Save]** button after changing Value.

ystem Data ~	< Fav	orite PGM Cabinet	Attrib ×			
System Attributes(160~161)			~			
System Password(162)	Enter Cat	pinet Index (0 - 31) :		Load		Save
Alarm Attributes(163)						
Attendant Assignment(164)	Cabinet Ir					
fulticast IP/Port(165)	Order <u>↓</u> a		Val	ue		
ISA COS(166)	1	Cabinet Status Check	OFF V			
ID/DISA Destination(167)	2	Cabinet No (0 ~ 999)	1			
xternal Control Contacts(168)	3	Status Check GW Slot S	Seq			
CD Display Mode(169)	4	Remark				
ED Flashing Rates(170)						
lusic Sources(171)	Index Ca	binet No Sts Check GW	Sts Check FAN1 St	ts FAN2 Sts PSU1	FAN Sts PSU2 FAN S	ts PSU1 Sts PSU2 Sts
BX Access Codes(172)	0 0)	OFF			
LP Priority(173)	1 1		OFF			
S-232 Port Settings(174)	2 2		OFF			
erial Port Selections(175)	3 3		OFF			
ulse Dial (Break/Make) Ratio(176)	4 4		OFF			
MDR Attributes(177)	5 5		OFF			
ystem Date & Time(178)	6 6		OFF			
ystem Multi Language(179)	7 7		OFF			
ystem Timers(180~182,186)	8 8		OFF			
Room Indication(183)	9 9		OFF			
eb Access Authorization	10 1	0	OFF			
tation Web Authorization	11 1	1	OFF			
TP Attributes(195)	12 1	2	OFF			
NMP Attribute(196)	13 1	3	OFF			
abinet Attribute(197)	14 1	4	OFF			
ot Desk Attributes(250)	15 1	5	OFF			
ystem Call Routing(251)	16 1	6	OFF			
O Call Rerouting(252)	17 1	7	OFF			
••• ·		8	OFF			
M COS Attributes(253)		9	OFF			
tatic Route Table(254)		0	OFF			
ccess Control List(255) system Speed Dial	21 2	1	OFF			

Figure 6.5.26-1 Cabinet Attribute

This Web page displays system cabinet configurations and alarm status.

6.5.27 Hot Desk Attributes - PGM 250

Selecting Hot Desk Attributes will display the Hot Desk Attributes data entry page. Click **[Save]** button after changing Value.

_	ystem Data ~		Favori	te PGM	Hot Desk Attri	× 0	
	System Attributes(160~161)					~	
	System Password(162)						
	Alarm Attributes(163)		Order ↓ª	Attribu	to	Value	Range
	Attendant Assignment(164)	-	1	Number of Ag		value	0 - 149
	Multicast IP/Port(165)			-			0 - 149
	DISA COS(166)		2	View Agent R	-		
	DID/DISA Destination(167)		3	Auto Logout 7	ïmer 0		00 - 24
	External Control Contacts(168)						
	LCD Display Mode(169)						
	LED Flashing Rates(170)						
	Music Sources(171)						
	PBX Access Codes(172)						
	RLP Priority(173)						
F	RS-232 Port Settings(174)						
	Serial Port Selections(175)						
F	Pulse Dial (Break/Make) Ratio(176)						
5	SMDR Attributes(177)						
5	System Date & Time(178)						
5	System Multi Language(179)						
5	System Timers(180~182,186)						
1	In Room Indication(183)						
1	Web Access Authorization						
5	Station Web Authorization						
1	NTP Attributes(195)						
5	SNMP Attribute(196)						
	Cabinet Attribute(197)						
_	Hot Desk Attributes(250)						
	System Call Routing(251)						
	CO Call Rerouting(252)						

Figure 6.5.27-1 Hot Desk Attributes

A Hot Desk station allows a user to login for access to the system features and resources. Once logged in, the user is provided access to system features and resources employing the database for the user's assigned station.

User station numbers, which are used as the Agent Id, are assigned automatically by the system. The system assigns station numbers to each agent starting at the highest station number available.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Number of Agents	Assign number of hot desk agent.	UCP100: 0-199 UCP600/1200:0- 300	0
View Agent Range	View the assigned station numbers for agents.		N/A
Auto Logout Timer	A Hot desk station will return to inactive if the logged in user takes no action for the Auto Logout timer.	00~24 Hrs.	00

Table 6.5.27-1 HOT DESK ATTRIBUTES

6.5.28 System Call Routing - PGM 251

Selecting System Call Routing will display the System Call Routing data entry page. Enter a valid Index range for the scenarios and click **[Load]** to enter Call Routing data. Click **[Save]** button after changing Value.

System Data V	^					×							×
System Attributes(160~161)	<	F	avorite PGM	System C	all Routing	251) ×							×
System Password(162)	Ente	ar Index	Range (0 - 1009) :						loa	he			Save
Alarm Attributes(163)	Line	A MOON	range (o 1000).										Save
Attendant Assignment(164)	Inde	x Range	e 1										
Multicast IP/Port(165)	Del	Order	Attribute				Value					Rang	e
DISA COS(166)		1	Caller ID	N/A T							Max 23 Dig	gits	
DID/DISA Destination(167)		2	Called Num								Max 23 Dig	gits	
External Control Contacts(168)				Start Date			- End	Date			YYYY-MM	-DD format	
LCD Display Mode(169)		3	Time Condition		E 🗆 WED 🛛	THU 🗆	FRI SA		ALL H	Holiday	1		
LED Flashing Rates(170)				Start Time		- End 1	Fime 📃				hhmm (Mu	st be 4 digits) 0000-23	59
Music Sources(171)		4	Destination	N/A			▼ :	DEST Valu	e		Destination	n type and value [VSF	0 -> Dial Tone] in DISA active
PBX Access Codes(172)		5	Scenario Priority								0~9 (0:high	nest priority)	
RLP Priority(173)		6	Scenario Active	OFF T							Scenario E	nable/Disable	
RS-232 Port Settings(174)		7	Scenario VMID								vocie mail	ID	
Serial Port Selections(175)		8	Scenario COS	0							COS Leve	(0~11)	
 Pulse Dial (Break/Make) Ratio(176) SMDR Attributes(177) 		9	Scenario DISA Active	OFF T							DISA Enat	× 7	
System Date & Time(178)		10	Scenario ICM Grp	0							0-100		
System Multi Language(179)		11	Scenario Zone No	0							Zone Num	her (0-32)	
System Timers(180~182,186)		12	Scenario Start CO	0							Start Co lir		
In Room Indication(183)		13	Scenario End CO	0							End Co lin	· · ·	
Web Access Authorization		15	Scenario End CO	U								e (0 - 556) nber (01~100)	
Station Web Authorization		14	Scenario Group	0							00 : Unuse		
NTP Attributes(195)		15	Zone Holiday	0							Zone Num	ber (0-32)	
SNMP Attribute(196)													
Cabinet Attribute(197)	Ind	ex <u>‡</u> ª C	aller ID Called Num Tir	me Destination	Priority <u>↓</u> a	Active V	MID COS	DISA Activ	ve ICM Grp	j <u>I</u> ª Zone CO	D Line Group	<u></u> Iª Zone Holiday (0-3	2)
Hot Desk Attributes(250)	1					OFF	0	OFF	0	0	0	0	
System Call Routing(251)													
CO Call Rerouting(252)													
VM COS Attributes(253)													
Static Route Table(254)													

Figure 6.5.28-1 System Call Routing

System Call Routing establishes scenarios with criteria to route calls. Criteria include time of day, day of week, Caller and Called numbers, etc. System Call Routing takes precedent over other system based call routing. However, Station Call Routing scenarios take precedence over System Call Routing scenarios.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Caller ID	This field defines the Caller Id for the scenario.	Max. 23 Digits	N/A
Called Num	This field defines the Called number for this scenario.	Max. 23 Digits	
Time condition (Start Day and End Day, weeks, start time and end time)	The time and day for activation of the scenario can be defined.	YYYY-MM-DD hhmm (Must be 4 digits)	
Destination (Type and Value)	This field defines the destination type and value for call routing when the scenario criteria are met.	STA Station Group, SPD, PABX, VSF, VSF(#), Net Station, Company Directory-	N/A

Table 6.5.28-1 System	Call Routing Attributes
-----------------------	-------------------------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Last name, INT Page,	
		EXT Page,	
		All Page,	
		VM,	
		ICLID Table	
	Each scenario can be assigned a priority.	0-9	
Scenario Priority	The highest priority scenario meeting the criteria is used to route the call.	(Highest priority)	
Scenario Active	A scenario must be active to be employed. If	ON	OFF
	not active, the scenario is ignored.	OFF	
Scenario VMID	A Voice Mail Id can be associated with the scenario for routing to a Voice Mailbox.	Voice mail ID	
Scenario COS	If DISA is active for the scenario, the COS	0-11	0
	can be assigned for the call.	(COS level)	0
Scenario DISA Active	The scenario can employ DISA for the	OFF,	OFF
	incoming call routing.	ON	011
Scenario ICM Group number	The scenario can route calls to a specific Tenancy group.	0-100	0
Scenario Zone	A zone can be assigned so that only CO calls to a CO/IP Line in the Zone will route	0-32	0
	based on the scenario.		
Scenario Start CO and End CO	This field defines a range of CO/IP Lines that	Start CO:0-998, End CO: 0-998	0
	will employ the scenario. Scenarios can be group allowing the	Ella CO. 0-998	
Scenario Group: this is used for	Attendant to select a group of scenarios to	001~100	0
scenario group by attendant.	route calls.	(00: Unused)	Ŭ
	A Zone can be assigned for routing calls		
Zone Holiday	using the scenario during Holiday periods	0-32	0
	defined for the Zone.		

Table 6.5.28-1 System Call Routing Attributes

6.5.29 CO Call Rerouting - PGM 252

Selecting CO Call Rerouting will display the CO Call Rerouting data entry page. Enter a valid Index range and click **[Load]** to enter Call Routing data. Click **[Save]** button after changing Value.

System Data v						
System Attributes(160~161)	<	Favorite PGM	CO Call Reroutin	ng(×		
System Password(162)						
Alarm Attributes(163)	Enter	Index Range (0 - 499) :			2	Load
Attendant Assignment(164)	Index	Range 1-20				
Multicast IP/Port(165)	Enabl	e Co Call Rerouting : C	N T			
DISA COS(166)	Initiali	ze CRR : 🔲				
DID/DISA Destination(167)	Index	Compare CO Group	Compare Digits	CO + Rerouting Number	Rerouting Type	Alternate Dest CO Group
External Control Contacts(168)	1	1			N/A T	
CD Display Mode(169)	2	1			N/A T	
ED Flashing Rates(170)	3	1			N/A T	
Music Sources(171)	4	1			N/A T	
BX Access Codes(172)						
LP Priority(173)	5	1			N/A •	
S-232 Port Settings(174)	6	1			N/A ▼	
erial Port Selections(175)	7	1			N/A •	
ulse Dial (Break/Make) Ratio(176)	8	1			N/A 🔻	
MDR Attributes(177)	9	1			N/A 🔻	
stem Date & Time(178)	10	1			N/A 🔻	
stem Multi Language(179)	11	1			N/A T	
stem Timers(180~182,186)	12	1			N/A T	
Room Indication(183)	13	1			N/A T	
eb Access Authorization						
ation Web Authorization	14	1			N/A •	
P Attributes(195)	15	1			N/A •	
MP Attribute(196)	16	1			N/A ▼	
inet Attribute(197)	17	1			N/A 🔻	
t Desk Attributes(250)	18	1			N/A 🔻	
stem Call Routing(251)	19	1			N/A 🔻	
O Call Rerouting(252)	20	1			N/A •	
M COS Attributes(253)						

Figure 6.5.29-1 CO Call Rerouting

CO Call Rerouting establishes routing for CO/IP calls with a specified caller id on CO/IP Lines from a specified group. The rerouting sends calls out over another CO/IP Line or group, a network destination, a DISA call or to another station. The incoming CO group and compare digits determine if the call should be rerouted and the destination is determined by the CO code and Telephone number, which is dialed when the incoming group and compare digits are matched. The routing type determines if the call is routed normal (N/A) or if the call is routed over a network or employs DISA.

Example CRR chart

Index	Incoming CO group	Compare Code	CO Code + Tel number	Routing Type
0	1	454	88005123456	N/A
1	2	456**	8901123456	N/A
2	1	42*555	9123456	N/A
3	5	353	8901123456	NET Type
4	5	401		DISA Type

- Index 0: If an incoming call on a CO/IP Line from group has digits "454" then seize CO 5

and send digit 123456.

- Index 1: If an incoming call on a CO/IP Line from group 2 has digits "456**" then seize CO group 1 and send digit 123456.
- Index 2: If an incoming call on a CO/IP Line from group1 has digits "42*555" then seize the first CO/IP Line and send digit 123456.
- Index 3; if an incoming call on a CO/IP Line from group 5 has digits "353" then seize CO group 1 and send digit 123456 as a transit-out call over the Network.
- Index 4: If an incoming call on a CO/IP Line from group 5 has digits "401" then activate DISA and await digits from the caller.

6.5.30 VM COS Attributes – PGM 253

Selecting VM COS Attributes will display the VM COS Attributes data entry page. Select a valid VM COS and click **[Load]** to enter VM COS data. Click **[Save]** button after changing Value.

System Attributes(160~161)	<	Favorite PGM VM C	OS Attrib X			
System Password(162)	Enter	/M COS Range (1 - 5) :			? Load	S
Alarm Attributes(163)						
Attendant Assignment(164)	VM CC	OS Range 1				
Multicast IP/Port(165)	Order	Attribute	Value	Range		
DISA COS(166)	1	Greeting Length	60	0-99 sec		
DID/DISA Destination(167)	2	Message Length	0	0-600 sec		
External Control Contacts(168)	3	Number of Messages	0	0-250		
LCD Display Mode(169)	4	Retention Time	0	0-99 Dav		
LED Flashing Rates(170)	5	E-Mail Notification	Notification and Delete			
Music Sources(171)	6	Future Delivery Message	OFF T			
PBX Access Codes(172)	7	Confirm Message Receipt	OFF •			
RLP Priority(173)	8	Private Message Mark	OFF •			
RS-232 Port Settings(174)						
Serial Port Selections(175)						
Pulse Dial (Break/Make) Ratio(176)						
SMDR Attributes(177)						
System Date & Time(178)						
System Multi Language(179) System Timers(180~182,186)						
In Room Indication(183)						
Web Access Authorization						
Station Web Authorization						
NTP Attributes(195)						
SNMP Attribute(196)						
Cabinet Attribute(197)						
Hot Desk Attributes(250)						
System Call Routing(251)						
CO Call Rerouting(252)						
oo our rorouring(202)						
VM COS Attributes(253)						

Figure 6.5.30-1 VM COS Attributes

VM COS establishes various common characteristics of the user's Voice Mailbox including greeting and message length, E-mail notification, message retention, etc.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Greeting Length	This defines maximum user greeting length.	0-99 (Seconds)	60
Message Length	This defines maximum user message recording time.	0-600 (Seconds)	0
Number Of Messages	This defines maximum number of voice mail message.	0-250	0
Retention Time	Voice mail messages will be automatically deleted after this number of days.	0-99 Days	0
E-Mail Notification	E-mail notification can be enabled or disabled and, if enabled, the message can be deleted after notification.	Disable, Notification Only, Notification & Delete	Notification & Delete
Future Delivery Message	Future Delivery of messages can be enabled or disabled.	OFF ON	OFF
Confirm Message Receipt	Confirm message receipt can be enabled or disabled.	OFF ON	OFF
Private Message Mark	Private message mark can be enabled or disabled.	OFF ON	OFF

Table 6.5.30-1 VM COS ATTRIBUTES

6.5.31 Static Route Attributes – PGM 254

Selecting Static route Attributes will display the static route attributes data entry page. Click **[Save]** button after changing Value.

stem Attributes(160~161)	< Fa	vorite PGM Stat	c Route X	
stem Password(162)				
arm Attributes(163)				
endant Assignment(164)	Index	Feature	Value	
Ilticast IP/Port(165)		Net Address		
SA COS(166)	1	Net Mask		
D/DISA Destination(167)		Gateway IP Address		
ternal Control Contacts(168)		Net Address		
D Display Mode(169)	2	Net Mask		
D Flashing Rates(170)	2	Gateway IP Address		
sic Sources(171)		-		
K Access Codes(172)		Net Address		
P Priority(173)	3	Net Mask		
232 Port Settings(174)		Gateway IP Address		
Port Selections(175)		Net Address		
e Dial (Break/Make) Ratio(176)	4	Net Mask		
R Attributes(177)		Gateway IP Address		
tem Date & Time(178)		Net Address		
tem Multi Language(179)	5	Net Mask		
tem Timers(180~182,186)		Gateway IP Address		
om Indication(183)		Galeway IF Aduless		
Access Authorization				
on Web Authorization				
Attributes(195)				
P Attribute(196)				
net Attribute(197)				
Desk Attributes(250)				
em Call Routing(251)				
Call Rerouting(252)				
COS Attributes(253)				
ic Route Table(254)				

Figure 6.5.31-1 Static Route Table Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net address	Network IP address	IP address	
Net mask	Net mask		
Gateway IP address	Gateway (route) IP address	IP address	

Table 6.5.31-1 STATIC ROUTE TABLE ATTIBUTES

6.5.32 Access Control List – PGM 255

Access Control List will display the access control attributes data entry page. Enter a valid index range and click **[Load]** to enter ACL data. Click **[Save]** button after changing Value.

	< F	Favorite PGN	M Acces	ss Control List(×			
System Attributes(160~161) System Password(162)	Enter In	dex Range (1 - 250) :		2	Load	
Alarm Attributes(163)							l
Attendant Assignment(164)	Deny Inc						
Multicast IP/Port(165)		age : OFF					
DISA COS(166)			Allow All				
DID/DISA Destination(167)		Protocol	Port Number	Port Type	Source IP Address	Remark	
External Control Contacts(168)	1	N/A V	<u> </u>				
CD Display Mode(169)	2	N/A T	<u> </u>				
ED Flashing Rates(170)	3	N/A T		· · · ·]/[]		
Music Sources(171)	4	N/A •			/		
PBX Access Codes(172)	5	N/A •		· · · · ·	1		
RLP Priority(173)	6	N/A •	-]/		
RS-232 Port Settings(174)	7	N/A •		· · · ·	1		
Serial Port Selections(175)	8	N/A •	<u> </u>				
Pulse Dial (Break/Make) Ratio(176)	9	N/A T	<u> </u>				
SMDR Attributes(177)	10	N/A T					
System Date & Time(178)	11	N/A T					
System Multi Language(179)	12	N/A T					
System Timers(180~182,186) n Room Indication(183)							
Web Access Authorization	13	N/A T	<u> </u>		/		
Station Web Authorization	14	N/A •	<u> </u>				
VTP Attributes(195)	15	N/A 🔻			1		
SNMP Attribute(196)							
Cabinet Attribute(197)							
Hot Desk Attributes(250)							
System Call Routing(251)							
CO Call Rerouting(252)							
/M COS Attributes(253)							
Static Route Table(254)							
Access Control List(255)							

Figure 6.5.32-1 Access Control List

Access Control determines the Source IP addresses that can access the system for specific protocols.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Protocol	This field defines the accessing protocol type.	N/A, ALL, TCP, UDP, ICMP	N/A
Port number	This field further defines the protocol TCP/IP port number.		
Port type	The port number can be configured as the source or destination port	DEST	
гоп туре	number.	SRC	
Source IP address	The source IP address and net mask allowed access is defined by this field.		
Remark	This is a general remark field.		

Table 6.5.32-1 ACCESS CONTROL LIST

6.5.33 Attendant Ring Mode – PGM 257

Selecting Attendant ring mode will display Attendant ring mode entry page. Click **[Save]** button after changing Value.

ystem Attributes(160~161)	< Favorite PGM Atte	ndant Ring Mo 🗙			
ystem Password(162)					
larm Attributes(163)					Sav
ttendant Assignment(164)	Attendant Type	Current Ring Mode	Saved Ring Mode	ON DEMAND RING	MODE Value(1 ~ 100)
ulticast IP/Port(165)			Main Attendant		
ISA COS(166)	Main Attendant	Day Ring Mode	Day Ring Mode	▼	
D/DISA Destination(167)		ICM T	enancy Group Attendant		
xternal Control Contacts(168)	ICM Tenancy Group Attendant 1	Day Ring Mode	Day Ring Mode	▼	
CD Display Mode(169)	ICM Tenancy Group Attendant 2	Day Ring Mode	Day Ring Mode	▼	
ED Flashing Rates(170)	ICM Tenancy Group Attendant 3	Day Ring Mode	Day Ring Mode	•	
usic Sources(171)	ICM Tenancy Group Attendant 4	Day Ring Mode	Day Ring Mode	•	
BX Access Codes(172)	ICM Tenancy Group Attendant 5	Day Ring Mode	Day Ring Mode	•	
LP Priority(173)	ICM Tenancy Group Attendant 6	Day Ring Mode	Day Ring Mode	•	
S-232 Port Settings(174)	ICM Tenancy Group Attendant 7	Day Ring Mode	Day Ring Mode	•	
erial Port Selections(175) ulse Dial (Break/Make) Ratio(176)	ICM Tenancy Group Attendant 8	Day Ring Mode	Day Ring Mode	•	
MDR Attributes(177)	ICM Tenancy Group Attendant 9	Day Ring Mode	Day Ring Mode	-	
ystem Date & Time(178)	ICM Tenancy Group Attendant 10	, ,	Day Ring Mode	- <u>-</u>	
vstem Multi Language(179)	ICM Tenancy Group Attendant 11	Day Ring Mode	Day Ring Mode		
stem Timers(180~182,186)	ICM Tenancy Group Attendant 12	, ,	Day Ring Mode	•	
Room Indication(183)	ICM Tenancy Group Attendant 12		Day Ring Mode	•	
eb Access Authorization					
tation Web Authorization	ICM Tenancy Group Attendant 14	Day Ring Mode	Day Ring Mode	•	
TP Attributes(195)	ICM Tenancy Group Attendant 15	, ,	Day Ring Mode	•	
NMP Attribute(196)	ICM Tenancy Group Attendant 16	, ,	Day Ring Mode	•	
abinet Attribute(197)	ICM Tenancy Group Attendant 17	Day Ring Mode	Day Ring Mode		
ot Desk Attributes(250)	ICM Tenancy Group Attendant 18	, ,	Day Ring Mode	•	
stem Call Routing(251)	ICM Tenancy Group Attendant 19	Day Ring Mode	Day Ring Mode	▼	
O Call Rerouting(252)	ICM Tenancy Group Attendant 20	Day Ring Mode	Day Ring Mode	•	
M COS Attributes(253)	ICM Tenancy Group Attendant 21	Day Ring Mode	Day Ring Mode	•	
atic Route Table(254) ccess Control List(255)	ICM Tenancy Group Attendant 22	Day Ring Mode	Day Ring Mode	•	
tendant Ring Mode (257)	ICM Tenancy Group Attendant 23	Day Ring Mode	Day Ring Mode	•	

Figure 6.5.33-1 Attendant Ring Mode

Administrator assigns the ring mode to 1 Main attendant and 15 ICM Tenancy Group Attendant. Five ring modes are supported as Day, Night, Timed, Auto, On demand ring mode (1~100). The Attendant controls the system Ring mode changing from Auto ring Mode to Day, Night, Timed or On demand ring mode. Based on the ring mode selected in the field of Saved Ring Mode, different ring assignments, COS (Class of Service) and answering privileges are invoked for the system users.

In case Main attendant select the other ring mode of Day ring mode in the field of Saved Ring Mode, ICM Tenancy group attendant controls the system ring mode instead of Main attendant. So Current Ring Mode and Saved Ring Mode of ICM Tenancy group attendant may be different.

6.5.34 System Speed Dial

Selecting System Speed Dial will display the System Speed Dial entry page. Enter a valid range of System Speed Dial numbers and click **[Load]** to enter Speed Dial data. Click **[Save]** button after changing Value.

ystem Attributes(160~161)	< Fa	vorite PGM	System Speed	I Dial ×			
ystem Auributes(160~161) ystem Password(162)		ex Range (20000					
larm Attributes(163)	Enter Inde	ex Range (20000	- 31999) :		2	Load	Sav
. ,	Index Rar	nge 20000-20049)				
ttendant Assignment(164)	Index	CO Type	CO Value	Dial Digit	Name		
ulticast IP/Port(165)	20000	N/A 🔻					
SA COS(166)	20001	N/A 🔻					
D/DISA Destination(167)	20002	N/A 🔻					
ternal Control Contacts(168)	20003	N/A 🔻					
CD Display Mode(169)	20004	N/A v					
ED Flashing Rates(170)	20005	N/A T					
usic Sources(171)	20006	N/A T					
3X Access Codes(172)	20007	N/A T					
P Priority(173)	20008	N/A T					
3-232 Port Settings(174)	20009	N/A T					
erial Port Selections(175)	20009	N/A T					
ilse Dial (Break/Make) atio(176)		N/A T					
MDR Attributes(177)	20011						
stem Date & Time(178)	20012	N/A •					
stem Multi Language(179)	20013	N/A •					
stem Timers(180~182,186)	20014	N/A T					
Room Indication(183)	20015	N/A •					
eb Access Authorization	20016	N/A 🔻					
ation Web Authorization	20017	N/A •					
P Attributes(195)	20018	N/A •					
	20019	N/A 🔻					
MP Attribute(196) abinet Attribute(197)	20020	N/A 🔻					
ot Desk Attribute(197)	20021	N/A 🔻					
	20022	N/A 🔻					
stem Call Routing(251)	20023	N/A •					
Call Rerouting(252)	20024	N/A •					
/I COS Attributes(253)	20025	N/A •					
atic Route Table(254)	20026	N/A 🔻					
cess Control List(255)	20027	N/A •					
tendant Ring Mode (257)	20028	N/A •					
stem Speed Dial	20029	N/A T					
istom Messages	_ 20030	N/A T					

Figure 6.5.34-1 System Speed Dial List

The UCP has memory for 12,000 Speed Dial numbers of up to 25 digits each. Each System Speed bin (index) is assigned the CO/IP Line for the Speed Dial, the number to be dialed and a name for Dial-by-Name.

6.5.35 Custom Messages

Selecting Custom Messages will display the Custom Message Table data entry page. Click **[Save]** button after changing Value.

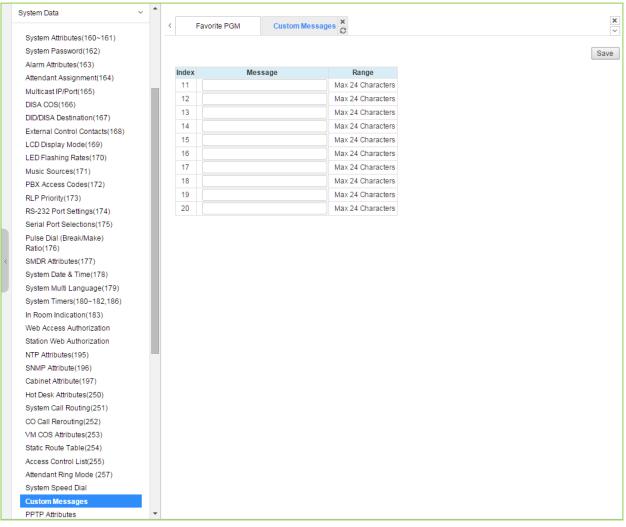


Figure 6.5.35-1 Custom Message

The system's 10 Custom messages can be defined with up to 24 characters each.

6.5.36 PPTP Attributes

Selecting PPTP Attributes will display the PPTP Attributes Table data entry page. Click **[Save]** button after changing Value.

Password(162) tribules(163) ttAssignment(164) ttPopent(165) S(166) Abstingment(164) VDestination(167) Control Contacts(168) shing Rates(170) purces(171) ess Codes(172) phylott(173) PortS Pervice CLI mitotacts(175) al (Breal/Make) 6) tributes(177) Date & Time(178) Wult Language(179) Times(180-182.186) Indication(183) sess Authorization Veb Authorization		< Fav	vorite PGM PPTF	Attributes ×		
httbds(163) httAssignment(164) IIP/Pott(165) S(166) Obsetnation(167) Control Contacts(168) Jaly Mode(169) Jaly Mode(171) Less Codes(172) Jartific Language(179) Timer(180-182,186) Indicaton(183) Jaess Authorization Jaute Solution(1617) Lathbube(260) Call Routing(251) Rerouting(252) Attribute(253) Jule Table(254) Sontrol List(255) Itting Mode (257)	m Attributes(160~161)					
Massignment(164) Order 1 Attribute Value Range 1 PPTP Usage OFF • IPAdress 3 PPTP ID Max 24 Chars Max 24 Chars Control Contacts(168) Max 24 Chars Max 24 Chars Max 24 Chars 5 PPTP Password Max 24 Chars Max 24 Chars 5 PPTP Service CLI Max 23 Digits 9 Port Setings(170) Max 23 Digits 9 Port Setings(174) Max 23 Digits 9 Port Setings(174) Max 24 Chars 9 Port Setings(174) Max 23 Digits 9 Port Setings(177) Max 24 Chars 9 Port Setings(174) Max 24 Chars 9 Port Setings(174) Max 24 Chars 9 Port Setings(177) Port Setings(178) 10 Image Setions(175) Image Setions(176) 10 Image Setions(177) 204 & Time(178) Multi Language(179) Timesr(189) Setions(169) 10 Image Setions(176) 10 Image Setions(177) 20 Image Setions(1						
1 PPTP Usage OFF • S(166) PTP Server IP Address IP Address 30 PPTP ID Max 24 Chars 31 appMode(166) Max 24 Chars Max 24 Chars 32 by Mode(166) Max 24 Chars Max 24 Chars 34 by Mode(166) Max 21 Chars Max 23 Digits 35 PPTP Dervice CLI Max 23 Digits 36 pPT5 Service CLI Max 23 Digits 37 pPT Service CLI Max 23 Digits 38 pPT5 Service CLI Max 23 Digits 39 pPT5 Service CLI Max 24 Chars 30 pPT5 Service CLI Max 23 Digits 30 pPT5 Service CLI Max 24 Chars 30 pPT5 Service CLI Max 23 Digits 30 pPT5 Service CLI Max 24 Chars 30 pPT5 Service CLI Service CLI 30 pPT5 Service CLI <td></td> <td>Order ↓ª</td> <td>Attribute</td> <td>Value</td> <td>Range</td> <td></td>		Order ↓ª	Attribute	Value	Range	
g(166) 2 PPTP D Service IP Address IP Address 3 PPTP ID Max 24 Chars 4 PPTP Password Max 24 Chars 5 PPTP Service CLI Max 23 Digits 9 Imp Address Max 24 Chars 9 Imp Address Max 24 Chars 9 Imp Address Max 23 Digits 9 Imp Address Max 24 Chars 9 Imp Address Max 23 Digits 9 Imp Address Max 24 Chars 9 Imp Address Max 24 Chars<		_ 1	PPTP Usage	OFF V		
3 PPTP D Max 24 Chars 4 PPTP Password Max 24 Chars 5 PPTP Password Max 23 Digits shing Rates(170) Max 23 Digits Max 23 Digits purces(171) sess Code(172) Max 23 Digits rith(173) Port Settings(174) Max 23 Digits port Settings(174) Max 24 Chars Max 23 Digits rith(173) Port Settings(174) Max 23 Digits port Settings(174) Max 24 Chars Max 24 Chars p		2	PPTP Server IP Address		IP Address	
Control Contacts(188) 4 PPTP Password Max 24 Chars Silay Mode(169) 5 PPTP Service CLI Max 23 Digits shing Rates(170) mix(171) Max 23 Digits Max 23 Digits ymix(173) PPOTS Setring(174) Max 24 Chars Max 23 Digits ymix(173) PPOTS Setring(174) Max 24 Chars Max 23 Digits ymix(173) PPOTS Setring(174) Max 24 Chars Max 23 Digits ymix(173) PPOTS Setring(175) Max 24 Chars Max 23 Digits al (Break/Make) Mix(177) Date & Time(178) Multi Language(179) Timers(180-182,186) Indication(183) Max 24 Chars Max 24 Chars butes(195) Timbute(196) Max 20 Digits Max 24 Chars Attribute(197) Attribute(197) Attribute(197) Max 24 Chars Max 24 Chars Attribute(250) Call Routing(251) Max 20 Digits Max 24 Chars Max 24 Chars Muter Table(254) Control List(255) Max 24 Chars Max 24 Chars Max 24 Chars Muter Table(254) Control List(255) M	COS(166)	3	PPTP ID		Max 24 Chars	
5 PPTP Service CLI Max 23 Digits shing Rates(170) Junces(171) Max 23 Digits purces(171) ess Codes(172) Junces(172) prifts(173) PProt Settings(174) Junces(175) paid (Break/Make) 6) Junces(177) paid (Break/Make) 6) Junces(177) paid (Break/Make) 6) Junces(177) paid & Time(178) Junces(177) paide & Time(178) Junces(178) Wulti Language(179) Timers(180-182,186) Indication(183) eses Authorization bubes(195) tributes(197) Kattribute(197) Kattribute(197) Kattributes(250) Call Routing(251) Rerouting(252) Authobus(253) Junt Table(254) Junces(155) thit Ring Mode (257) List (255)		4	PPTP Password		Max 24 Chars	
shing Rates(170) burces(171) ess Codes(172) orthy(173) Port Settings(174) ort Settings(174) ort Settings(174) ort Settings(174) ort Settings(174) ort Settings(174) ort Settings(175) al (Break/Make) 6) ttributes(177) Date & Time(178) Wulti Language(179) Timer(178) Wulti Language(179) Timer(178) Veb Authorization butes(195) ttribute(197) Attribute(197) Attribute(250) Call Routing(251) Rerouting(252) Attribute(253) uite Table(254) Control List(255) tt Ring Mode (257)		5	PPTP Service CLI		Max 23 Digits	
Surves(17) ess Codes(172) intity(173) Port Settings(174) pht Selections(175) al (Break/Make) 6) titbutes(177) Date & Time(178) Wulti Language(179) Timers(180-182,186) Indication(183) sess Authorization Veb Authorization butes(195) ttributes(197) Call Routing(251) Rerouting(252) Attributes(253) uut Table(254) Control List(255) tt Ring Mode (257)						
ees Codes(172) inty(173) Port Settings(174) inty(173) Port Settings(174) inty(175) part Settings(175) inty(175) part Settings(177) inty(178) Sate & Time(178) inty(179) Date & Time(178) inty(170) Vult Language(179) inty(170) Timers(180~182,186) inty(170) Indication(183) inty(170) reses Authorization inty(170) Veb Authorization inty(170) Sattributes(197) inty(170) Call Routing(250) inty(170) Call Routing(251) inty(170) Rearcuting(252) inty(170) Date (253) inty(170) Date (254) inty(170) Date (255) inty(170)						
Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) Date Table(254) Control List(255) at Ring Mode (257)						
Port Settings(174) port Settings(175) al (Break/Make) 6) ttributes(177) Date & Time(178) Wulti Language(179) Timers(180~182,186) Indication(183) sess Authorization Web Authorization Web Authorization Web Authorization Web Authorization Sets Authorization Web Authorization Sets Authorization Web Authorization Sets Authorization						
aut Selections(175) al (Break/Make) 6) ttributes(177) Date & Time(178) Wulti Language(179) Timers(180~182,186) Indication(183) sess Authorization Veb Authorization bibutes(195) ttribute(196) Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) uite Table(254) Control List(255) tt Ring Mode (257)						
al (Break/Make) 6) ttributes(177) Date & Time(178) Multi Language(179) Timers(180~182,186) Indication(183) sess Authorization Veb Authorization Veb Authorization butes(195) ttribute(196) Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) sute Table(254) Control List(255) tt Ring Mode (257)						
6) (f) (tributes(177) Date & Time(178) (Wulti Language(179) Timers(180~182,186) Indication(183) eses Authorization Veb Authorization bibutes(195) (tribute(196) Attributes(250) Call Routing(251) Rerouting(251) Rerouting(252) Attributes(253) uite Table(254) Control List(255) (tribunes) (tributes(255)) (tributes)(255) (
Date & Time(178) Multi Language(179) Timers(180-182,186) Indication(183) ess Authorization Veb Authorization butes(195) ttributes(196) Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) uite Table(254) Control List(255) tt Ring Mode (257)						
Wulti Language(179) Timers(180-182,186) Indication(183) tess Authorization Veb Authorization butes(195) ttribute(196) Attribute(197) ck Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) uote Table(254) Control List(255) tt Ring Mode (257)	ttributes(177)					
Timers(180-182,186) Indication(183) tess Authorization Veb Authorization butes(195) ttribute(196) Attribute(197) t Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) outer Table(254) Control List(255) tt Ring Mode (257)	Date & Time(178)					
Indication(183) ess Authorization Veb Authorization butes(195) ttribute(196) Attributes(250) Call Routing(251) Rerouting(251) Attributes(253) ute Table(254) Control List(255) tt Ring Mode (257)	vlulti Language(179)					
ess Authorization /eb Authorization butes(195) tribute(196) Attributes(250) Attributes(250) Attributes(251) Attributes(253) ute Table(254) bontrol List(255) t Ring Mode (257)	imers(180~182,186)					
Veb Authorization bbutes(195) ttribute(196) Attribute(197) x Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) outer Table(254) Control List(255) tt Ring Mode (257)	Indication(183)					
butes(195) ttribute(196) Attribute(197) (Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) outer Table(254) Control List(255) tt Ring Mode (257)	ess Authorization					
ttribute(196) Attribute(197) (Attribute(250) Call Routing(251) Rerouting(252) Attributes(253) oute Table(254) Control List(255) tt Ring Mode (257)	Web Authorization					
Attribute(197) Attributes(250) Call Routing(251) Rerouting(252) Attributes(253) uite Table(254) Control List(255) it Ring Mode (257)	butes(195)					
Attributes(250) all Routing(251) all Routing(252) all Attributes(253) all ite Table(254) antrol List(255) Ring Mode (257) all	ribute(196)					
all Routing(251) lerouting(252) Attributes(253) ute Table(254) ontrol List(255) Ring Mode (257)	(ttribute(197)					
erouting(252) ttributes(253) te Table(254) ntrol List(255) Ring Mode (257)	ttributes(250)					
ttributes(253) te Table(254) ntrol List(255) Ring Mode (257)	II Routing(251)					
Ite Table(254) ontrol List(255) Ring Mode (257)	erouting(252)					
Control List(255) t Ring Mode (257)	Attributes(253)					
t Ring Mode (257)	ute Table(254)					
	ontrol List(255)					
	nt Ring Mode (257)					
speed Dial	Speed Dial					
Messages	Messages					

Figure 6.5.36-1 PPTP Attributes

When required, the system supports Point to Point Tunneling Protocol (PPTP). PPTP must be enabled, values for the PPTP server IP address, Id and password must be entered, and a server name may be entered.

6.6 Station Group Data

Selecting the Station Group Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

	PGM Base Function Base	< Favorite PGM			×
	Q PGM Search				Edit
	System ID & Numbering Plans	System IP Plan(102) System ID & Numbering	Device IP Plan(103) System ID & Numbering	Common Attributes(111) Station Data	Flexible Buttons(115/1 Station Data
	Station Data				
	Board Based Data	Common Attributes(140) CO Line Data	CO/IP Ring Assignme CO Line Data	CID/CPN Attributes(151) CO Line Data	System Attributes(160 System Data
	CO Line Data				
	System Data	System Password(162) System Data	Station Group Assign Station Group Data	Station Group Attribut Station Group Data	Station Authorization Tables Data
	Station Group Data V				
*	Station Group Overview Station Group Assignment(190) Station Group Attributes(191) Pick-Up Group Overview Pick-Up Group(192) Personal Group(260) Personal Group(260)	System Authorization Tables Data	Flexible DID Conversi Tables Data		
	ISDN Line Data				
	SIP Data				
	Tables Data				
	Networking Data				

Figure 6.6-1 Station Group Data

Stations can be grouped so that incoming calls will search (Station) for an idle station in the group. The system allows assignment of three Station processes, Circular, Terminal and ACD. In addition, there are eight (8) functional groups available: ACD (Automatic Call Distribution) based on ACD, Ring, Call Pick-Up, external Voice Mail (SLT or SIP), VSF-Voice Mail, iPECS Feature Server (UMS-VM), Network Voice Mail, and UCS Groups.

Certain types of groups can incorporate announcements, which are given to the calling party. The system's VSF can store up to two hundreds (200) announcements for use with Station Groups.

Note that a station can belong to multiple groups if the groups are all of the same type. Also note that when a station group is assigned to a group type (Circular, Terminal, ACD, VM, FS VM, VSF-VM, Net VM, UCS and Ring), the group attributes are initialized to the default values.

6.6.1 Station Group Overview

Selecting the Station Group Overview item will return the Station Group Overview page. This page displays the Station Group attributes (type, pick-up attribute and member stations) for all the Station Groups. Note that data cannot be entered on this page.

GM Base Function Base	e < Favorite PGM	Static	on Group X	
GM Search	O Group Number <u>↓</u> ^a	Type <u>↓</u> a	Pickup Attribute Member Li	ist Group Name
	*401	Circular	OFF	Go to Assignment
em ID & Numbering Plans	*402	ACD	OFF	Go to Assignment
on Data	*403	Ring	OFF	Go to Assignment
d Based Data	*404	Voice Mail	OFF	Go to Assignment
D	*405	Pick-Up	ON	Go to Assignment
ne Data	*406	VSF-VM	OFF	Go to Assignment
em Data	*407	UMS-VM	OFF	Go to Assignment
on Group Data	× ^{*408}	UCS	OFF	Go to Assignment
	*409	N/A	OFF	Go to Assignment
tion Group Overview	*410	N/A	OFF	Go to Assignment
ion Group Assignment(190) ion Group Attributes(191)	*411	N/A	OFF	Go to Assignment
-Up Group Overview	*412	N/A	OFF	Go to Assignment
Up Group(192)	*413	N/A	OFF	Go to Assignment
nal Group Overview	*414	N/A	OFF	Go to Assignment
onal Group(260)	*415	N/A	OFF	Go to Assignment
onal Group Attributes(261)	*416	N/A	OFF	Go to Assignment
ine Data	*417	N/A	OFF	Go to Assignment
ta	*418	N/A	OFF	Go to Assignment
ltd	*419	N/A	OFF	Go to Assignment
Data	*420	N/A	OFF	Go to Assignment
king Data	*421	N/A	OFF	Go to Assignment
outing Table	*422	N/A	OFF	Go to Assignment
	*423	N/A	OFF	Go to Assignment
Data	*424	N/A	OFF	Go to Assignment
ata	*425	N/A	OFF	Go to Assignment
e Login	*426	N/A	OFF	Go to Assignment

Figure 6.6.1-1 Station Group Overview

Г

6.6.2 Station Group Assignment - PGM 190

Selecting Station Group Assignment will display the Station Group data entry page. Enter the desired Station Group number and click **[Load]** to display the Group Assignment.

PGM Base Function Base	< Favorite PGM Station Group 🗙	×
Q PGM Search O	Enter Group Number : Load	
System ID & Numbering Plans	Group Number *401	
Station Data		
Board Based Data	Pick-up Attribute : OFF ▼ Save Group Type Go to Attributes	
CO Line Data	Add/Delete Group Member	
Custom Data	Station Range - Add O Del S	ave
System Data	Add Station Number +	Save
Station Group Data 🗸	Unselect All Station Number	
Station Group Overview	Save / Delete	
Station Group Assignment(190)		
Station Group Attributes(191)		
Pick-Up Group Overview		
Pick-Up Group(192)		
Personal Group Overview		
Personal Group(260)		
Personal Group Attributes(261)		

Figure 6.6.2-1 Station Group Assignments

Under Station Group Assignments the type, members and Pick-Up attributes are assigned to the Station Group. Note for the Net VM group, the network number must be assigned as the Net VM group member station.

ATTRIBUTE	- DESCRIPTION	RANGE	DEFAULT
Group Type	Defines the type of Station group	N/A, Circular, Terminal, ACD, Ring, Voice Mail, Pick-Up, VSF-VM, UMS VM, NET VM, UCS	N/A
Pick-up Attribute	Stations can pick-up group calls ringing at other stations in the group. This does not apply to the VM groups.	OFF ON	OFF
Member	Assigns stations as members of a station group or, for the Net VM group type, defines the Net Number of the group.		-

Table 6.6.2-1 STATION GROUP ASSIGNMENT

6.6.3 Station Group Attributes - PGM 191

Selecting Station Group Attributes will display the Station Group Attributes data entry page. Enter the Station Group number and click **[Load]**, the Web page for the selected group will be displayed as in Figure 6.6.3-1 to Figure 6.6.3-8 based on the Group type.

Each type of group has a different set of available attributes relating to announcements, timers, overflow, etc. Table 6.6.3-1 through Table 6.6.3-8 provides descriptions for the attributes and data entries required. Note that the attributes for the Circular and Terminal Station groups are given in Table 6.6.3-1 and the ACD attributes include the ACD functions Table 6.6.3-2.

PGM Base Function Base	<	Favorite PGM Station Gro	up Attri <mark>×</mark>		
PGM Search O	Enter	Group Number :	Load		Save
System ID & Numbering Plans		Number *401 Type : Circular			
Station Data		p Attribute : OFF			
Board Based Data	Order	Attribute		Value	Range
	1	VSF Announce 1 Timer	15		000 - 999 (sec)
CO Line Data	2	Guar-Annc (Timer 0) Wait If Busy	ON T		
System Data	3	VSF Announce 2 Timer	0		000 - 999 (sec)
Otation Occurs Data	4	VSF Announce 1 Location	0		0 - 200 (0 : Unused)
Station Group Data V	5	VSF Announce 1 Auto Drop			
Station Group Overview	6	VSF Announce 2 Location	0		0 - 200 (0 : Unused)
Station Group Assignment(190)	7	VSF Announce 2 Auto Drop			
Station Group Attributes(191)	8	VSF Announce 2 Repeat Timer	0		000 - 999 (sec)
Pick-Up Group Overview	9	VSF Announce 2 Repeat	OFF V		
Pick-Up Group(192)			STA/NET or Station Group		Station or Group Number
Personal Group Overview	10	Overflow Destination	VSF Announcement 0	Auto Di	rop 🔲 1 - 200
Personal Group(260)			System Speed		System Speed
Personal Group Attributes(261)	11	Overflow Timer	180		000 - 600 (sec)
ISDN Line Data	12	Wrap-Up Timer	2		000 - 999 (sec)
	13	No Answer Timer	15		00 - 99 (sec)
SIP Data	14	Pilot Station Group	ON V		00 33 (300)
Tables Data	15	Report No Member	OFF T		
	16	Music Source	Internal/External Music 1	7	
Networking Data	17	Allow Member Forward	ON T		OFF : Ignore Forward
H.323 Routing Table	18	Mailbox Message Wait Station			Station Number
-	19	Mailbox Password			Max 12 Digits
T-NET Data			STA/NET or Station Group		Station or Group Number
Zone Data	20	Forced Forward Destination	VSF Announcement 0		1 - 200
Device Login	-		System Speed		System Speed

Figure 6.6.3-1 Terminal & Circular Group Attributes

Table 6.6.3-1	TERMINAL	& CIRCULAR	ATTRIBUTES
		C OILOULAI	ATTRIBUTED

ATTRIBUTE	- DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the Station process (guaranteed announcement).	000~999 (seconds)	15

ATTRIBUTE	- DESCRIPTION	RANGE	DEFAULT
Guard-Annc(Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement (OFF).	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the caller receives the assigned 2nd VSF announcement.	000~999 (seconds)	0
VSF Announce 1 Location	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is the VSF Announcement number. An entry of 00 indicates no announcement.	00~200	0: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Station & Station Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is the VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement.	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to callers that remain in queue at intervals of the Announcement 2 Repeat Timer. Note VSF Announce 2 Repeat below must be "ON".	000~999 (seconds)	0
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announce 2 Repeat Timer interval, defined above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned overflow destination. If VSF Announcement is selected, Auto Drop can be checked.	STA/NET or Station Group/ VSF Announcement/ Auto Drop/ System SPD	
Overflow Timer	A call to the group remains at the last station in the group or can be sent to the assigned Overflow Destination after expiration of the Overflow Timer.	000~600 (seconds)	180
Wrap-Up Timer	After terminating a group call, a Group member will be maintained in a busy state for the duration of the Wrap- Up timer.	000~999 (seconds)	2
No Answer Timer	Calls to a station in the group are directed to the station, if unavailable or unanswered in the No Answer Timer, the call can be routed based on the assigned Station process.	00~99 (seconds)	15
Pilot Station	A circular/terminal Station group can be set so that only calls to the pilot number (Station Group number) will hunt.	OFF ON	ON

Table 6.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	- DESCRIPTION	RANGE	DEFAULT
Report No Member	If a call is received and no members are on-duty, an ICM call will return re-order tone, while a CO/IP call will route to the overflow destination.	OFF ON	OFF
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone.	Ring back tone, Internal/External Music 1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Internal/Exter nal Music 1
Allow Member Forward	A member activating Call forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal (OFF).	OFF ON	ON
Mailbox Message Wait Station	When a call overflows or routes to the VM group, a station number is used to identify the Mailbox for the group messages.	Station Number	
Mailbox Password	The password associated with a group Mailbox is defined here. The password is used in conjunction with the group Mailbox as with a normal station.	Max. 12 digits	
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the Station process. "Forced Forward", below, must be enabled.	STA./NET or Station group/ VSF Announcement/ Sys. Speed	
Forced Forward Destination Usage	When Forced Forward is enabled for the group, calls to the group forward directly to a defined destination, see above "Forced Forward Destination".	OFF ON	OFF
Group Name	A name can be designated for the group.	Max. 12 characters	
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls receive error tone and disconnect after the VSF Announcement 1, if assigned, is played.	00-99	99

Table 6.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

PGM Base Function Base	<	Favorite PGM Station Grou	up Attri X	
PGM Search	C Enter	Group Number :	Load	Save
System ID & Numbering Plans	Group	Number *402 Type : ACD		
Station Data	Pick-	up Attribute : OFF		
Board Based Data	Orde	r Attribute	Value	Range
CO Line Data	1	VSF Announce 1 Timer	15	000 - 999 (sec)
CO Line Data	2	Guar-Annc (Timer 0) Wait If Busy	ON V	
System Data	3	VSF Announce 2 Timer	0	000 - 999 (sec)
Station Group Data	× 4	VSF Announce 1 Location	0	0 - 200 (0 : Unused)
Station Group Data	5	VSF Announce 1 Auto Drop		
Station Group Overview	6	VSF Announce 2 Location	0	0 - 200 (0 : Unused)
Station Group Assignment(190)	7	VSF Announce 2 Auto Drop		
Station Group Attributes(191)	8	VSF Announce 2 Repeat Timer	0	000 - 999 (sec)
Pick-Up Group Overview	9	VSF Announce 2 Repeat	OFF V	
Pick-Up Group(192)			STA/NET or Station Group	Station or Group Number
Personal Group Overview	10	Overflow Destination	VSF Announcement 0 0 Auto Drop	1 - 200
Personal Group(260)			System Speed	System Speed
Personal Group Attributes(261)	11	Overflow Timer	180	000 - 600 (sec)
ISDN Line Data	12	Wrap-Up Timer	2	000 - 999 (sec)
	13	No Answer Timer	0	00 - 99 (sec)
SIP Data	13	Report No Member	OFF V	00 - 55 (360)
Tables Data	15	Music Source	Internal/External Music 1	
	16	ACD Warning Tone		
Networking Data		, too training tone	STA/NET or Station Group	Station or Group Number
H.323 Routing Table	17	Alternate Destination	SYS SPD	System Speed
T-NET Data	18	Supervisor Timer	30	000 - 999 (sec)
	19	Supervisor Call Count	0	00 - 99
Zone Data	20	Max Queued Call Counter	99	00 - 99
Device Login	• 21	Supervisor 1		Station Number

Figure 6.6.3-2 ACD Group Attributes

Table 6.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the Station process (guaranteed announcement).	000~999 (seconds)	15
Guard-Annc (Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement. (OFF)	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, a 2nd timer is activated. At expiration, if the call remains queued to the group, the caller receives the assigned 2nd VSF announcement.	000~999 (seconds)	0
VSF Announce 1 Location	Each Station & Station Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration.	000~200	0: none

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	The announcement location is a VSF announcement		
	number. An entry of 00 indicates no announcement.		
VSF Announce 1	If this attribute is selected, the call will drop after the 1st		
Auto Drop	VSF announcement		
VSF Announce 2 Location	The Station & Station Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF announcement number. An entry of 00 indicates no announcement.	000~200	0: none
VSF Announce 2	If this attribute is selected, the call will drop after the 2nd		
Auto Drop	VSF announcement		
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in queue at intervals of the VSF Announce 2 Repeat Timer. Note repeating must be "ON" under VSF Announce 2 Repeat below.	000~999 (seconds)	0
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce 2 Repeat Timer interval.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will queue to the group or route to the assigned Overflow Destination. If VSF Announce is assigned, Auto Drop is available.	STA/NET or Station Group/ VSF Announcement/ Auto Drop/ System SPD	
Overflow Timer	A call to a group remains queued to the group or is sent to the assigned Overflow Destination after expiration of the Overflow Timer	000~600 (seconds)	180
Wrap-Up Timer	After terminating a group call, a Station Group member will be maintained in a busy state for the duration of the Wrap-Up timer.	000~999 (seconds)	2
ACD No Answer Timer	Calls to an agent in the group are directed to the station, if unanswered in the NO ANSWER TIMER, the call can be routed to another agent.	00-99 (seconds)	0
Report No Member	If a call is received and no members are on-duty, an ICM call will return re-order tone, while a CO/IP call routes to the overflow destination.	OFF ON	OFF
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone while in queue.	Ring back tone, Internal/External Music 1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Internal/Exter nal Music 1
ACD Warning Tone	An ACD supervisor can monitor agent conversations. A warning tone can be provided to the agent and connected party when the supervisor activates the monitor feature.	OFF ON	OFF
Alternate Destination	When a call comes into the group and there are no group members available, the call will be routed to the	STA, NET, Station, System Speed	

Table 6.6.3-2 ACI	GROUP	ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	assigned Alternate Destination.		
Supervisor Timer	When calls have been in queue longer than the Supervisor Timer, the ACD supervisor is notified by a display of the longest queue time.	000~999 (seconds)	30
Supervisor Call Count	When the number of calls in queue exceeds the Supervisor Call Count, the ACD Supervisor is notified by a display of queued calls.	00~99	0
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls receive error tone and disconnect after the VSF Announcement 1, if assigned, is played.	00-99	99
Supervisor 1 to 5	Any valid iPECS IP or LDP Phone with display can be assigned as a Supervisor, max. 5 ACD Supervisors.	Station Number	
ACD DND	This parameter sets the duration a station will receive ring before the system places the station in ACD DND and unavailable for group calls. A setting of '00' disables automatic ACD DND.	002~200 (Sec.)	10
Entered Caller ID ICLID Usage	Within 5 seconds of a guaranteed announcement, the caller may dial digits as an ICLID. The user-dialed digits are compared to the ICLID Table entries, for routing or, for a single dialed digit, to the ACD CCR table below.	OFF ON	OFF
Allow Member Forward	A member activating Call Forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal.	OFF ON	ON
Group Name	An ACD group name can be designated.	Max. 12 characters	
CIQ Route 1			Not selected
CIQ Route 2	When an ACD call is queued, the caller may be allowed		Not selected
CIQ Route 3	to dial a digit to exit the queue and route to another destination. The alternate destination is based on the		Not selected
CIQ Route 4	user-dialed digit and can be a station, Station group,		Not selected
CIQ Route 5	system-speed bin, or network station. Dial the digit		Not selected
CIQ Route 6	below for the type of destination and enter the value		Not selected
CIQ Route 7	associated with the destination. 1: Enter a station number.		Not selected
CIQ Route 8	2: Enter a Station group number.		Not selected
CIQ Route 9	3: Enter a system speed bin.		Not selected
	4: Enter a network station number		
CIQ Route 0		055	Not selected
ZAP Tone	Agents using a headset can have ACD calls connected to them automatically preceded by a tone (Zap tone).	OFF ON	OFF
CIQ Announcement	If enabled, queued callers receive the CIQ message (You are # in queue) after the 1 st and 2 nd announcement.	OFF ON	OFF
Mailbox Message Wait Station	When an ACD call overflows or routes to the VM group, a station number is used to identify the Mailbox for the ACD group messages.	Station Number	
Mailbox Password	The password associated with an ACD group Mailbox is	Max. 12 digits	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	defined here. The password is used in conjunction with the ACD group Mailbox as with a normal station.		
CIQ Display To Agent - Mode	When an ACD call is in queue, the Call in queue information is displayed in the LCD of agent and supervisor phones.	OFF ON	OFF
CIQ #1 Page Alert - Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #1 Announcement to the CIQ #1 Page Zone after the CIQ #1 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #1 Announcement Repeat Timer.	00-99	10
CIQ #1 Page Alert – Announcement Location	VSF announcement number for the CIQ #1 Announcement.	000~200	0
CIQ #1 Page Alert – Page Zone	Page Zone to receive CIQ #1 Announcement	0~105	0
CIQ #1 Page Alert - Delay Time	Delay timer for CIQ #1 Announcement	000-180	15
CIQ #1 Page Alert - Repeat Time	Interval for repeating the CIQ #1 Announcement	000-180	45
CIQ #2 Page Alert - Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #2 Announcement to the CIQ #2 Page Zone after the CIQ #2 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #2 Announcement Repeat Timer.	00-99	20
CIQ #2 Page Alert - Announcement Location	VSF announcement number for the CIQ #2 Announcement.	000~200	0
CIQ #2 Page Alert – Page Zone	Page Zone to receive CIQ #2 Announcement	0~105	0
CIQ #2 Page Alert - Delay Time	Delay timer for CIQ #2 Announcement	000-180	15
CIQ #2 Page Alert - Repeat Time	Interval for repeating the CIQ #2 Announcement	000-180	25
CIQ #3 Page Alert - Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #3 Announcement to the CIQ #3 Page Zone after the CIQ #3 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #3 Announcement Repeat Timer.	00-99	30
CIQ #3 Page Alert - Announcement Location	VSF announcement number for the CIQ #3 Announcement.	000~200	0
CIQ #3 Page Alert - Page Zone	Page Zone to receive the CIQ #3 Announcement	00~15 or 00-40	0
CIQ #3 Page Alert - Delay Time	Delay timer for the CIQ #3 Announcement	000-180	15
CIQ #3 Page Alert - Repeat Time	Interval for repeating the CIQ #3 Announcement	000-180	5

Table 6.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the Station process. "Forced Forward", below, must be enabled.	STA./NET or Station group, VSF Announcement, Sys. Speed	
Forced Forward Dest Usage	When Forced Forward is enabled for the group, calls to a Station group forward directly to a defined destination, see above "Forced Forward Destination".	OFF ON	OFF
Auto Ring Mode	Normally, an ACD call will be routed to the longest idle group member. If desired, the call may be routed using the timing in the assigned Auto Ring Mode Table and the Day, Night, and Timed mode destinations entered below. If Manual Change is selected, the Group supervisor may select the active Ring mode manually.	Manual Change Table 0 ~ 100	Manual Change
Day Destination	When the ACD Ring Mode Table schedule is in the Day mode, ACD group calls route to the destination defined here.	Normal Service, STA/NET or Station group, VSF Announcement, Sys. Speed	Normal Service
Night Destination	When the ACD Ring Mode Table schedule is in the Night mode, ACD group calls route to the destination defined here.	Normal Service, STA/NET or Station group, VSF Announcement, Sys. Speed	Normal Service
Timed Destination	When the ACD Ring Mode Table schedule is in the Timed mode, ACD group calls route to the destination defined here.	Normal Service, STA/NET or Station group, VSF Announcement, Sys. Speed	Normal Service
ACD Group Queuing Call Indication	If there are queued group calls, the queuing indication can be served to group members by Mute Ring and LED button flashing.	OFF ON (RING and LED) ON (LED only)	OFF

Table 6.6.3-2 ACD GROUP ATTRIBUTES

PGM Base Function Base	<	Favorite PGM Station Gro	oup Attri ×		
PGM Search	Enter G	iroup Number :	Load		Save
ystem ID & Numbering Plans		Number *403 Гуре : Ring			
tation Data	Pick-up	Attribute : OFF			
oard Based Data	Order	Attribute	١	/alue	Range
O Line Data	1	VSF Announce 1 Timer	15		000 - 999 (sec)
U Line Data	2	Guar-Annc (Timer 0) Wait If Busy	ON T		
ystem Data	3	VSF Announce 2 Timer	0		000 - 999 (sec)
tation Group Data V	4	VSF Announce 1 Location	0		0 - 200 (0 : Unused)
	5	VSF Announce 1 Auto Drop			
Station Group Overview	6	VSF Announce 2 Location	0		0 - 200 (0 : Unused)
Station Group Assignment(190)	7	VSF Announce 2 Auto Drop			
Station Group Attributes(191)	8	VSF Announce 2 Repeat Timer	0		000 - 999 (sec)
Pick-Up Group Overview	9	VSF Announce 2 Repeat	OFF T		
Pick-Up Group(192)			STA/NET or Station Group		Station or Group Number
Personal Group Overview	10	Overflow Destination	VSF Announcement 0	Auto Drop 🗆	1 - 200
Personal Group(260)			System Speed		System Speed
Personal Group Attributes(261)	11	Overflow Timer	180		000 - 600 (sec)
DN Line Data	12	Wrap-Up Timer	2		000 - 999 (sec)
	13	Music Source	Internal/External Music 1 T		,
P Data	14	Max Queued Call Counter	99		00 - 99
ables Data	15	Allow Member Forward	ON T		OFF : Ignore Forward
	16	Group Name			Max 12 Characters
etworking Data	17	Mailbox Message Wait Station			Station Number
323 Routing Table	18	Mailbox Password			Max 12 Digits
NET Data			STA/NET or Station Group		Station or Group Number
	19	Forced Forward Destination	VSF Announcement 0		1 - 200
one Data			System Speed		System Speed

Figure 6.6.3-3 Ring Group Attributes

Table 6.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the Station process (guaranteed announcement).	000~999 (seconds)	15
Guar-Ann(Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement. (OFF)	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, a 2nd announcement Timer is activated. At expiration, if the call remains queued to the group, the caller receives the assigned 2nd VSF announcement.	000~999 (seconds)	0
VSF Announce 1 Location	Each Ring Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is	000~200	0: none

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	a VSF Announcement number. An entry of 00 indicates no announcement.		
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Ring Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	000~200	0: none
VSF announce Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in queue at intervals of the VSF Announce 2 Repeat Timer. Note VSF Announce 2 Repeat below must be "ON".	000~999 (seconds)	0
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce 2 Repeat Timer interval, defined above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to ring group member stations until answered. The call will remain at the last station or routes to the assigned Overflow Destination. If VSF Announce is assigned, Auto Drop is available.	STA/NET or Station Group, VSF Announcement, Auto Drop, System SPD	
Overflow Timer	A call to a group remains in the group or routes to the assigned Overflow Destination after expiration of the Overflow Timer.	000~600 (seconds)	180
Wrap-Up Timer	After terminating group call, a Station Group member will be maintained in a busy state for the duration of the Wrap- Up Timer.	000~999 (seconds)	2
Music Source	A Music source can be assigned so that calls to the group receive audio from the assigned source in place of ring- back tone.	Ring back tone, Internal/External Music 1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Internal/Ext ernal Music 1
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls receive error tone and disconnect after the VSF AA announcement, if assigned, is played.	00-99	99
Allow Forward Member	A member activating Call Forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal.	OFF ON	ON
Group name	A group name can be designated.	Max.12 characters	
Mailbox Message Wait Station	When a call overflows or routes to the VM group, a station number is used to identify the Mailbox for the group messages.	Station Number	
Mailbox Password	The password associated with the group Mailbox is defined here. The password is used in conjunction with the	Max. 12 digits	

Table 6.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	group Mailbox as with a normal station.		
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the Station process. "Forced Forward", below, must be enabled.	STA/NET or Station group, VSF Announcement, Sys. Speed	
Forced Forward Usage	When Forced Forward is enabled for the group, calls to a Station group forward directly to a defined destination, see above "Forced Forward Destination".	OFF ON	OFF
Ring group indication	When a station calls a Ring Group, DSS/BLF buttons assigned for the calling station will flash and muted ring is received.	OFF, Mute, Burst	Mute

Table 6.6.3-3 RING GROUP ATTRIBUTES

	PGM Base Function Base	Enter G	Group Number :	n Group Attri <mark>×</mark> C	ad			× × Save
	System ID & Numbering Plans		Number *404 Type : Voice Mail					
	Station Data	Pick-up	Attribute : OFF					
	Board Based Data	Order	Attribute		Value		Range	
	CO Line Data	1	Wrap-Up Timer	2			000 - 999 (sec)	
	CO Line Data	2	Put Mail Index	1 🔻				
	System Data	3	Get Mail Index	2 Terminal T				
	Station Group Data V	4	Station Group Type					
		5	Overflow Timer	180		000 - 600 (sec)		
	Station Group Overview		6 Overflow Destination	STA/NET or Station	n Group 🔍		Station or Group Number	
	Station Group Assignment(190)	6		VSF Announcemer	it 🔍 🖸	Auto Drop 🗆	1 - 200	
	Station Group Attributes(191)			System Speed			System Speed	
`	Pick-Up Group Overview			STA/NET or Station	n Group		Station or Group Number	
	Pick-Up Group(192)	7	Forced Forward Destination	VSF Announcemer	 t © 0		1 - 200	
Ľ	Personal Group Overview			System Speed			System Speed	
	Personal Group(260)	8	Forced Forward Dest Usage				- ,	
	Personal Group Attributes(261)	9	Group Name	Max 12 Characters			Max 12 Characters	
	ISDN Line Data	10	Server Type				max 12 Onerdetero	
	ISUN LINE Data	11	Server Number	0			0 - 10	
	SIP Data	12	Member Type	SLT TYPE V	Capacity (SIP TYPE Only)		0 - 2400	

Figure 6.6.3-4 External Voice Mail Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Wrap-Up Timer	After terminating a group call, the VM port will be maintained in a busy state for the duration of the Wrap-Up timer allowing the VM time to return the port to idle.	000~900 (seconds)	2

Table 6.6.3-4 EXTERNAL VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Put Mail Index	For external analog Voice Mail groups, an index to the Voice Mail Dial Table that contains the "Put Mail" dial code.	1~4	1
Get Mail Index	For external analog Voice Mail groups, an index to the Voice Mail Dial Table that contains the "Get Mail" dial code.	1~4	2
Station Type	The type of Station process applied to the SLT ports connected to the VM can be assigned as Circular or Terminal.	Terminal Circular	Terminal
Overflow Timer	A call to a group remains at the last station in the group or is sent to the assigned Overflow Destination after expiration of the Overflow Time.	000~600 (seconds)	180
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned Overflow Destination. If assigned VSF Announce, Auto Drop is available.	STA/NET or Station Group, VSF Announcement, Auto Drop, System Speed	-
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the Station process. "Forced Forward", below, must be enabled.	STA/NET or Station group, VSF Announcement, Sys. Speed	
Forced Forward Usage	When Forced Forward is enabled for the group, calls to a Station group forward directly to a defined destination, see above "Forced Forward Destination".	OFF ON	OFF
Group Name	A group name can be designated.	Max. 12 character	
Server type	When a third party SIP server is used for AA/VM, or the IPCR or third party SIP recording server is used, the server type must be selected.	IPCR 3rd party Type	3rd party Type
Server number	Each IPCR and third party SIP server must be assigned a server number from 01 ~ 10 which correlates this group with an Agent table.	0-10	0
Member Type	The External AA/VM employs analog SLT protocols or SIP protocols. The protocol (SLT/SIP) must be configured here, and, for SIP, the number of agents defined (1-2400). A server and member licenses may be required.	0-2400 (SLT or SIP Type)	SLT Type

	PGM Base Function Base	<	Favo	orite PGM Statio	on Group Attri ×	
C	PGM Search		Enter Group	Number :	Loa	ad
			Group Num Group Type			
	Station Data		Pick-up Attr	ibute : ON		
	Board Based Data		Order	Attribute	Value	Range
	CO Line Data		1	Auto Pick-Up	OFF V	
			2	All Ring	OFF V	
	System Data					
	Station Group Data v					
	Station Group Overview					
	Station Group Assignment(190)					
<	Station Group Attributes(191)					
	Pick-Up Group Overview					
	Pick-Up Group(192)					
	Personal Group Overview					
	Personal Group(260)					
	Personal Group Attributes(261)					

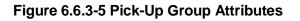


Table 6.6.3-5 PICK-UP GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Pick Up	If a group member is ringing, other members of the Group can Pick-Up the ringing call by simply going "Off-hook".	OFF ON	OFF
All Ring	When a call is offered to a member of the Pick-Up Group in the Tone Ring mode, all members will ring. Note Auto Pickup above must be "ON".	OFF ON	OFF

PGM Base Function Base	<	Favorite PGM	Station Group Attri X	
Q PGM Search O	Enter 0	Group Number :	Load	
System ID & Numbering Plans		Number *406 Type : VSF-VM		
Station Data		Attribute : OFF		
Board Based Data	Order	Attribute	Value	Range
CO Line Bete	1	Retention Time (Day)	0	00 - 99
CO Line Data	2	Dial Time Out (sec)	15	00 - 99
System Data	3	Group Name		Max 12 Characters
Station Group Data ~				
Station Group Overview				
Station Group Assignment(190)				
Station Group Attributes(191)				
Pick-Up Group Overview				
Pick-Up Group(192)				
Personal Group Overview				
Personal Group(260)				
Personal Group Attributes(261)				



Table 6.6.3-6 VSF GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Retention Time (day)	When voice messages are stored in the VSF or UVM, the system will maintain (store) the message for the maximum number of days set in this program (0 to 99 days).	00-99 (day)	0
Dial Time Out (sec)	This timer determines the inter-digit time for a VSF-AA or a VM session. If this timer expires while the VSF AA or VM is awaiting user input, the system will assume the remote party has disconnected and will return the channel to idle.	00-99 (seconds)	15
Group Name	A group name can be designated.	Max. 12 characters	

PGM Base Function Base	<	Favorite PGM Station G	iroup Attri X						
PGM Search O		Number *407			Sa				
System ID & Numbering Plans		Group Type : UMS-VM Pick-up Attribute : OFF							
Station Data	Order	Attribute	Value		Range				
Board Based Data	1	VSF Announce 1 Timer	15		000 - 999 (sec)				
	2	VSF Announce 2 Timer	0		000 - 999 (sec)				
CO Line Data	3	VSF Announce 1 Location	0		0 - 200 (0 : Unused)				
System Data	4	VSF Announce 1 Auto Drop							
station Group Data	5	VSF Announce 2 Location	0		0 - 200 (0 : Unused)				
	6	VSF Announce 2 Auto Drop							
Station Group Overview	7	VSF Announce 2 Repeat Timer	0		000 - 999 (sec)				
Station Group Assignment(190)	8	VSF Announce 2 Repeat	OFF T						
Station Group Attributes(191)		Overflow Destination	STA/NET or Station Group		Station or Group Number				
Pick-Up Group Overview	9		VSF Announcement 0 0	Auto Drop	1 - 200				
Pick-Up Group(192)			System Speed		System Speed				
Personal Group Overview Personal Group(260)	10	Overflow Timer	180		000 - 600 (sec)				
Personal Group Attributes(261)	11	No Answer Timer	15		00 - 99 (sec)				
	12	Pilot Station Group	ON V						
SDN Line Data			STA/NET or Station Group		Station or Group Number				
IP Data	13	Alternate Destination	SYS SPD 0		System Speed				
IF Data	14	Station Group Type	Circular 🔻						
ables Data	15	Wrap-Up Timer	2		000 - 999 (sec)				
etworking Data			STA/NET or Station Group		Station or Group Number				
	16	Forced Forward Destination	VSF Announcement 0		1 - 200				
.323 Routing Table			System Speed		System Speed				
-NET Data	17	Forced Forward Dest Usage	OFF V						
one Data	18	Group Name			Max 12 Characters				

Figure 6.6.3-7 iPECS Feature Server Voice Mail Group (UMS-VM) Attributes

Table 6.6.3-7 FEATURE SERVER VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available FS- VM channel. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the Station process (guaranteed announcement).	000~999 (seconds)	15
VSF Announce 2 Timer	After the 1st announcement, a 2nd Announcement Timer is activated. At expiration, if the call remains queued to the group, the caller receives the assigned VSF Announce 2 Location.	000~999 (seconds)	0
VSF Announce 1 Location	Each group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	000~200	0: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 2 Location	The Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates	000~200	0: none
VSF Announce 2 Auto	no announcement. If this attribute is selected, the call will drop after the 2nd	Check box	
Drop VSF Announce 2 Repeat Timer	VSF announcement. The 2nd announcement can be repeated to calls that remain in queue at intervals of the announcement 2 repeat timer. Note VSF Announce 2 Repeat below must be "ON".	000~999 (seconds)	0
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce Repeat timer interval, above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned Overflow Destination. If assigned VSF Announce, Auto Drop is available.	STA/NET or Station group, VSF Announcement, Auto drop, System Speed	
Overflow Timer	A call to a group remains at the last station in the group or routes to the assigned Overflow Destination after expiration of the Overflow Timer.	000~600 (seconds)	180
No Answer Timer	Calls to a station in the group are directed to the station, if unavailable or unanswered in the No Answer Timer, the call can be routed based on the assigned Station process.	00~99 (seconds)	15
Pilot Station	A FS-VM Station group can be set so that only calls to the pilot number (station group number) will hunt.	OFF ON	ON
Alternate Destination	When a call comes into the group and there are no group members available, the call will route to the assigned Alternate Destination.	STA/NET or Station group, System SPD	
Station type	The Station process for the FS-VM group can be defined as Circular or Terminal.	Circular Terminal	Circular
Wrap-Up Timer	After terminating any call, the FS port will be maintained in a busy state for the duration of the Wrap-Up Timer.	000~999 (seconds)	2
Forced Forward Destination	Calls to a group may forward directly to a defined destination, bypassing the Station process. "Forced Forward", below, must be enabled.	Sta./NET or Station group, VSF announcement, Sys. Speed	
Forced Forward	When Forced Forward is enabled for the group, calls to a Station group forward directly to a defined destination, see above "Forced Forward Destination".	OFF ON	OFF
Group Name	A group name can be designated.	Max. 12 characters	

	PGM Base Function Base		<	Favorite PGM	Sta	tion Group Attri <mark>×</mark>	
	Q PGM Search	0	Enter G	roup Number :		Los	ad
	System ID & Numbering Plans			Number *408 Type : UCS			
	Station Data			Attribute : OFF			
	Board Based Data		Order	Attribute		Value	Range
	CO Line Data		1	UCS Server	1		01 - 16
	System Data						
	Station Group Data	•					
	Station Group Overview						
	Station Group Assignment(190)						
<	Station Group Attributes(191)						
	Pick-Up Group Overview Pick-Up Group(192)						
	Personal Group Overview						
	Personal Group(260)						
	Personal Group Attributes(261)						

Figure 6.6.3-8 iPECS UCS Server Group Attributes

Table 6.6.3-8 UCS GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
UC Server	UCS Server number, this value must be set to 1.	01-16	1

6.6.4 Pick Up Group Overview

Selecting Pick Up Group Overview item will return the Station Pick Up Group Overview page. This page displays the Station Group member stations for all the Station Pick Up Groups. Note that data cannot be entered on this page.

PGM Base Function Base	< Favorite PGM Pic	k-Up Gro ×	
Q PGM Search	Group Number	Member List	
System ID & Numbering Plans	0		
Station Data	2		
Board Based Data	4		
CO Line Data	5		
System Data	7		
Station Group Data ~	8		
Station Group Overview	10 11		
Station Group Assignment(190) Station Group Attributes(191)	12 13		
Pick-Up Group Overview Pick-Up Group(192)	14		
Pick-Op Gloup(192) Personal Group Overview	15		
Personal Group(260)	17		
Personal Group Attributes(261)	18		
ISDN Line Data	19 20		
	21		
SIP Data	22		
Tables Data	23		
Networking Data	24		
Networking Data	25		
T-NET Data	27		
Zone Data	28		
Device Login	29		
	30		
UCS Standard	• 32		

Figure 6.6.4-1 Pick Up Group Overview

6.6.5 Pick Up Group - PGM 192

Selecting Pick Up Group will display the Pick Up Group Assignment entry page. Enter the desired Pick Up Group number and click **[Load]** to display the group member Assignment.

	PGM Base Function Base	<	Favorite PGM	Pick-Up Gro ×	×
	Q PGM Search		Enter Group Number (0	0 - 199) : Load	
	System ID & Numbering Plans		Group Number 1		
	Station Data			Add/Delete Group Member	
	Board Based Data		Station Range	- Add O Del Save	
			Add Station Number	+ Save	
	CO Line Data		Unselect All	Station Number	
	System Data			Save / Delete	
	Station Group Data V				
	Station Group Overview				
	Station Group Assignment(190)				
	Station Group Attributes(191)				
<	Pick-Up Group Overview				
	Pick-Up Group(192)				
	Personal Group Overview				
	Personal Group(260)				
	Personal Group Attributes(261)				

Figure 6.6.5-1 Pick Up Group

Table 6.6.5-1 PICK UP GROUP

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Member	Assign stations as members of the Pick-Up group.		

6.6.6 Personal Group Overview

Selecting Personal Group Overview displays the master station and member list for all the personal groups.

PGM Base Function Ba	se 🗸	Favorite	PGM	Personal Group .	×
PGM Search	Θ	Group Numb	er Master Stat	tion Member List	
System ID & Numbering Plans		1	1011	1012(0)	Go to Assignment
System ID & Numbering Plans	_	2			Go to Assignment
Station Data		3			Go to Assignment
Board Based Data		4			Go to Assignment
CO Line Data		5			Go to Assignment
CO Lifie Data	_	6			Go to Assignment
System Data		7			Go to Assignment
Station Group Data	~	8			Go to Assignment
	_	9			Go to Assignment
Station Group Overview		10			Go to Assignment
Station Group Assignment(190) Station Group Attributes(191)		11			Go to Assignment
Pick-Up Group Overview		12			Go to Assignment
Pick-Up Group(192)		13			Go to Assignment
Personal Group Overview		14			Go to Assignment
Personal Group(260)		15			Go to Assignment
Personal Group Attributes(261)		16			Go to Assignment
ISDN Line Data		17			Go to Assignment
	_	18			Go to Assignment
SIP Data		19			Go to Assignment
Tables Data		20			Go to Assignment
Networking Data		21			Go to Assignment
-		22			Go to Assignment
H.323 Routing Table		23			Go to Assignment
T-NET Data		24			Go to Assignment
Zone Data		25			Go to Assignment
Device Login	-	26			Go to Assignment

Figure 6.6.6-1 Personal Group Overview

Clicking [Go to Assignment] goes to move Personal group (260) for assigning Group master & member and setting Personal group attributes.

6.6.7 Personal Group - PGM 260

Selecting Personal Group will display the Personal Group entry page. Enter a valid Personal Group number and click **[Load]** to enter group data.

	PGM Base Function Base	< Favorite PGM	Personal Group(2 <mark>×</mark>	×
	Q PGM Search O	Enter Personal Group N	Number (1 - 1200) : Load	
	System ID & Numbering Plans	Personal Group Numbe	r 1	
	Station Data	Master Station : 1011	Save Go to Attributes	
	Board Based Data		Add/Delete Group Member	
		Station Range	- Add O Del	Save
	CO Line Data	Add Station Number	+	Save
	System Data	Select All	Station Number	Dly
	Station Group Data V		Save / Delete	
*	Station Group Overview Station Group Assignment(190) Station Group Attributes(191) Pick-Up Group Overview Pick-Up Group(192) Personal Group Overview Personal Group(260) Personal Group Attributes(261)		1012	0

Figure 6.6.6-1 Personal Group

Several stations can share same station number. That means Personal Group is extended feature of Linked Pair.

A Personal Group is composed with a master station and several member stations.

A master station and all member stations share master station's number.

In case of Member station, each member station can be set the delay (Dly) time.

By using this shared number, almost features (Call To xxx / Call From xxx / SMDR / Message Wait...) can be activated.

But, some features can be chosen by PGM 261 attribute about all station activating or individual station working.

In PGM 260, Personal group master and member can be assigned.

In PGM 261, Personal group attribute can be set.

6.6.8 Personal Group Attribute - PGM 261

Selecting Personal Group Attribute will display the Personal Group Attribute entry page. Enter a valid Personal Group number and click **[Load]** to enter the group data.

PGM Base Function Base	< Favor	ite PGM Per	sonal Gro X	
Q PGM Search	Enter Pers	onal Group Number	(1 - 1200) : Load	Sav
System ID & Numbering Plans	Personal G	roup Number 1		
	Order <u>↓</u> a	Attribute	Value	
Station Data	1	Wake-Up	Individual 🔻	
Board Based Data	2	Call-Forward	Overall 🔻	
	3	Do-Not-Disturb	Individual 🔻	
CO Line Data	4	Linked Pair Mode	OFF (Cover Ring)	
System Data				
Station Group Data ~				
Station Group Overview				
Station Group Assignment(190)				
Station Group Attributes(191)				
Pick-Up Group Overview				
Pick-Up Group(192)				
Personal Group Overview				
Personal Group(260)				
Personal Group Attributes(261)				



ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT						
Wake-Up	Wake-up Alarms set by the Master station can also notify the linked stations using the "Overall" setting. With the "Individual" setting each station receives Wake-up alarms only if set by the station.	Individual/ Overall	Overall						
Call-Forward	When the Master station activates Call Forward, calls to members also forward using the "Overall" setting. With the "Individual" setting each station controls call forward only for that station.	Individual Overall	Overall						
Do-Not Disturb	The Master station can activate DND for all stations when this field is set to "Overall". DND is controlled by the each station separately when the "Individual" setting is selected.	Individual/ Overall	Overall						
Linked Pair Mode	The member stations can be linked so all members reflect a single status, when one is busy they are all busy (ON), or stations reflect their own status (OFF).	OFF(Cover Ring)/ ON(Cover Ring and State Sync.)	OFF(Cover Ring)						

Table 6.6.7-1 PERSONAL GROUP ATTRIBUTES

6.7 ISDN Line & ICLID Routing Data

Selecting the ISDN Line Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

PGM Base Function Base	< Favorite PGM			×
Q PGM Search				Edit
System ID & Numbering Plans	System IP Plan(102) System ID & Numberi	Device IP Plan(103) System ID & Numberi	Common Attributes(Station Data	Flexible Buttons(115 Station Data
Station Data	System ib a Number	System ib & Number	Station Data	Station Data
Board Based Data	Common Attributes(CO Line Data	CO/IP Ring Assignm CO Line Data	CID/CPN Attributes(1 CO Line Data	System Attributes(16 System Data
CO Line Data				
System Data	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attrib Station Group Data	Station Authorizatio Tables Data
Station Group Data				
ISDN Line Data V	System Authorizatio Tables Data	Flexible DID Conver Tables Data		
ISDN Attributes(200)				
< CLIP/COLP Table(201) MSN Table(202)				
ICLID Route Table(203)				
ICLID Ring Assignment(204)				
PPP Attributes(205)				
Prefix Dialing Table(206)				

Figure 6.7-1 ISDN Line Data

Each ISDN (Integrated Services Digital Network) Line provides digital services to the end-user. Basic Rate Lines have three (3) channels, 2 B channels and a D channel. The 2 B channels provide 64 Kbps each, a total of 128 Kbps for "Bearer" or voice channels. The D channel provides a 16 Kbps signaling channel. Primary Rate Lines have 23 or 30 64 Kbps 'B' channels and 1 or 2 64 Kbps signaling channels. The 23B + D PRI complies with North American standards and the 30B + 2D complies with ETSI standards. For proper operation, entries are required for various attributes and Tables to match the ISDN circuit and services.

6.7.1 ISDN Attributes - PGM 200

Selecting ISDN Attributes will display the ISDN Attributes data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base		< Favor	rite PGM ISDN	l Attribut	×
Q PGM Search	2				
System ID & Numbering Plans	1	Order $\underline{1}^a$	Attribute	Value	Range
Station Data		1	CO ATD Code CLI Print To Serial		Max 2 Digits
Board Based Data	-	3	Display DID Info	OFF T	
CO Line Data					
System Data	1				
Station Group Data					
ISDN Line Data					
ISDN Attributes(200)					
CLIP/COLP Table(201)					
MSN Table(202)					
ICLID Route Table(203)					
ICLID Ring Assignment(204)					
PPP Attributes(205)					
Prefix Dialing Table(206)					

Figure 6.7.1-1 ISDN Attributes

ISDN attributes define several characteristics of the ISDN interface as shown in the following table.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO ATD Code	When the system is configured to send the station number with ISDN CLIP or COLP, either the station number or this ATD code is sent based on Station Data Common Attributes in section 6.2.2, EXT or ATD assignment.	Max.2 Digits	
CLI Print To Serial	The ISDN Calling Line Id may be included in call records, refer to SMDR Attributes section 6.5.17.	OFF ON	OFF
Display DID Information	The received DID digits can be shown in the iPECS IP or LDP Phone LCD and output to the defined SMDR port.	OFF ON	OFF

Table 6.7.1-1 ISDN ATTRIBUTES

6.7.2 CLIP/COLP Table - PGM 201

Selecting CLIP/COLP Table will display the CLIP/COLP Table Attributes data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	^	Favo	rite PGM	CLIP/COLP T X		
PGM Search						
System ID & Numbering Plans		Order <u>↓</u> a	Table	Valu	е	Range
			CID Password		Go to Setting	Max 12 Characters
tation Data		1	COLP table 0			Max 10 Digits (include '*' and '#')
ard Based Data		2	COLP table 1			Max 10 Digits (include '*' and '#')
Line Data		3	COLP table 2			Max 10 Digits (include '*' and #')
Line Data		4	COLP table 3			Max 10 Digits (include '*' and #')
m Data		5	COLP table 4			Max 10 Digits (include '*' and #')
on Group Data		6	COLP table 5			Max 10 Digits (include '*' and '#')
·		7	COLP table 6			Max 10 Digits (include '*' and '#')
N Line Data ∨		8	COLP table 7			Max 10 Digits (include '*' and '#')
N Attributes(200)		9	COLP table 8			Max 10 Digits (include '*' and '#')
/COLP Table(201)		10	COLP table 9			Max 10 Digits (include '*' and '#')
Table(202)		11	COLP table 10			Max 10 Digits (include '*' and '#')
Route Table(203)		12	COLP table 11			Max 10 Digits (include '*' and '#')
Ring Assignment(204)		13	COLP table 12			Max 10 Digits (include '*' and '#')
Attributes(205) Dialing Table(206)		14	COLP table 13			Max 10 Digits (include '*' and '#')
Dialing Table(206)		15	COLP table 14			Max 10 Digits (include '*' and '#')
ta		16	COLP table 15			Max 10 Digits (include '*' and '#')
Data		17	COLP table 16			Max 10 Digits (include '*' and '#')
Data		18	COLP table 17			Max 10 Digits (include '*' and '#')
king Data		19	COLP table 18			Max 10 Digits (include '*' and '#')
Routing Table		20	COLP table 19			Max 10 Digits (include '*' and '#')
		21	COLP table 20			Max 10 Digits (include '*' and '#')
Data		22	COLP table 21			Max 10 Digits (include '*' and '#')
Data		23	COLP table 22			Max 10 Digits (include '*' and '#')
Login		24	COLP table 23			Max 10 Digits (include '*' and '#')
e Login		25	COLP table 24			Max 10 Digits (include '*' and '#')
Standard	-	26	COLP table 25			May 10 Digits (include ** and **)

Figure 6.7.2-1 CLIP/COLP Table

Normally, the system will send the primary Directory Number of the ISDN Line in the ISDN call SETUP and CONNECT messages to identify the caller (CLIP) or the answering (COLP) party respectively. Under certain circumstances, it may be desirable to provide a secondary or DID number for the ISDN Line. In these cases, the CLIP/COLP Table may be used to define the digits sent. The number sent is selected based on the index assigned for the CO/IP Line under *'CID/CPN Attributes section'*.

The Station CLI is sent as a suffix to the number in the Table. Note that this number is sent only if CLIR/COLR is disabled under the CLIR Service and COLR Service assignments in the Station ISDN Attributes.

Setting CID Password directly

You can set the CID password to click "Go to Setting" button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.

6.7.3 MSN Table - PGM 202

Selecting MSN Table will display the MSN Table data entry page. Enter a valid MSN Table index range and click **[Load]** to enter the MSN Table data. Click **[Save]** button after changing Value.

PGM Base Function Base	< F	avorite PGM MSN T	able(202) ×		
Q PGM Search	C Enter I	ndex Range (1 - 2400) :		2 Load	Sa
System ID & Numbering Plans		Range 1-20			
Station Data	Index		Value	Range	
	_	CO Line Range		1 - 998	
Board Based Data	1	Index of Flexible DID Table		0 - 9999	
CO Line Data		Called Telephone Number		MAX 23 Digits (Include "* and #)	
	_	CO Line Range	-	1 - 998	
System Data	2	Index of Flexible DID Table		0 - 9999	
Station Group Data		Called Telephone Number		MAX 23 Digits (Include "" and #")	
	-	CO Line Range	-	1 - 998	
ISDN Line Data	3	Index of Flexible DID Table		0 - 9999	
ISDN Attributes(200)		Called Telephone Number		MAX 23 Digits (Include **' and '#')	
CLIP/COLP Table(201)		CO Line Range		1 - 998	
MSN Table(202)	4	Index of Flexible DID Table		0 - 9999	
ICLID Route Table(203)		Called Telephone Number		MAX 23 Digits (Include **' and '#')	
ICLID Ring Assignment(204)		CO Line Range	-	1 - 998	
PPP Attributes(205)	5	Index of Flexible DID Table		0 - 9999	
Prefix Dialing Table(206)		Called Telephone Number		MAX 23 Digits (Include ** and #)	
		CO Line Range		1 - 998	
SIP Data	6	Index of Flexible DID Table		0 - 9999	
Tables Data		Called Telephone Number		MAX 23 Digits (Include "" and "#)	
	_	CO Line Range		1 - 998	
Networking Data	7	Index of Flexible DID Table		0 - 9999	
H.323 Routing Table	· · · ·	Called Telephone Number		MAX 23 Digits (Include ** and '#')	
-		CO Line Range		1 - 998	
T-NET Data		č		0 - 9999	
Zone Data	8	Index of Flexible DID Table			
	-	Called Telephone Number		MAX 23 Digits (Include **' and '#')	
Device Login	-	CO Line Range	-	1 - 998	

Figure 6.7.3-1 MSN Tables

When a Line assigned for DID operation receives an incoming call, the call will be routed to a station based on the Flexible DID Table Index assigned in the following table, which configures the expected Multiple Subscriber Numbers associated with the ISDN line.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Range	The ISDN line associated with the MSN Table entry can be defined to reduce the number of entries searched	1-998	None
Index of Flexible DID Table	This field defines the index to the Flexible DID Table, section 6.9.12, for routing the call.	0~9999	None
Called Telephone Number	When the received MSN number matches this entry, the call is routed based on the DID Table index entered above.	Max. 23 Digits (Include * and #)	None

Table 6.7.3-1 MSN TABLE ATTRIBUTES

6.7.4 ICLID Route Table - PGM 203

Selecting ICLID Route Table will display the ICLID Route Table data entry page. Enter the Index range and click **[Load]** to open the ICLID Route Table. Click **[Save]** button after changing Value.

PGM Base Function Base	Favorite PGM ICLID	Route Tabl×		
Q PGM Search O	Enter Index Range (1 - 500) :		2	Load
System ID & Numbering Plans	Index Range 1-20			
Station Data	Index ICLID Ring Assign Index	Caller Telephone Number	Caller Name Rin	ng Tone
Station Data	1			
Board Based Data	2			
CO Line Data	3			
CO Line Data	4			
System Data	5			
Station Group Data	6			
	7			
ISDN Line Data V	8			
	9			
ISDN Attributes(200)	10			
CLIP/COLP Table(201) MSN Table(202)	11			
ICLID Route Table(203)	12			
ICLID Ring Assignment(204)	13			
PPP Attributes(205)	14			
Prefix Dialing Table(206)	15			
	16			
SIP Data				
THER	17			
Tables Data	18			
Networking Data	19			
	20			
H.323 Routing Table				

Figure 6.7.4-1 ICLID Route Table

The system can employ ICLID (Incoming Calling Line Id) to determine the routing of incoming external calls. Each CO/IP Line, including DID Lines and ACD group calls may be assigned to employ ICLID routing. The system will compare the received ICLID to entries in the ICLID Route Table and, if a match is found, will route the call to the destination defined in the ICLID Ring Assignment Table index assigned here.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ICLID Ring Assign Index	This field is the index to the ICLID Ring Assignment Table, PGM 204 that determines the call routing.	001~250	None
Caller Telephone Number	If the Caller Id matches this Table entry, the index above is used to select the route from PGM 204.	24 Digits	None
Caller Name	The ICLID name that is sent by the system to the destination for the ICLID routed call.	12 characters	None
Ring Tone	If the received Caller Id matches the Caller Telephone Number, the Ring tone selected here is employed for the call alerting.	01 ~ 16	Ring Tone

Table 6.7.4-1 ICLID ROUTE TABLE ATTRIBUTES

6.7.5 ICLID Ring Assignment Table - PGM 204

Selecting ICLID Ring Assignment Table will display the ICLID Ring Assignment Table data entry page. Enter the desired index and click **[Load]** to enter the ICLID Ring Assignment. Click **[Save]** button after changing Value.

	PGM Base Function Base	< Favorite Enter Table N	PGM ICLIE	D Ring Assi X C		× × Save
	System ID & Numbering Plans	Table Number	: 1			
	· · ·	At	tribute	Value	Range	Station Delay Value [Station:Delay]
	Station Data Board Based Data		Station Range	Range : Delay :	0~9	[1000:0]
			Station Group			
	CO Line Data	Day	O VSF	Announcement : Auto Drop : □	0 - 200 (0 : Unused)	
	-,		AA Ring Time		0~30	
	Station Group Data		Net Station			
	ISDN Line Data 🗸		Station Range	Range : Delay :	0~9	[1000:0]
	ISDN Attributes(200)		Station Group			
<	CLIP/COLP Table(201) MSN Table(202)	Night	© VSF	Announcement : Auto Drop :	0 - 200 (0 : Unused)	
	ICLID Route Table(203)		AA Ring Time		0~30	
	ICLID Ring Assignment(204)		Net Station			
	PPP Attributes(205) Prefix Dialing Table(206)		Station Range	Range : Delay :	0~9	[1000:0]
	SIP Data		Station Group			
	Tables Data	Timed Ring	O VSF	Announcement : Auto Drop :	0 - 200 (0 : Unused)	
	Networking Data		AA Ring Time		0~30	
			Net Station			
	H.323 Routing Table					

Figure 6.7.5-1 ICLID Ring Assignment Table

If the Incoming Caller ID matches an entry in the ICLID Route Table, the index from the Table is used the ICLID Ring Assignment Table entry to employ to route the call. Separate ring assignments are made for Day, Night, and Timed Ring mode for each index, 001 to 250. When assigned to ring to a VSF announcement, the call can be automatically dropped after the announcement by entering '#' after the announcement number.

Using the AA Ring time, the call is sent to the assigned VSF announcement after the AA Ring Time expires if the call has not been answered by a station. The delay is defined in seconds from 00 to 30.

6.7.6 ISDN PPP Attributes - PGM 205

Selecting PPP Attributes will display the PPP Attributes data entry page. Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations when saved. Click **[Save]** button after changing Value.

PGM Base Function Base		< Favo	rite PGM	PPP Attribut X		
PGM Search	0					
System ID & Numbering Plans		Order <u>↓</u> a	Check All	Attribute	Value	Range
Station Data		1		PPP Destination		Station Number
Station Data	_	2		User ID 1		Max 12 Characters
Board Based Data		3		User Password 1	*****	Max 12 Characters
CO Line Data		4		User ID 2		Max 12 Characters
	-11	5		User Password 2	*******	Max 12 Characters
System Data		6		PPP SERVER IP Addr	0.0.0.0	
Station Group Data		7		PPP CLIENT IP Addr	0.0.0.0	
SDN Line Data	-					
ISDN Attributes(200)						
CLIP/COLP Table(201)						
MSN Table(202)						
ICLID Route Table(203)						
CLID Ring Assignment(204)						
PPP Attributes(205)						
Prefix Dialing Table(206)						

Figure 6.7.6-1 PPP Attributes

In addition to remote access via an IP network connection, the system database may be accessed remotely via an ISDN connection. Placing a call over an ISDN Line to the designated PPP Station will provide a connection to the system database. The system will request a user id and password, which must match one of the User Ids and passwords assigned. After a matching id and password are received, the iPECS Login Home page is provided.

Table 6.7.6-1 PPP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
PPP Destination	If the incoming capability is 64 Kbps unrestricted digital and the called party number matches the PPP destination, the system will automatically answer the call and request PPP ID and password.	Station number	None
User ID 1	The System accepts this PPP ID 1 as valid.	Max. 12 characters	likppp01
User Password 1	The password entered is used to authorize PPP ID 1.	Max. 12 characters	lpkts01
User ID 2	The System accepts this PPP ID 2 as valid.	Max. 12 characters	likppp02
User Password 2	The password entered is used to authorize PPP ID 2.	Max. 12 characters	lpkts02
PPP Server IP Addr	When configured, the PPP Server IP Address must match this entry. To apply this option the system must be restarted.	IP Address	
PPP Client IP Addr	When configured, the PPP Client IP Address must match this entry. To apply this option the system must be restarted.	IP Address	

6.7.7 ISDN Prefix Dialing Table

Selecting ISDN Prefix Dialing Attributes will display the Prefix Dialing Table Attributes data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< F:	avorite PGM Prefix Dialing	g Ta <mark>×</mark> C			×
Q PGM Search	Enter Ir	ndex Range (1 - 500) :			2	Load Save
System ID & Numbering Plans	Index F	0				
	Index	Value			Range	
Station Data		Prefix Code			MAX 8 Digits (Include '*' and '#')	
Board Based Data		Table ID	0		0-6, 0 means disable	
CO Line Data		Min Digit	0		00-30	
CO Line Data		Max Digit	0		00-30	
System Data		Number Of Type	Unknown	•		
Station Group Data	1	Numbering Plan	Unknown	•		
Station Group Data		Sending Complete	OFF V			
ISDN Line Data V		Call Charge Type	Unknown	•		
		Call Charge Timer	0	*1sec)	000-999	
ISDN Attributes(200)		Call Cost Per Call Charge Timer	000000		Must be 6 digits	
CLIP/COLP Table(201)		Flat Rate	OFF T			
MSN Table(202)						
ICLID Route Table(203)						
ICLID Ring Assignment(204) PPP Attributes(205)						
Prefix Dialing Table(206)						
Trenx blanng Table(200)						

Figure 6.7.7-1 Prefix Dialing Table Attributes

Prefix Dialing Table. With this table, three features can be supported.

- 1. Analog CO Call Charge with NPR metering.
- 2. SIP direct dialing with no wait inter-digit timer.
- 3. ISDN Prefix Call ISDN en-block Dialing with Prefix Call Setup.

If first some digits (up to 8 digits) of outgoing dial number are matched with Prefix Code of each table, this table can start work. By each Co-line (PGM 142 - F20), Table ID (0-6) can be set. This table ID (PGM 142 - F20) is associated with PGM 206 - each table ID.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Prefix Code	The Prefix code is the digits that the user must dial as the first digits in order to activate the Prefix Dialing options.	Max. 8 Digits (Include * and #)	
Table ID	The Prefix Code is assigned to a Table (0~6) that is referenced in the CO Line Common Attributes to define the Prefix codes are associated with the CO/IP Line.	0-6	0
Min Digit	This field defines the minimum number of digits the user must dial to activate Enblock dialing and includes the Prefix digits.	00-30	0
Max Digit	This field defines the maximum number of digits the user must dial to activate Enblock dialing and includes	00-30	0

 Table 6.7.7-1 Prefix Dialing Table Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the Prefix digits.		
Number Of Type	Select Number of Type (0~6).	Unknown, International, National, Network spec, Subscriber, Abbreviated, Reserved	Unknown
Numbering Plan	Select Numbering Plan (0~6).	Unknown, ISDN Telephony, Data numbering, Telex, National standard, Private, Reserved	Unknown
Sending Complete	When the user-dialed digits match the Prefix digits, the system will send the digits Enblock to the ISDN or SIP Call server.	ON/OFF	OFF
Call Charge Type	This field defines the Call type for the charges. The Call Charge Type can be assigned as Unknown, Local, Long Distance, International, Mobile, or reserved	Local, Long distance, International, Mobile, Reserved	Unknown
Call Charge Timer	When the user dialed digits match the assigned Prefix code on an analog CO Line, the call charge is calculated using this timer as Call Duration/Call Charge Timer * Cost per pulse.	000-999	0
Call Cost	Call Cost is calculated by CALL TIMER. (ex : timer is 1 min, cost is 000020, then after 3 minute call, total call cost is calculated to 000060)	000000-9999999	000000
Flat Rate	If Flat Rate is ON, Flat Rate is applied by CALL COST per a call.	ON/OFF	OFF

Table 6.7.7-1 Prefix Dialing Table Attributes

6.8 SIP Data

Selecting the SIP Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

PGM Base Function Base	Favorite PGM			
Q PGM Search O				
System ID & Numbering Plans	System Overview System ID & Number	System IP Plan(102) System ID & Number	Device IP Plan(103) System ID & Number	Common Attributes(Station Data
Station Data				
Board Based Data	Flexible Buttons(11 Station Data	Common Attributes(CO Line Data	CO/IP Ring Assign CO Line Data	CID/CPN Attributes(CO Line Data
CO Line Data				
System Data	System Attributes(1 System Data	System Password(1 System Data	Station Group Assi Station Group Data	Station Group Attrib Station Group Data
Station Group Data				
ISDN Line Data	Station Authorizatio Tables Data	System Authorizati Tables Data	Flexible DID Conver Tables Data	
SIP Data V				
SIP Common Attributes(210) SIP Trunk Status Overview SIP CO Attributes(133) SIP Registration Status Overview SIP UID Alloc Status Overview SIP User ID Attributes(126) SIP Phone Attributes(211) SIP Phone Provisioning(212) Provisioning File View&Delete VMEX Station Data(215) VMEX Connection Table(216)				
Tables Data				
Networking Data				
H.323 Routing Table				
T-NET Data	•			

Figure 6.8-1 SIP Data

6.8.1 SIP Common Attributes - PGM 210

Selecting SIP Common Attributes will display the SIP System based Attributes data entry page. The attributes are system based SIP server data that running on UCP.

DNS server address is where system can get IP address of external party that was written in Name in system. Local UDP/TCP/TLS Port is UCP's SIP signaling port number.

'Signal TLS Option' is for the SIP signaling by TLS configuration.

'SIP Status' the status of is running of SIP server in UCP.

PGM Base Function Base	< F	avorite PGM SIP	Common Att		
PGM Search	•				Save
System ID & Numbering Plans	Order	Attribute	Value	Range	Remark
Station Data	1	Primary DNS Address		Max 32 Characters	SYSTEM will be restarted after [SAVE]
Board Based Data	2	Secondary DNS Address		Max 32 Characters	SYSTEM will be restarted after [SAVE]
	3	Local Server UDP Port	5060	Port	SYSTEM will be restarted after [SAVE]
CO Line Data	4	Local Server TCP Port	5060	Port	SYSTEM will be restarted after [SAVE]
System Data	5	Local Server TLS Port	5061	Port	SYSTEM will be restarted after [SAVE]
Station Group Data	6	Check Message Send Timer	0	0 (OFF), 10-3600 sec	
ISDN Line Data					
SIP Data V	1	TLS Version	TLS1.0 T		SYSTEM will be restarted after [SAVE]
	2	Crypt Mode	RSA V		SYSTEM will be restarted after [SAVE]
SIP Common Attributes(210)	3	First TLS	None •		SYSTEM will be restarted after [SAVE]
SIP Trunk Status Overview	4	Second TLS	None 🔻		SYSTEM will be restarted after [SAVE]
SIP CO Attributes(133)	5	Persistent Level	TRANSACTION_USER •		SYSTEM will be restarted after [SAVE]
SIP Registration Status Overview	6	Capacity Level	70	0-100	SYSTEM will be restarted after [SAVE]
SIP UID Alloc Status Overview SIP User ID Attributes(126)	7	Connection Reuse(TLS)	ON T		
SIP Phone Attributes(211) SIP Phone Provisioning(212)	8	System Cert File Format	PEM(Normal)		
Provisioning File View&Delete	9	System Cert Key Password	****	Max 16 Characters	
VMEX Station Data(215)	10	TLS Security	OFF V		SYSTEM will be restarted after [SAVE]
VMEX Connection Table(216)	11	SRTP Security	OFF •		SYSTEM will be restarted after [SAVE]
Tables Data			SIP MESSAGE BLC	CKING OPTIO	N
rables Data	1	IP AUTH USAGE	ON T		Server IP and SIP Ext IP
Networking Data	2	Remote REGISTER	ALLOW •		REGISTER from FMC or Remote SIP Ext(IP AUTH USAGE ON)
H.323 Routing Table	3	REGISTER Check Time	0	0-3600 sec	Time for checking invalid remote REGISTER(Remote REGISTER:ALLOW)
T-NET Data	-	<u> </u>	-	0.00000	Max number of invalid remote

Figure 6.8.1-1 SIP Common Attributes

Check Message Send Timer – This is Keep Alive Message (OPTIONS) frequency from SIP server (UCP) to SIP Phone. If a SIP Phone does not respond to system's Keep Alive Message then system will make the status of SIP Phone to 'disconnected' in system.

Keep Alive Message (OPTIONS) programming for a SIP station is as below:

- Frequency: SIP Data / SIP Common Attributes (210) Check Message Send Timer.
- Usage ON/OFF for a SIP Extension: SIP Data / SIP Phone Attributes (211) Keep Alive Usage.
- Retry Count: IP Data / SIP Phone Attributes (211) Retry Count.

Table 6.8.1-1 SIP Common Attributes								
ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT					
Primary DNS Address	The system will contact this IP address as the primary Name Resolution Server. System will restart after Save.	IP Address (Max. 32 characters)						
Secondary DNS Address	The system will contact this IP address as a secondary Name Resolution Server. System will restart after Save.	IP Address (Max. 32 characters)						
Local Server UDP Port	The UDP port for SIP signaling packets is configurable. System will restart after Save.		5060					
Local Server TCP Port	The TCP/IP port for SIP signaling packets is configurable. System will restart after Save.		5060					
Local Server TLS Port	The TLS port for SIP signaling packets is configurable. System will restart after Save.		5061					
Check Message Send Timer	To assure a registered SIP Phone is still functioning, the system sends a SIP OPTION message to the phone at this interval. OPTIONS Usage must be enabled for the SIP Trunk (PGM133) and Keep Alive Usage (PGM 211) for the SIP phone must be enabled.	10 ~ 3600 (Sec.)	0					
	Signal TLS option							
TLS Version	The Transport Layer Security (TLS) version options are: TLS1.0: TLS1.0 is used for TLS connection. TLS1.2: TLS1.2 is used for TLS connection. SSL3 (Auto): TLS1.0/TLS1.2 with auto negotiation System will restart after Save.	TLS1.0, TLS1.2, SSL3(Auto)	TLS1.0					
Crypt Mode	The RSA or ECC cryptography modes are available. System will restart after Save.	RSA, ECC	RSA					
First TLS	The primary TLS key encryption method for SIP signaling packets can be configured. System will restart after Save.	None, ARIA-128, AES-128, ARIA-128-SHA2, AES-128-SHA2, AES-256-SHA2(RSA)	None					
Second TLS	The secondary TLS encryption key method for SIP signaling packets can be configured. System will restart after Save.	None, ARIA-128, AES-128, ARIA-128-SHA2, AES-128-SHA2, AES-256-SHA2(RSA)	None					
Persistent Level	The TLS path for SIP signaling packets can be selected as: Transaction: different path than other signaling Transaction_user: same path as other signaling System will restart after Save.	TRANSACTION, TRANSACTION_USER	TRANSACTI ON_USER					
Capacity Level	The maintenance rate or capacity of the TLS session can be limited, maximum 70%. System will restart after Save.	0 - 100	70					

Table 6.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Connection Reuse (TLS)	The TLS session can be maintained and reused for another session.	OFF ON	ON
System Cert File Format	The system supports two certification formats Privacy-Enhanced Electronic Mail (PEM) or Distinguished Encoding Rules (DER).	PEM(Normal) DER (Normal)	PEM (Normal)
System Cert Key password	Password to encrypt private key.	Max. 16 characters	
TLS Security	Change password that is used to encrypt TLS certification periodically.	OFF ON	OFF
SRTP Security	Allow only SRTP call (blocking none SRTP call)	OFF ON	OFF
	SIP Message blocking option		
IP AUTH USAGE	The system will authenticate the origin of SIP Requests (INVITE, REGISTER, NOTIFY, OPTIONS, etc.). If the origin IP address is a registered SIP phone or configured SIP Trunk (PGM 133) the system will respond to the request otherwise, the request is ignored.	OFF ON	ON
Remote Register	When IP Authentication above is enabled, remote devices must be allowed to register.	ALLOW DENY	ALLOW
REGISTER Check Time	Enabling IP Authentication and Remote registration may result in attempts to flood the system with registration requests. The system can check for and lock out registration if flooding occurs. This time sets the interval the system will use to check for flooding.	0~3600 (Sec.)	0
REGISTER Threshold	Enabling Remote registration may result in attempts to flood the system with registration requests. The system can check for and lock out registration if flooding occurs. This value sets the number of registration requests for the flooding threshold allowed within the Check Time.	0~60000	0
REGISTER Lock Time	With IP Authentication enabled and registration allowed, should a registration flood be detected		0
	SIP SMS Option		
SMS Domain	When SIP SMS is available, this field configures the Domain Name used for sending messages.	Max. 32 characters	
Request URI	For Korea Telecom, the "Request URI" employed when sending a SIP SMS can be defined.	Max. 32 characters	1549
SMS Mode	For Korea Telecom, this value assigns the SMS mode, Normal or External.	Normal, External	Normal
	SIP FAX Option		
Start w/ G.711 Fax	When a SIP Trunk call is directed to a Fax port, the system will request use of the G711 Codec.	OFF ON	OFF
G.711 Fax method	When using G711 for Faxing, the VBD (Voice Band Data) encoding can be assigned for use with	711A/711U/711A(VBD). 711U(VBD)	711A

Table 6.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT	
	the G.711 Codec for improved Fax performance.			
T38 FAX Failover(711)	When T38 is employed for Faxing, should negotiation fail, the system can Fail-over to use the G711 Codec for Fax Transmission.	OFF ON	OFF	
	Miscellaneous Option			
OCS Prefix Code	When the server type assigned for a SIP Trunk is OCS, the system will send these digits as a prefix to the number in the SIP "To:" header.	Max. 8 Digits		
SIP Pound Use	SIP employs Enblock dialing where the user dials all digits before they are sent to the carrier for processing. When the user completes dialing of a SIP call, '#' is used to indicate end of dialing. If users must be able to dial '#', SIP Pound Use can be disabled and the system will automatically send digits at expiration of the inter-digit time.	OFF ON	OFF	
BLF SYNC NOTIFY Timer	When the system reboots, the button LEDs of SIP phones may indicate erroneous status. To display proper status LEDs, the system sends a Notify message to synchronize the LED states at expiration of this timer.	10-360 seconds	10	
SRTP PATH(SIPEXT)	For SIP extensions connected to the same LAN as the system, the SRTP path can be established through a VoIP channel (Packet Relay) or directly between the end-points.	VOIM RELAY, DIRECT	VOIM RELAY	
DNS SRV Usage	The system can be configured to query the DNS for the SRV resource record, which defines domains for various services.	OFF ON	OFF	
Out OF Rsc Response	When the system has no resources available for the SIP Request, the system will respond with this code.	503, 486	503	
Error Code For Trunk Rerouting	If the iPECS UCP receives this Error Code in response to a request, the call will be rerouted. The semi-colon (;) is used to separate multiple SIP message codes.			
	SIP QOS Option			
SIP QOS Method Selection	For SIP messages, the system can employ Diff Serv or TOS to implement QoS.	DSCP, TOS	TOS	
SIP Signal DSCP value	When Diff Serv is selected as the QoS method, the, DSCP value for SIP signaling messages is defined.	0~63	0	
SIP Signal TOS value	When TOS is selected as the QoS method, the TOS value for SIP signaling messages is defined.	· 0~7		
RTP DSCP value	When DSCP is selected as the QoS method, the DSCP value for RTP packets is defined.	0~63	0	
RTP TOS value	When TOS is selected as the QoS method, the TOS value for RTP packets is defined.	0~7	5	

Table 6.8.1-1 SIP Common Attributes	Table	6.8.1-1	SIP	Common	Attributes
-------------------------------------	-------	---------	-----	--------	------------

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ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT						
SIP T-NET Option									
CM Prefix	Korea Telecom only, when employing an iPECS- CM as the CM, iPECS UCP will require a Prefix to set-up a SIP trunk call.	Max. 4 Digits							
CM Prefix Method	Korea Telecom only, enables the Prefix method for processing a call with a SIP trunk through iPECS-CM.	Normal, With prefix	Normal						
	SIP TRUNK REGISTER Option								
Register Retry Timer	When registration fails, the UCP attempts to register periodically at intervals of this timer.	20~3600	60						
Option Check number	Korea Telecom only, a SIP Options message is used for redundancy. If the system does not respond to the Option message after the number of attempts, the redundant server becomes active	1~20							
Option Check Interval	Korea Telecom only, a SIP Options message is used for redundancy. The Option message is sent at intervals of this timer.	20~3600							
	SIP ALARM SERVER Option								
Alarm Server Usage	If this value is changed, all WTIM will restart.	OFF/ ON	OFF						
Alarm Server Address	Enter the alarm server address up to 32 characters.	Max. 32 characters							
Alarm Server UDP Port	Default UDP port for Alarm server.	Port	5060						
Alarm Server Check Usage	If IPECS doesn't receive reply for this option 3 consecutive times, will not send Message and Information to Alarm server. PGM 210 check message send timer.	OFF/ ON	OFF						
Terminal State Announcement	Information (Terminal state) is sent to Alarm server if this value is ON, not sent to Alarm server if this value is OFF.	OFF/ ON	OFF						
600BE Channels for Alarm	The number of 600BE channels reserved for Alarm SMS.	0~1	0						

Table 6.8.1-1 SIP Common Attributes

6.8.2 SIP Trunk Status Overview

Selecting SIP Trunk Status Overview displays the overview page. The page displays the Proxy, Domain, etc. for the SIP Trunks configured in PGM 133.

	PGM Base Function Base	Î	<		avorite PGM	CID	Trunk Status	×			
	FOW Dase Function Das				avonte PGW	SIP	Trunk Status	C			
¢	PGM Search	0		ndex	Proxy Address	Domain	COL Range	SIP Group	UID Range	State	UIDSEL
				1	,,		-		-		
	System ID & Numbering Plans			2			-		-		
	0. C. D.			3			-		-		
	Station Data	_		4			-		-		
	Board Based Data			5			-		-		
				6			-		-		
	CO Line Data			7			-		-		
	System Data			8			-		-		
	-	_		9			-		-		
	Station Group Data			10 11			-		-		
	ISDN Line Data			11			-		-		
ŀ		_		12			-		-		
	SIP Data	~		14			-		-		
<				15			-		-		
	SIP Common Attributes(210)	- 11		16			-		-		
	SIP Trunk Status Overview			17			-		-		
	SIP CO Attributes(133)			18			-		-		
	SIP Registration Status Overview			19			-		-		
	SIP UID Alloc Status Overview			20			-		-		
	SIP User ID Attributes(126)			21			-		-		
	SIP Phone Attributes(211)			22			-		-		
	SIP Phone Provisioning(212)			23			-		-		
	Provisioning File View&Delete			24			-		-		
	VMEX Station Data(215)			25			-		-		
	VMEX Connection Table(216)			26			-		-		
				27			-		-		
	Tables Data			28			-		-		
	Networking Data			29			-		-		
	-			30			-		-		
	H.323 Routing Table			31 32			-		-		
	T-NET Data	•		32 33			-		-		
	I THE I Data	•		33			-		-		

Figure 6.8.2-1 SIP trunk status overview

6.8.3 SIP CO Attributes - PGM 133

Selecting SIP CO Attributes will display the SIP CO Attributes data input page, Figure 6.8.3-1. Enter the CO Range and click **[Load]** to enter attribute values. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of stations when saved.

PGM Base Function Base	<	Favorite	PGM SIP CO Attributes(133) X				
C PGM Search O	Enter C	:O Range (1 - 9	98) :	Load			Save
System ID & Numbering Plans	CO Ra	nge 1					Register
Station Data	Order	Check All	Attribute	Value		Range	UnRegister
	1	0	Soft Switch Type	Normal •			
Board Based Data	2	0	Proxy Server Address			IP Address	
CO Line Data 3 🗐		(i)	Use Outbound Proxy	OFF •			
	4	0	Connection Mode	UDP .			
station Group Data 5 0		0	Caller Name Service	Use Unused OFF OFF			
		0	181 Being Forwarded				
ISDN Line Data	DN Line Data 7 🗟 8 🕢		100 rel				
CENT OCHOAND			Use single codec only				
SIP Data 🗸 🗸	9	8	Use rport method	OFF .			
SIP Common Attributes(210)	10	0	Domain			Max 40 Characters	
SIP Common Autobules(210) SIP Trunk Status Overview	11	8	Invite Acceptance	From All			
SIP CO Attributos(133)	12	0	Contact Address Domain	SIP Device Addr ·			
SIP Registration Status Overview	13	0	From Address Domain	Server Domain •			
SIP UID Alloc Status Overview	14	0	Firewall IP Apply	ON Y			
SIP User ID Attributes(126)	15	0	Diversion Recursing	Recursing *		302, Blind Transfer	
SIP Phone Attributes(211)	16	100	VSF Answer Response	200 OK •			
SIP Phone Provisioning(212)	17	0	RTP Diversion Method	Recursing •			
Provisioning File View&Delete VMEX Station Data(215)	18	0	OPTIONS Usage(Keep Alive)	OFF .		PGM210 Check Message Send Timer	
VMEX Station Data(215) VMEX Connection Table(216)	19	0	Proxy Registration Timer	3600		1-65535	
THE STREET STREET	20	0	Proxy Server UDP Port	5060		Port(1-65535)	
Tables Data	21	0	Proxy Server TCP Port	5060		Port(1-65535)	
	22	0	Proxy Server TLS Port	5061		Port(1-65535)	
Networking Data	23	8	Registration UID Range	-		Max 2400 Entries	
H.323 Routing Table	24	0	DTMF Type	INBAND	•		
T-NET Data	25	8	Action with REG Failure	IDLE •		CO State	

Figure 6.8.3-1 SIP CO Attributes

Various parameters must be entered for proper operation of SIP Trunks including the SIP proxy and Registrar as outlined in Table 6.8.3-1.

	Table 6.8.3-1 SIP CO ATTRIBUTES		
ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Soft Switch Type	The Soft Switches that provide SIP Trunking service each may have slightly different extended capabilities and protocol implementations. While "Normal" will function with standard SIP Call Servers, extended functions of specific servers mentioned are available.	Normal, Broadsoft, KT. SK TELINK, KT-C, MS OCS, SKYPE CONNECT, SIP-CC, TI PK0, ERICSSON IMS, DNS REDUNT, MS LYNC KT CENTREX	Normal
Proxy Server Address	This field assigns the IP address or URL of the Service Provider's SIP Proxy server.	IP address or URL	

Table 6.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Use Outbound Proxy	With this field enabled, the system will send all SIP messages to the Proxy server defined above.	OFF ON	OFF
Connection Mode	This field establishes the transport protocol for SIP signaling packets as UDP, TCP or TLS.	UDP, TCP, TLS	UDP
Caller Name Service	The caller name may be included in SIP messages. When included, the name can display in the LCD of iPECS IP and LDP Phones. In addition, the Contact Display Name assigned to the SIP User Id (PGM 126) will be sent in the SIP message.	Unused Use	Use
181 Being Forwarded	A SIP 181 Message is sent when a call is being redirected or forwarded, if enabled.	Unused Use	Unused
100 rel	To improve reliability of Provisional SIP messages, the system is configured to send and expect to receive an ACK response to such messages.	OFF ON	OFF
Use single codec only	During capabilities negotiation, the system sends the first priority codec id or the prioritized list of codecs as defined in the Codec priority settings below.	OFF ON	OFF
Use rport method	When employed behind a NAPT server, the system can use the Rport parameter in the SIP Via header to request the SIP server respond to the IP address and port of the originator.	OFF ON	OFF
Domain	Domain name of the Service Provider's SIP Call server that is used in SIP "To:" headers.	Max. 40 characters	
Invite Acceptance	The system can accept SIP INVITE requests from any domain or only from the "Domain" specified above.	Domain Only, From All	From All
Contact Address Domain	The system will populate the SIP "Contact" header Domain with either the iPECS device IP address or the "Domain" specified above.	SIP Device Addr, Server Domain	SIP Device Addr
From Address Domain	The system will populate the SIP "From" header Domain with either the iPECS device IP address or the "Domain" specified above.	SIP Device Addr, Server Domain	Server Domain
Firewall IP Apply	When the iPECS system and VoIP devices are assigned a Firewall IP address, the system can use either the Firewall or local IP address in the Via and Contact headers as well as in SDP messages.	OFF ON	ON
Diversion Recursing	When a SIP call is redirected by a 3xx Diversion response such as when a call forwards, the SIP message can be forked (recursing) or forwarded (non- recursing).	Recursing, Non-Recursing	Recursing
VSF Answer Response	The system can respond to a SIP Invite with a SIP 183 Session Progress message. This allows a VSF announcement to play and user dialed digits to be	183 Msg. 200 OK	200 OK
RTP Diversion Method	Reserved Currently.	Recursing, Non-Recursing	Recursing

Table 6.8.3-1 SIP CO ATTRIBUTES

With "OPTIONS Usage" ON, an Option message is

OPTIONS Usage

OFF

OFF

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
(Keep Alive)	sent at intervals of the Check Message Send Timer assigned in PGM 210 to assure a connection with the SIP CO. SIP COs generally provide an Option message. In this case, the UCP should not be enabled here.	ON	
Proxy Registration Timer	Periodically, the system must re-register with the SIP Registrar. While this timing is often negotiated with the Registrar, the system can be configured with this timer to establish the re-register interval.	1-65535	3600
Proxy Server UDP Port	When employing UDP transport, this port number is employed for messages to the SIP proxy.	Port	5060
Proxy Server TCP Port	When employing TCP transport, this port number is employed for messages to the SIP proxy.	Port	5060
Proxy Server TLS Port	When employing TLS transport, this port number is employed for messages to the SIP proxy.	Port	5061
Registration UID Range	The User Id indices from the SIP User Id Attributes Table PGM 126 that will register with the SIP Service Provider's SIP Registrar must be configured.	Max. 2400 Entries	
DTMF Type	DTMF dialing signals can be sent from the system using in-band or various Info messages. The method or type must match the SIP Call Server.	Inband, 2833, Info (DTMF), Info (DTMF relay), Info (tel. event, Info (Nortel Networks)	Inband
Action with REG Failure	When registration fails, the link is down to the SIP Call server, or the system receives no response to an Invite message in the "Call Setup No-response" timer below, the call will return error tone (Wait Idle), or Fail-over to a Line from the Fail-over CO Group specified below (Idle).	IDLE WATI IDLE	IDLE
Media Port	The UDP ports used for RTP (media) packets can be limited to a fixed range.	UDP Port	6000-19972
	Secondary Proxy Server		
Secondary Proxy Server Address	For Korea Telecom, a secondary SIP proxy server can be assigned for redundancy.	IP Address	
Secondary Domain	For Korea Telecom, a secondary Domain can be assigned for redundancy.	Max. 32 Characters	
Secondary Proxy Server UDP Port	For Korea Telecom, a UDP port for the secondary SIP proxy server can be assigned for redundancy.	Port	
ID Presentation Option			
ID Usage			
P-Asserted-ID	The system normally provides a P-Asserted ID in SIP messages. The system can be configured not to provide the header.	Unused Use	Use
Remote-Party-ID	The system normally provides a Remote-Party-ID in	Unused	Use

Table 6.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	SIP messages. The system can be configured not to provide the header.	Use	
Privacy(CLIR) Presentation	SIP employs various headers that include a User Id and Name. In some cases, it may desirable to restrict the called party from receiving this information. Several options for Caller Id restriction can be applied.	Anonymous Name & Anonymous Number, Anonymous Name, Privacy: user, Privacy: id, Privacy: user;id;critical, Privacy: id & anonymous & P- Preferred-ID	Anonymous Name & Anonymous Number
	ID Individuality		
CID Password	Enter CID Password.		
From ID	The Id in the "From" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Extension SIP User Id: one of three SIP User Ids assigned to the station in PGM 111. Select which of the three indices to use in the SIP UID Selection below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Authorized Representative Id: the User Id of the "Authorized Representative Id" assigned to the SIP User Id that is indexed to the station in PGM 111. The specific index is selected below as the SIP UID Selection. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below	Extension SIP- User-ID Table, Extension outgoing-CLI, Authorized Representative ID, Fixed Table	Extension SIP- User-ID Table
From Display	The "Display" field of the "From" header can be configured to use the below: System Rule: a. From ID = Extension SIP User-ID Table, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank b. From Id = Extension Outgoing CLI, display Station Name from PGM 111 or blank c. From Id = Authorized Rep Id, display Contact Display Name of Authorized Rep Id from PGM 126 otherwise display Station Name from PGM 111 or blank d. From Id = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151	SYS RULE, Extension outgoing-CLI	SYS RULE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
P-Asserted-ID	The Id in the "P-Asserted Id" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Ext SIP User Id: one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Selection below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Authorized Representative Id: the User Id of the "Authorized Representative Id" assigned to the SIP User Id that is indexed to the station in PGM 111. The specific index is selected below as the SIP UID Selection. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension SIP- User-ID Table, Extension outgoing-CLI, Authorized Representative ID, Fixed Table	Extension SIP- User-ID Table
P-Asserted-ID Display	 The "Display" field of the "P-Asserted Id" header can be configured to use the below: System Rule: a. P-Asserted ID = Extension SIP User-ID Table, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. P-Asserted Id = Extension Outgoing CLI, display Station Name from PGM 11 or blank. c. P-Asserted Id = Authorized Rep Id, display Contact Display Name of Authorized Rep Id from PGM 111 or blank. d. P-Asserted Id = Fixed Table display Contact Display Name from PGM 111 or blank. d. P-Asserted Id = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. 	SYS RULE, Extension outgoing-CLI	SYS RULE
Contact ID	The Id in the "Contact ID" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Ext SIP User Id: one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Selection below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension SIP- User-ID Table, Extension outgoing-CLI, Fixed Table	Extension SIP- User-ID Table
Remote-Party-ID	The Id in the "Remote-Party ID" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Ext SIP User Id: one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Assignment section	Extension SIP- User-ID Table, Extension outgoing-CLI, Fixed Table	Extension SIP- User-ID Table

Table 6.8.3-1	SIP CO	ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	below.		
	Extension outgoing CLI: the CLI configured for the		
	station through Web PGM 113 and 151.		
	Fixed Table: the SIP User Id from the SIP UID		
	Fixed Table Index attribute assigned below.		
	Offnet Call Route ID Transit		
The below applies to	CO to Offnet Direct Call Route calls routed from a CO/IP Line to an Off-net location I	ay the system ave	r o SID Trunk
The below applies to	The Id in the "From" and "Contact" headers of SIP	by the system ove	
	messages employ System Attendant CLI, the original		
	CLI or a fixed User Id.		
	Sys Atd: the CLI configured for the System	SYS ATD,	
From/Contact ID	Attendant through Web PGM 113 and 151.	Original CLI,	SYST ATD
	Original CLI: the CLI received by the system for the	Fixed Table	
	original incoming call.		
	Fixed Table: the SIP User Id from the SIP UID		
	Fixed Table Index attribute assigned below.		
	The "Display" field of the "From" header can be		
	configured to use the below:		
	System Rule:		
	a. From ID = System Atd, display Contact Display		
	Name from PGM 126, otherwise display Attendant		
	Station Name from PGM 111 or blank.		
From Display	b. From Id = Original CLI, display the Name in	SYS RULE, Original CLI	SYS RULE
	received by the system for the original call.		
	c. From Id = Fixed Table display Contact Display		
	Name from PGM 126 or Station Name from PGM 111		
	or blank.		
	Original CLI: the CLI received by the system for the		
	original incoming call.		
	The Id in the "P-Asserted Id" header of SIP messages		
	can be based on the System Attendant, the Original		
	CLI or a fixed User Id.		
D. Assestant JD	Sys Atd: CLI: the CLI configured for the System	SYS ATD,	
P-Asserted-ID	Attendant through Web PGM 113 and 151. Original CLI: the CLI received by the system for the	Original CLI, Fixed Table	SYST ATD
	· · ·	FIXED TADIE	
	original incoming call. Fixed Table: the SIP User Id from the SIP UID		
	Fixed Table Index attribute assigned below.		
	The "Display" field of the "P-Asserted Id" header can be		
	configured to use the below:		
	System Rule:		
	a. P-Asserted ID = System Atd, display Contact		
	Display Name from PGM 126, otherwise display	SYS RULE,	
P-Asserted-ID Display	Attendant Station Name from PGM 111 or blank.	Original CLI	SYS RULE
	b. P-Asserted Id = Original CLI, display the Name	5	
	in received by the system for the original call.		
	c. P-Asserted Id = Fixed Table display Contact		
	Display Name from PGM 126 or Station Name from		

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	PGM 111 or blank.		
	Original CLI: the CLI received by the system for the		
	original incoming call.		
	The Id in the "Remote-Party ID" header of SIP		
	messages can be based on the System Attendant, the		
	Original CLI or a fixed User Id.		
	Sys Atd: the CLI configured for the System	SYS ATD,	
Remote-Party-ID	Attendant through Web PGM 113 and 151.	Original CLI,	Original CLI
	Original CLI: the CLI received by the system for the	Fixed Table	
	original incoming call.		
	Fixed Table: the SIP User Id from the SIP UID		
	Fixed Table Index attribute assigned below.		
	The Id in the "Diversion" header of SIP messages can		
	be based on the System Attendant, the Original CLI or		
	a fixed User Id, or Unused.		
	Unused: no Diversion header provided.	Unused,	
.	Sys Atd: the CLI configured for the System.	SYS ATD,	
Diversion	Attendant through Web PGM 113 and 151.	Original CLI,	Unused
	Original CLI: the CLI received by the system for the	Fixed Table	
	original incoming call.		
	Fixed Table: the SIP User Id from the SIP UID		
	Fixed Table Index attribute assigned below.		
	Offnet Call Forward by Station		
The below apply to	calls routed from a CO/IP Line to an Off-net location	by a station over a	a SIP Trunk.
	The Id in the "From" and "Contact" headers of SIP		
	messages employ the forwarding Station, the original		
	CLI or a fixed User Id.		
	Extension: the Extension SIP User ID or Extension	Extension,	
From/Contact ID	Outgoing CLI as assigned for the From ID under ID	Original CLI,	Extension
	Individuality.	Fixed Table	Extended
	Original CLI: the CLI received by the system for the		
	original incoming call.		
	Fixed Table: the SIP User Id from the SIP UID		
	Fixed Table Index attribute assigned below.		
	The "Display" field of the "From" header can be		
	configured to use the below:		
	System Rule:		
	a. From ID = Extension, display Contact Display		
	Name from PGM 126, otherwise display Station Name		
From Display	from PGM 111 or blank.	SYS RULE,	SYS RULE
	b. From Id = Original CLI, display the Name in	Original CLI	
	received by the system for the original call.		
	c. From Id = Fixed Table display Contact Display		
	Name from PGM 126 or blank.		
	Original CLI: the CLI received by the system for the		
	original incoming call.	F (1)	
D A	The Id in the "P-Asserted Id" header of SIP messages	Extension,	
	employ the forwarding Station, the original CLI or a	Original CLI,	Extension
	fixed User Id.	Fixed Table	

Table 6.8.3-1 S	SIP CO AT	TRIBUTES
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ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.		
P-Asserted-ID Display	The "Display" field of the "P-Asserted Id" header can be configured to use the below: System Rule: a. P-Asserted ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. P-Asserted Id = Original CLI, display the Name in received by the system for the original call. c. P-Asserted Id = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE, Original CLI	SYS RULE
Remote-Party-ID	The Id in the "Remote Party Id" header of SIP messages employ the forwarding station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension, Original CLI, Fixed Table	Extension
Diversion	The Id in the "Diversion" header of SIP messages can be based on the forwarding station, the Original CLI or a fixed User Id, or Unused. Unused: no Diversion header provided. Extension: the Extension SIP User ID or Extension. Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Unused, Extension, Original CLI, Fixed Table	Unused
Mobile Extension External Call			
From/Contact ID	below applies to calls routed to a Mobile Extension of The Id in the "From" and "Contact" headers of SIP messages employ the calling station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the	Extension, Original CLI, Fixed Table	Extension

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	original incoming call or Station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.		
From Display	The "Display" field of the "From" header can be configured to use the below: System Rule: a. From ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. From Id = Original CLI, display Station Name from PGM 111 for ICM call or the Name in received by the system for the original outside call. c. From Id = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE, Original CLI	SYS RULE
P-Asserted-ID	The Id in the "P-Asserted Id" header of SIP messages employ the calling station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call or station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension, Original CLI, Fixed Table	Extension
P-Asserted-ID Display	The "Display" field of the "P-Asserted Id" header can be configured to use the below: System Rule: a. P-Asserted ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. P-Asserted = Original CLI, display Station Name from PGM 111 for ICM call or the Name in received by the system for the original outside call. c. P-Asserted = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE, Original CLI	SYS RULE
Remote-Party-ID	The Id in the "Remote Party Id" header of SIP messages employ the Station CLI, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLII as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call or station number for ICM call Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension, Original CLI Fixed Table	Extension

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Diversion	The Id in the "Diversion" header of SIP messages can be based on the calling station, the Original CLI or a fixed User Id, or Unused. Unused: no Diversion header provided. Extension: the Extension SIP User ID or Extension. Outgoing CLII as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the	Unused, Extension, Original CLI, Fixed Table	Unused
	original incoming call or the station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.		
	SIP UID Assignment		
SIP User ID Fixed Table Index	When a header is assigned to use "Fixed Table", the Id from this SIP User ID (PGM 126) Table index is used.	Index	
SIP User ID SELECTION	When a header is assigned to use the "Extension SIP- User-ID Table", the SIP User ID is selected using this SIP UID index in the Station Attributes (PGM 111).	Index, Index 2, Index 3	SIP User Table Index
	External CODEC Priority Configuration		
1 st ~5 th priority	When the system negotiates with the SIP Trunk, the Codec priority specified is employed. If only the 1st. priority Codec is defined, only that Codec is available from the system. If the Codec is not supported by the remote party, the call will fail.	None, g.711-u, g.711-a, g.723.1, g.729, g.729-a, g.722	None
	SIP Call Setup Failover Option		
Call Setup No Response Time	When the system initiates a SIP Trunk call and receives no response from the SIP proxy server, after expiration of this timer the SIP call is canceled and a Fail-over call placed on the Fail-over CO/IP Line group specified below. Note the timer can be set at 3 to 15 seconds and '0', which disables Fail-over.	0, 3 ~ 15 sec	5
Failover CO Group Number	When the system attempts to initiate a SIP Trunk call and the SIP Trunk is in an OOS state or the SIP proxy server does not respond in the No Response time above, the system will cancel the SIP call and place a call over a CO/IP Line from this group.	CO/IP Line Group	
	SIP Session Timer		
Session Timer Usage	During a SIP call or "session", there are no signaling packets sent or received from the SIP Call server. In order to assure a session is still active, the system can periodically send an Option message that the SIP Call server should acknowledge.	OFF ON	OFF
Session Timer Value	When "Session Timer Usage" is enabled, the system	90~ 3600	360
Min SE	will verify the session at this timer interval. During negotiation with "Session Timer Usage" enabled, the system will use this value as the minimum Session expiration timer and will not respond to a SIP	90~ 3600	90

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT						
	Option message prior to expiration of this timer.								
URI Formatting and Rules									
General Formatting									
To Field Method	The SIP "To:" header is formatted using the SIP or Telephony method as shown below. SIP method To: < sip:[Number]@[Domain];user=phone > Telephony method To: < tel:+[Number] >Domain	sip: method tel: method	SIP: method						
Numbering Format	When assigned the Telephony method for the "To" header, the number format can be: Local - [tel:+Number]@[Domain] or Global (+E164) - [tel:+E.164 Address]@[Domain] E.164 Address: Nation + Area Code + Number	Local Global	Local						
Local: include Area Code	The Area code (PGM 143) can be added as a prefix if the 'Numbering Format' is set as Local. Example: user dials '8701234' and the Area code is '042' The resulting "To" field URI is tel:+0428701234@[Domain]	Yes No	No						
Global: include phone- context	If the 'Numbering Format' is Global and the 'To Field Method' is Telephony, the 'phone-context' can be added as below. user dials '0011428701234' from Country code 82 The resulting "To" field URI is, tel:+0011428701234@[Domain];phone-context=+82	Yes No	No						
	Specific Formatting by Conversion (example	;)							
From 4 digits	To 6 digits	User Dial	Result						
	The first digits, up to four (4), dialed by the user can be converted to a digit string of up to six (6) digits and may include a plus (+) sign. For example if the "From" digits are 00 and the "To" digits are +820, if the user dials 002233432, the system converts the number to +820 2233432.								
	SRTP Setting								
SRTP Usage	When implemented by the carrier, the system can encrypt media (RTP) packets employing SRTP (Secure Real-Time Protocol). But VoIP Virtual switching channel does not support SRTP.	OFF ON	OFF						
1st CRYPTO	The first priority cryptographic method for SRTP is selected from the below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80		None						

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	AES_CM_256_HMAC_SHA1_80		
2nd CRYPTO	The second priority cryptographic method for SRTP is selected from the below: None ARIA_CM_192_HMAC_SHA1_80 AES_CM_128_HMAC_SHA1_80 ARIA_CM_128_HMAC_SHA1_80 AES_CM_192_HMAC_SHA1_80 ARIA_CM_256_HMAC_SHA1_80 AES_CM_256_HMAC_SHA1_80		None
	Caller/Called ID		
	ID Option		
Caller ID Selection	For the purposes of display and ICLID call routing, the iPECS employ this header as the "Caller ID".	P-Asserted-ID, Remote-Party-D, From ID	P-Asserted-ID
Display Caller Name(Though Id is Anonymous)	Even though the User Id is Anonymous, the system can display the SIP "From" header "Display Name" field for the call.	No Yes	No
Called ID Selection	For the purposes of call routing, the "SIP Request" or "To" header will be employed by the system as the "Called Party ID".	Request URI, To ID	Request URI
	Miscellaneous set		
Drop Busy Station	While busy, the system can be configured to terminate a station call, and accept and connect any new call from the SIP Trunk. For special use in Italy only.	No Yes	No
Ignore INBAND DTMF	In some situations, DTMF tones from the connected party may be received along with the DTMF Type specified above. This can cause errors in detection such as double digits. In this case, the system can be configured to ignore Inband DTMF signals. Note do not disable Inband signals if selected as the "DTMF Type" above as this may disable DTMF detection.	No Yes	No
SIP Trunk Group	Multiple SIP User Id ranges may register with the SIP CO, for example, SIP COs from different providers. When different SIP User ID ranges are required on a SIP CO, a different SIP Trunk Group should be assigned to each range. Note this has no relationship with the CO/IP Line Group.	0~71 (0:Normal/1- 71:Check To header)	0
Send Refer for Transfer	The system can employ the SIP Refer method to forward or transfer incoming calls to an "Off-net" location if supported by the SIP Service Provider.	No Yes	No
CN Payload Insert	When Comfort Noise generation is desired, the system will provide a Comfort Noise Payload during periods of silence.	No Yes	No
Ignore 180 after 183	If the option is Yes, an appropriate ring back tone may be played to the calling party when the called party's phone is alerting without changing the internal or system ring back tone. For example, when placing a	No Yes	No

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ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	call from USA to Korea, a Korean ring back tone is heard by the caller.		
Add "user=phone" param	For outgoing SIP call, "user=phone" will be added in Request URI of INVITE.	No Yes	No

6.8.4 SIP Registration Status Overview

Selecting SIP Registration Status will display the Registration Overview page. The page displays a list of configured SIP User Ids and the status.

	PGM Base Function Base		<	Favor	ite PGM	SIP Registrati	on <mark>x</mark>
۹	PGM Search	0		Index	Regist	ration User ID	SIP Status
5	System ID & Numbering Plans			1			
5	Station Data			3			
E	Board Based Data			5			
C	CO Line Data			6 7			
s	System Data			8 9			
5	Station Group Data			10 11			
I	SDN Line Data			12			
5	SIP Data	~		13 14			
	SIP Common Attributes(210)			15 16			
	SIP Trunk Status Overview SIP CO Attributes(133)			17			
	SIP Registration Status Overview	ч		18 19			
	SIP UID Alloc Status Overview SIP User ID Attributes(126)			20 21			
	SIP Phone Attributes(211) SIP Phone Provisioning(212)			22			
	Provisioning File View&Delete			23 24			
	VMEX Station Data(215) VMEX Connection Table(216)			25 26			
H	ables Data			27 28			
	letworking Data			29			
	1.323 Routing Table			30 31			
	-NET Data	-		32 33			

Figure 6.8.4-1 SIP Registration status overview

6.8.5 SIP UID Allocation Status Overview

Selecting SIP User ID Allocation Status will display the allocation overview page. The SIP User Id Allocation Status Overview page displays the station(s) assigned to each SIP User Id index in the Station Common Attributes PGM 111.

	PGM Base Function B	Base	<	Favorite PGM	SIP UID A	lloc St <mark>×</mark>
Q	PGM Search	Θ		Index		Station
	System ID & Numbering Plans			1 2		
	Station Data			3 4		
	Board Based Data			5		
	CO Line Data			6 7		
	System Data			8		
	Station Group Data			9		
				11		
	ISDN Line Data			12		
< -	SIP Data	~		14		
	SIP Common Attributes(210)			15 16		
	SIP Trunk Status Overview SIP CO Attributes(133)			17		
	SIP Registration Status Overvie			18 19		
	SIP UID Alloc Status Overview SIP User ID Attributes(126)			20		
	SIP Phone Attributes(211)			21 22		
	SIP Phone Provisioning(212) Provisioning File View&Delete			23 24		
	VMEX Station Data(215)			24		
	VMEX Connection Table(216)			26 27		
	Tables Data			28		
	Networking Data			29 30		
	H.323 Routing Table			31		
	T-NET Data			32 33		

Figure 6.8.5-1 SIP UID Allocation Status Overview

6.8.6 SIP User ID Attributes – PGM 126

Selecting SIP User ID Attributes will display the SIP User ID input page. Enter a valid SIP User ID Index Number range, and click **[Load]** to view the SIP User ID Attributes for the first index in the range. Enter new data and click **[Save]** to modify the attributes for the index range.

PGM Base Function Base	< F	avorite PGN	SIP User ID Attr		×
Q PGM Search	Enter S	IP User ID Ir	ndex Number (1 - 2400) :	2 Load	Save
System ID & Numbering Plans	SIP Us	er ID Index 1			
Station Data	Order	Check All	Attribute	Value	Range
	-		CID Password	Go to Setting	
Board Based Data	1		Registration User ID		Max 64 Characters
CO Line Data	2		Authentication User ID		Max 64 Characters
System Data Station Group Data	3		Authentication User Password		Max 32 Characters
ISDN Line Data	4		Contact Number		Max 16 Characters
SIP Data	5		Contact Display Name		Max 21 Characters
	6		Asc Station Number		
SIP Common Attributes(210)	7		User ID Register	Provision	
SIP Trunk Status Overview	8		Authorized Representative ID Table Index	0	0 - 2400
SIP CO Attributes(133)	9		User ID Usage	OFF V	
SIP Registration Status Overview SIP UID Alloc Status Overview	10		Ring Route Type	ID ASSIGNED STATION •	
SIP UID Alloc Status Overview SIP User ID Attributes(126)	11		DID Conversion Type	DID Digit Conversion •	
SIP Oser ID Attributes(126) SIP Phone Attributes(211)	12		Number of Digits Expected from DID Circuit Expected from DID Circuit	4	2-4
SIP Phone Provisioning(212) Provisioning File View&Delete	13		DID Digit Mask	****	4 Digits: *,#,0-9
VMEX Station Data(215) VMEX Connection Table(216)	14		SMS Received Station Number		

Figure 6.8.6-1 SIP User ID Attributes

For each station, an index to the SIP User Id Attributes Table is defined in PGM 111 Station Attributes. The SIP User Id Attributes Table defines SIP characteristics associated with the index including User ID, Authentication name, etc. These characteristics are required for proper operation of the system and registration of the terminals when employed with SIP trunks. See also PGM 133. Note PGM 126 and PGM 133, which are accessible only via Web Admin, apply to SIP Trunks.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registration User ID	This field defines the SIP User Id from by the SIP Service provider. The User Id has the format User ID@Domain. Note the domain is commonly the system IP address.	Max. 64 characters	
Authentication User ID	The SIP Service Provider may require authentication of the user for registration and at other times during call setup. The Authentication name from the provider must be entered for proper SIP registration	Max. 64 characters	
Authentication User Password	The SIP Service Provider may require authentication of the user for registration and at other times during call setup. The Authentication password from the provider must be assigned for proper SIP registration.	Max. 32 characters	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Contact Number	The Contact header of SIP messages is populated with the specified SIP User Id.	Max. 16 characters	
Contact Display Name	The Display Name specified is used for the Contact header Name field.	Max. 21 characters	
Associative Station Number	Not used.	Station number	
User ID Register	 The SIP Trunks are provided in two formats 1) Registered: the system must register for service often using Authentication 2) Provision: the provider sends all SIP messages to a fixed IP; the system does not register for service. 	Register Provision	Provision
Authorized Representative ID Table Index	The User Id can be assigned an index of another User Id. When the SIP CO is configured to employ the Authorized Representative Id as the SIP "From" or "Contact" header, the indexed User Id is employed.	0-2400	0
User ID Usage	If registration is enabled (User ID Register above) the iPECS can send the User ID or Authorized Representative ID to the SIP Proxy to register the ID. Otherwise, only the Authentication Name and password are used.	OFF ON	OFF
Ring Route Type	 Incoming calls from a SIP trunk can be routed 1) to the ID assigned Station (any station with any of the SIP User ID Table Indices in PGM 111 matching the incoming SIP User Id), 2) based on CO/IP Ring assignments (PGM 144), 3) using DID treatment defined below, or 4) follow the MSN Table routing (PGM 145). 	ID Assigned Station, Ring Assignment, DID Conversion, MSN-DID Conversion	ID assigned Station
DID Conversion Type	When the Ring Route above is defined as DID, the system will send the call to a destination based on the DID conversion selected here. The digits in the SIP User ID may be used "as is" to identify the desired station, modified based on the DID Digit mask below and routed to the resulting station or the modified DID number can be used as an index to the Flexible DID Conversion Table, PGM 231 to route the call.	DID Digit Conversion, Use 'as is', Modify Using Flexible DID Conversion Table	DID Digit Conversion
Number of Digits (2-4) Expected from DID Circuit	When DID Digit Conversion or Flexible DID Conversion Table routing is used, the number of digits received is defined in this field.	2-4	4
DID Digit Mask	When DID Digit Conversion or Flexible DID Conversion Table routing is used, the digit conversion is defined in this field. For each of the four (4) digits, use "*" to accept any digit, "#" to delete the digit, or a digit 0-9 to replace the digit.	4 Digits: *, #, 0-9	***
SMS Received Station Number	When an SMS is received for this User Id, the Station to receive the SMS must be defined.		

Table 6.8.6-1 SIP User ID ATTRIBUTES

6.8.7 SIP Phone Attributes - PGM 211

Selecting SIP Phone Attributes will display the SIP Phone input page. Enter a valid SIP Station Number or range, and click **[Load]** to view the SIP Phone Attributes for the first Station Number in the range. Use the check boxes to indicate the data to modify for the Station range. Enter new data and click **[Save]** to modify the attributes for the Station Range.

PGM Base Function Base	< Fa	vorite PGM	SIP Phone Attri ×		
PGM Search	Enter S	tation Range :		2 Load	Save
System ID & Numbering Plans	Station	Range 1000-10	45		
Station Data	Order	Check All	Attribute	Value	Range
	1		Registering Mode	Register •	
Board Based Data	2		Registration Status	Registered	
CO Line Data	3		IP Address	10.10.42.1	
	4		IP Port	5588	
System Data	5		Transport Mode	UDP	
Station Group Data	6		System SIP Port	5060	
IODNI Lizz Data	7		SIP Phone Type	3rd SIP •	
ISDN Line Data	8		Device Register Mode	AUTO 🔻	
SIP Data 🗸	9		Registration Timer Usage	OFF V	
	10		Registration Timer	3600	30-3600 sec
SIP Common Attributes(210) SIP Trunk Status Overview	11		Keep Alive Usage	OFF V	
SIP Trunk Status Overview SIP CO Attributes(133)	12		Retry Count	3	3-10
SIP Registration Status Overview	13		407 Authentication	ON V	
SIP UID Alloc Status Overview	14		181 Being Forwarded	OFF V	
SIP User ID Attributes(126)	15		100rel	OFF T	
SIP Phone Attributes(211)	16		Session Timer Support	OFF •	
SIP Phone Provisioning(212)	17		Max Session Timer	1800	180-3600 sec
Provisioning File View&Delete	18		Min Session Timer	90	60-150 sec
VMEX Station Data(215)	19		Within Same Firewall with UCP	ON T	
VMEX Connection Table(216)	20		SRTP Usage	OFF •	
Tables Data	21		1ST CRYPTO	None	
	22		2ND CRYPTO	None	
Networking Data	23		DTMF Type	INFO(DTMF RELAY)	
H.323 Routing Table	24		SMS TYPE	AUTO V	
	25		CO Dial Tone	OFF V	

Figure 6.8.7-1 SI	P Phone Attributes
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< Registration >

For a new registration of SIP station, input ID/PWD & Desired Station Number in PGM 443 of Station User Login Table. This SIP Phone Attributes are for Stations that are already registered to system.

- Register Mode Register/ Manual : Set Registration Time Out or Not
- Registration Status : View connection status (Disconnected or Not) for a station
- IP Address : SIP Phone's IP address
- IP Port : SIP Phone's IP Port Number
- Transport Mode : SIP signaling method
- SIP Phone Type : Automatically Assigned by System
- Device NAT Usage : Automatic Detection
- Registration Timer Usage: OFF Assign (Re-) Registration Timer by Provisioning

- (212), ON Assign (Re-) Registration Timer by SIP Phone Attributes (211).
- Registration Timer: more than 10 minute recommended.
- 407 Authentication: Authentication of Registration (and Call Setup). To implement authentication, user login Password should be available in PGM 443 for the Station.

< Keep Alive / NAT Resolution >

To keep stable information of SIP Phone's Connection, IP address and Port number that is under NAT environment, system uses 'OPTIONS' message to implement Keep Alive and assist NAT resolution - effort to maintain IP address of SIP Phone by sending message so often from system to SIP Phone. SIP Phone should be capable to answer for 'OPTIONS' message

- Check Message Sending Timer in [SIP Data / SIP Attributes (210)] : 120 seconds
- Keep Alive Usage for a SIP Station in [SIP Data / SIP Phone Attributes (211)] : ON
- Retry Count for a SIP Station in [SIP Data / SIP Phone Attributes (211)] : 3

< System Firewall Resolution >

In case of firewall routed with MPB, to distinguish remote SIP Phone that is outside of firewall from system local area a check bit is required per a SIP Station. With this check bit, system can determine whether to serve communication using firewall mapped WAN IP address of MPB or serve communication using LAN IP address of MPB.

 SIP Phones that are outside of system protect firewall : [SIP Data / SIP Phone Attributes (211)] – 'Same Zone with MPB' to 'OFF'

< Session Timer >

To confirm talk state frequently during in talk state, system sends 'UPDATE' message to SIP Phone. If there is no response for the UPDATE message with in Maximum session timer, system will disconnect the talking call.

- [SIP Data / SIP Phone Attributes (211)] Session Timer Support : ON
- [SIP Data / SIP Phone Attributes (211)] Max Session Timer : if exceed, disconnect talking call
- [SIP Data / SIP Phone Attributes (211)] Min Session Timer: minimum guard timer for session timer negotiation.

< SRTP >

Voice & Video Data Encryption requires synchronization of CRYPTO method between system and SIP Phone side. If system specifies SRTP information then same information should be in SIP Phone side by Phone user programming.

SRTP usage requires a SRTP relay channel via eMG system VOIU and VOIB.

- [SIP Data / SIP Phone Attributes (211)] SRTP Usage: ON
 →SIP Phone self-programming is required, too SRTP ON
- [SIP Data / SIP Phone Attributes (211)] 1st CRYPTO key generation type: one of ARIA_CM_192_HMAC_SHA1_80, AES_CM_128_HMAC_SHA1_80, ARIA_CM_128_HMAC_SHA1_80

→SIP Phone self-programming is required, too – 1st/2nd CRYPTO method

[SIP Data / SIP Phone Attributes (211)] – 2nd CRYPTO key generation type: one of ARIA_CM_192_HMAC_SHA1_80, AES_CM_128_HMAC_SHA1_80, ARIA_CM_128_HMAC_SHA1_80

 \rightarrow SIP Phone self-programming is required, too – 1st/2nd CRYPTO method

< DTMF >

1) INFO (OUT BAND) type DTMF

- Presented in SIP signaling message.

- INFO (SIMPLE DTMF) / INFO (NORTEL NETWORKS) / INFO (DTMF RELAY) / INFO (TELEPHONE EVENT)

- Default: INFO (DTMF RELAY)

2) TONE (INBAND) type DTMF

- Presented in RTP packet
- Additional VOIU/VOIB' DSP channel is required to detect DTMF in RTP
- INBAND / 2833

<CO DIAL TONE>

This is to avoid double play of CO dial tone

'Set' if SIP phone plays CO dial tone by itself. If not, there will be another CO dial tone from external.

<Request URI Type>

Some SIP Phone will reject Request-URI if IP and port in domain field is different from its contact IP and port.

'Normal': IP and port number in Request URI domain field will be the real IP and port number of the SIP phone.

'KT-FMC': IP and port number in Request URI domain field will be system IP and port

<Busy Serve>

System Busy Tone: there will be a 'busy-tone' on busy state that is presented by system.

Additional VOIB/VOIU DSP channel is required.

486 Busy Message: there will be '486 busy' SIP signaling response on busy state.

<Call Initiation Mode>

For a SIP station, system can establish multiple or single call sessions. With this option system can control 'call-wait' option in system side. Normally, the SIP Phone has its 'call-wait ON/OFF' option by itself.

Options are as below:

'Multiple': for a new additional call to SIP Phone, system initiates every call for the SIP

Issue 1.3

Phone regarding it is on idle state. The 'call-wait allow/deny' is decided by SIP Phone itself. 'Single': system initiates only one call for a SIP Phone. The 'call-wait' is denied by system side. So, a call to a busy SIP station will be implemented on a busy state call-control.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registration Mode	Initial registration of a SIP phone is accomplished employing the parameters set in Station User Login PGM 443. The SIP phone can be required to register with the system periodically based on the Registration Timer or the registration can be maintained without the need for the SIP phone to reregister with the system (Manual).	Manual Register	Register
Registration Status	The system will display the status of the SIP phone registration.		
IP address	The system will display the IP address of the registered SIP phone.		
IP Port	The system will display the IP port used for the registered SIP phone.		
Transport Mode	The system will display the IP transport used by the registered SIP phone for signaling messages (UDP, TCP or TLS). In case of TLS, the options configured in the SIP Common Attributes (PGM 210) apply.		UDP
System SIP Port	The system will display the system SIP Port.		
SIP Phone Type	The type of SIP phone is generally determined by the system and can be an Ericsson-LG standard SIP phones or the 3rd party SIP phone type.		3 rd SIP
Device register mode	The Register Mode determines if the SIP phone is behind a NAT server. When set in the Auto mode, the system will determine if the phone is behind a NAT server.	AUTO, NO NAT, NAT	AUTO
Registration Timer usage	When the Registration Mode is "Register", the phone must register with the system periodically. The timer that determines the period can be the Registration Timer below (ON) or, when OFF, the timer is assigned through provisioning (PGM212).	OFF ON	OFF
Registration Timer	When the Registration Timer is enabled above, the system informs the SIP phone that registration is required at intervals of this Registration Timer. If the phone does not register within the timer, the phone is placed in an Out-of-Service state until the phone registers. Note shorter times will increase LAN traffic.	30-3600	3600
Keep Alive Usage	The system will periodically send an Option message to assure a connection with the registered SIP phone. Note when separated by a NAT server, Keep-Alive should be employed to maintain the NAT table record. The Check Message Sending Timer in PGM 210 determines the frequency.	OFF ON	OFF
Retry Count	The system periodically sends an Option message to assure a connection with the registered SIP phone. If	3-10	3

Table 6.8.7-1	SIP PH	IONE AT	TRIBUTES
	011 1 1		

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	there is no response, the system sends additional Option messages, and, after the retry count, considers the SIP phone Out-of-Service.		
407 Authentication	The system can challenge the SIP phone during registration and outgoing call set-up with a SIP 407 Authentication message requiring the SIP phone to provide the Authentication Id and password assigned in the Station Login PGM 443.	OFF ON	ON
181 Being Forwarded	N/A	OFF ON	OFF
100 rel	N/A	OFF ON	OFF
Session Timer Support	During a SIP call or "session", there are no signaling packets sent or received from the SIP Call server. In order to assure a session is still active, the system can periodically send an Update message that the SIP Call server should acknowledge.	OFF ON	OFF
Max Session Timer	When "Session Timer Support" is enabled, the system will verify the session at this timer interval.	180-3600	1800
Min Session Timer	During negotiation with "Session Timer Support" enabled, the system will use this value as the minimum Session expiration timer and will not respond to a SIP Option message prior to expiration of this timer.	60-150	90
Within same firewall with UCP	For a remote SIP phone, the system must communicate with the phone employing the system's "Firewall" address (OFF). Otherwise, the system employs the LAN address to communicate with the SIP phone.	OFF ON	ON
SRTP Usage	When supported by the SIP phone, the system can encrypt media (RTP) packets employing SRTP (Secure Real-Time Protocol).	OFF ON	OFF
1 st CRYPTO	The first priority cryptographic method for SRTP is selected from the below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80		None
2 nd CRYPTO	The second priority cryptographic method for SRTP is selected from the below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80		None
DTMF Type	DTMF dialing signals sent by the SIP phone must be	INBAND,	INFO(DTMF

Table 6.8.7-1 SIP PHONE ATTRIBUTES

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ATTRIBUTE

Table 6.8.7-1 SIP PHONE ATTRIBUTES									
DESCRIPTION	RANGE	DEFAULT							
defined for the system to detect the tones properly. For	2833,	RELAY)							
Inband DTMF, a VoIP channel is required.	INFO(SIMPLE								
	DTMF),								
	INFO(NORTEL								
	NETWORKS),								
	INFO(DTMF								
	RELAY),								
	INFO(TELEPHONE								
	EVENT)								
	AUTO								

Table 6.8.7-1 SIP PHONE ATTRIE

		RELAY),	
		INFO(TELEPHONE	
		EVENT)	
		AUTO,	
	The Short Message Service Protocol (type) must be	Text/plan,	
SMS Type	selected to support SMS.	Text/plan(KR),	AUTO
		Xnipm+xml	
	When the war of a QID share dials a QQ/ID line	∧nipm+xm	
	When the user of a SIP phone dials a CO/IP Line	OFF	055
CO Dial Tone	access code with Enblock dialing, the system can	ON	OFF
	provide virtual dial tone to the user.		
	For compatible SIP phones, the system supports SIP	OFF	
MWI NOTIFY	Subscribe/Notify. When enabled here, the system		OFF
	sends Message Waiting notifications to the SIP phone.	message-summary	
	The SIP Request header Domain field can use the SIP		
	phone's IP address and port (Normal) or for 'KT-FMC'	Normal	N a mag al
Request URI Type	the Request URI Domain field will be system IP and	KT FMC	Normal
	port.		
	To indicate a busy condition to the SIP phone, the		
	system can provide RTP packets with busy tone or the	System Busy Tone,	System
Busy Serve	SIP 486 Busy message. Providing busy tone requires a	486 Busy Message	Busy Tone
	VoIP DSP channel in the system.		,
	The system can route calls to the SIP phone while busy		
	(Multiple). In this case, the SIP phone determines if Call		
Call Initiation Mode	Waiting is supported. Otherwise, if the SIP phone is	Multiple,	Multiple
	busy, the system routes calls based on the busy	Single	
	treatment (Single).		
	The system normally provides the 183 Session		
	Progress SIP message to establish a "Pre-audio"		
	connection. The "Pre-audio" connection permits the		
	system to send tones (CO dial tone or ringback tone) to	183 Session	
Pre Audio Connection	the SIP phone. In addition, the SIP phone can send	Progress,	183 Session
For DTMF	DTMF tones the user dials in response to CO dial tone	200 OK	Progress
	or a remote IVR message. Some SIP phones may		
	require the 200 OK message, which "answers" the call,		
	to allow dialing after the call has been initiated.		
	This feature can be set in case of the following Range:		
	- OFF(REG): Extension name will be updated with		
	displayed in REGISTER message.	OFF(REG),	
Do Not Overwrite	- ON: Extension name will not be updated.	ON,	
Station Name	 OFF(INV): Extension name will be updated with 	OFF(INV),	OFF(REG)
	displayed in INVITE message.	OFF(REG+INV)	
	 OFF(REG+INV): Extension name will be updated 		
	with displayed in REGISTER or INVITE message.		
Follow CO Enblock	Skip "dial tone by system" phase and deliver	OFF	
_	transparent message of CO trunk to SIP phone.		OFF
Process	Transparent message of CO trunk to SIP phone.	ON	l

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Suffix DID Tbl to CLI	If this option is ON, CLI is published by suffixing DID	OFF	OFF
	Conversion table index.	ON	011

Table 6.8.7-1 SIP PHONE ATTRIBUTES

6.8.8 SIP Phone Provisioning - PGM 212

Selecting SIP Phone Provisioning will display the SIP Phone Provisioning Data input page. In the CONFTYPE, select the Ericsson-LG Enterprise SIP Phone type to view/configure the Provisioning data. To view/configure a phone specific configuration file, enter the SIP phone MAC in the Private MAC field. After modifying data, press **[Save]** button to save the configuration. To store provisioning files that have been uploaded to the iPECS UCP, press **[Store uploaded Provision files]**. To view the stored configuration files, press **[View Provision files]**. To download Provision files, press **[Download Provision files]**. To view TLS Cert. files, press **[View TLS Cert files]** button.

PGM Base Function Base		< F	Favorite PGM S	IP Phone Provis×											
Q PGM Search	Θ						Save								
System ID & Numbering Plans						Store u	ploaded Provision files								
System 15 & Numbering Frans	_						View Provision files								
Station Data	- 1					D	ownload Provision files								
Board Based Data		Order	Attribute	v	alue	Range	View TLS cert files								
	-1	1	CONFTYPE	None 🔻											
CO Line Data	- 1			Address must just be enter	ered for Private Conf file										
System Data		2	Private Mac			Private MAC Addr									
	-1			Don't enter MAC address fo	or common Conf file										
Station Group Data	- 1	3	Register Timer	3600		120-3600									
ISDN Line Data		4	Local UDP Port	5060		Port									
	-1	5	Local TCP Port	5060		Port									
SIP Data	~	6	Local TLS Port	5061		Port									
		7	Local RTP Port	23000		Port									
SIP Common Attributes(210) SIP Trunk Status Overview								8	Proxy UDP Port	5060		Port			
SIP CO Attributes(133)															
SIP CO Attributes(155) SIP Registration Status Overview	- 1	10	Proxy TLS Port	5061		Port									
SIP UID Alloc Status Overview	- 1	11	Transport Mode	UDP V											
SIP User ID Attributes(126)	- 1	12	Cert Format	PEM(Normal)											
SIP Phone Attributes(211)	- 1			Preferred Voice Co	dec Priority										
SIP Phone Provisioning(212)		13	1st priority	None 🔻											
Provisioning File View&Delete	- 1	14	2nd priority	None •											
VMEX Station Data(215)		15	3rd priority	None •											
VMEX Connection Table(216)		16	4th priority	None •											
		17	5th priority	None 🔻											
Tables Data				NTP Setti	ng										
Networking Data		18	NTP Server Address			Max 32 Characters									
notwonking Data		19	NTP Interval	1		0-120(Hours)									
H.323 Routing Table		20	NTP Time Zone	(GMT+01:00)COPEN	HAGEN, DENMARK										
T-NET Data	Ξ.	21	DST Usage	OFF T											

Figure 6.8.8-1 SIP Phone Provisioning

The IP8800 series SIP phones from Ericsson-LG Enterprise may be configured automatically by the system. The configuration files are compacted using the Linux/Unix Tar command to create a sip_conf.tar file. The file is then uploaded to the iPECS UCP File system using File Upload under S/W upgrade in the Maintenance Web services. Once uploaded to the File System, the configuration files are unpacked and stored in the provisioning file directory using the [Store] button.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CONFTYPE	To modify or view a Configuration file, from the drop-down, select an Ericsson-LG Enterprise SIP Phone type. The WIT-400HE is for future use.		None
	MAC address must just be entered for Private Conf	file	
Private MAC	There are two types of Config files, a global file for all phones of a specific type and a phone specific file. To view or modify a Phone specific file, enter the MAC address of the SIP phone.	Private MAC address	
	Don't enter MAC address for common Conf file		
Registration Timer	120-3600	3600	
Local UDP Port	When employing UDP transport, this port number is employed for messages from the SIP phone.	Port	5060
Local TCP Port	When employing TCP transport, this port number is employed for messages from the SIP phone.	Port	5060
Local TLS Port	When employing TLS transport, this port number is employed for messages from the SIP phone.	Port	5061
Local RTP Port	The system sends RTP packets to the SIP phone using the first port available starting with this port number.	Port	23000
Proxy UDP Port	The SIP phone will send messages to the UCP system over this SIP Server port.	Port	5060
Proxy TCP Port	The SIP phone will send messages to the UCP system over this SIP Server port.	Port	5060
Proxy TLS Port	The SIP phone will send messages to the UCP system over this SIP Server port.	Port	5061
Transport Mode	The IP packet transport mode used between the system and SIP phone for signaling messages is defined as UDP, TCP or TLS. In case of TLS, the options configured in the SIP Common Attributes (PGM 210) apply.	UPD TCP TLS	UDP
Cert Format	The UCP system supports two certification formats Privacy- Enhanced Electronic Mail (PEM) or Distinguished Encoding Rules (DER).	PEM(Normal), DER (Normal)	PEM(Normal)
	Preferred Voice CODEC PRIO		
1 st priority ~ 5 th priority	When the system negotiates with the SIP phone, the Codec priority specified is employed. If only the 1st. priority Codec is defined, only that Codec is available from the phone. If the Codec is not supported by the remote party, the call will fail.	G.711-u G.711-a G.723.1 G-729 G.722	None
	NTP Setting (Need for TLS)		
NTP Server Address	The IP-8800 series phones employ NTP to determine the time of day. The NTP server id must be configured for the phone.	Max. 32 Characters	
NTP Interval	The phone periodically checks the NTP server to determine the proper time of day.	0-120 (Hours)	1
NTP Time Zone	The phone must be configured with the local Time Zone for proper operation and time display.	GMT	
DST Usage	The phone must be configured to support Daylight Saving	OFF	OFF

Table 6.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
	Time.	ON					
	DSP Setting						
Speaker Volume	The default volume level of SIP phone speaker can be set through the Config file.	1-11, 1-7 (LIP-8850)	6				
Handset Volume	The default volume level of SIP phone handset can be set through the Config file.	1-11, 1-7 (LIP-8850)	6				
Headset Volume	The default volume level of SIP phone headset can be set through the Config file.	1-11, 1-7 (LIP-8850)	6				
Max Handset Volume	The default maximum volume level of SIP phone handset can be set through the Config file.	1-11, 1-7 (LIP8850)	11				
	Digit Map						
Dial Tone Digit	A digit string can be defined in the Config file so that the SIP phone will provide a "Second Dial Tone" to the user.	Max. 256 Digits					
Pause Timer							
Digit Map	Send setup to system numbering plan.	Max. 1000					
Emergency Code	mergency Code The Emergency dial code for the SIP phone can be set through the Config file.						
	System Setting						
Feature Sync.	With Do Not Disturb and Call Forward feature synchronization ON, when SIP Phone changes the DND or Call Forward state, the system is informed of the change in status.	ON OFF	ON				
Auto Idle Timer	Phone goes to idle after this timer when the phone receives disconnect message or signal from system.	00-99 (Sec.)	5				
Check Domain	The IP8800 SIP Phones can be configured to verify the domain in SIP messages match the registered proxy server.	OFF ON	ON				
Telnet Usage	The IP8800 series phones can support Tenet access to the CLI.	Enable Disable	Disable				
WEB Usage	The IP8800 series phones incorporate a Web server for access to the phone configuration files.	Enable Disable	Disable				
Crypt Mode	The system provisioning cryptosystem is configured to employ either RSA or ECC (Elliptic Curve Cryptography)	RSA ECC	RSA				
Store uploaded Pro View Provision files Download Provision	provisioning for the specified common CONFTYPE or specific SIF vision files button: Store the uploaded provision files. button: display all of saved provisioning information. files button: download the provision files. button: display all of saved TLS Cert files information.	P Extension with I	Private MAC.				

Table 6.8.8-1 SIP PHONE PROVISIONING

6.8.9 Provisioning File View & Delete

Selecting Provisioning File View & Delete displays a list of all the Provisioning files stored in the provisioning files directory as shown in Figure 6.8.9-1. Note this does not included files that have been uploaded to the iPECS UCP file system but not "stored" under PGM 212. To delete a file from the provisioning file directory, check the box in front of the file to be deleted then click **[Delete]**.

	PGM Base Function Base	< Favorite PGM	Provisioning	×Q
0	PGM Search			
	System ID & Numbering Plans	View Provisioning files	or Delete	
	Station Data	Check All	File Name	File Size
	Board Based Data			
	CO Line Data			
	System Data			
	Station Group Data			
	ISDN Line Data			
	SIP Data v			
<	SIP Common Attributes(210)			
	SIP Trunk Status Overview			
	SIP CO Attributes(133)			
	SIP Registration Status Overview			
	SIP UID Alloc Status Overview			
	SIP User ID Attributes(126)			
	SIP Phone Attributes(211)			
	SIP Phone Provisioning(212)			
	Provisioning File View&Delete			
	VMEX Station Data(215)			
	VMEX Connection Table(216)			

Figure 6.8.9-1 Provisioning File View & Delete

6.8.10 VMEX Station Data - PGM 215

Selecting VMEX Station data will display the VMEX Station Data input page. Enter a range, and click **[Load]** to view the VMEX Data for all stations in the range. Use the check boxes to indicate the VMEX Station Data to modify. After modifying the data, click **[Save]** to store the VMEX Station Data.

PGM Search O	Enter VME>	Statior	ı Index	(Range (1 - 2400) :			Coad		
System ID & Numbering Plans	VMEX Stati	VMEX Station Index Range 1-20							
Station Data	Check All	Orde	Seq	Station Number	Mobile Number	DID Number	Connection Table Proxy Address Failover		
		1	1	1000			D		
Board Based Data		2		1001			0		
CO Line Data		3		1002			0		
		4		1003			0		
System Data		5		1004			0		
Station Group Data		6		1005			0		
SDN Line Data		7		1006			0		
		8		1007			D		
SIP Data v		9		1008			D		
SIP Common Attributes(210)		10		1009			D		
SIP Trunk Status Overview		11		1010			0		
SIP CO Attributes(133)		12		1011			D		
SIP Registration Status Overview		13		1012			D		
SIP UID Alloc Status Overview		14		1013			D		
SIP User ID Attributes(126)		15		1014			D		
SIP Phone Attributes(211) SIP Phone Provisioning(212)		16		1015					
Provisioning File View&Delete		17		1016					
VMEX Station Data(215)		18		1017					
VMEX Connection Table(216)		19		1018					
es Data		20		1019					

Figure 6.8.10-1 VMEX Station Data

The Virtual Mobile Extension feature permits a remote mobile phone to act as a station within the system employing SIP. For proper operation, various parameters as shown in Table 6.8.10-1 must be configured for the Station data.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	The station number of the VMEX can be modified. The VMEX		
Station Number	station number must not conflict with other numbering plans.	Station	
Otation Number	The station number can be modified here or in PGM 105 and is	Number	
	affected by the 8 Digit Table		
	The Caller Id of the Mobile phone must be entered to allow the		
Mobile Number	system to recognize the VMEX phone. The mobile number		
	here must match the number in the SIP From header.		
DID Number	The DID number associated with the VMEX must be		
	configured to allow for recognition of calls to the VMEX.		
	An index to the Connection Table PGM 216 must be entered.		
Connection Table	One of ten indices can be assigned permitting the use of	0~10	
	multiple SIP Call servers.		
Proxy Address	The SIP Proxy for the VMEX must be configured for access to		

Table 6.8.10-1 VMEX Station Data

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the VMEX.		
Fail-over	The index (Station Number) of the Mobile Extension Table (PGM 236) can be assigned for Fail-over operation. In this case, the Table entry must be configured for fail-over operation.	Station Number	

Table 6.8.10-1 VMEX Station Data

6.8.11 VMEX Connection Table - PGM 216

Selecting VMEX Connection table will display the VMEX Connection Data input page. Use the check boxes to indicate the Table index data to modify.

POM Base Function Base	<	Favorite Pr	GM	VMEX Connection Table	e(216) o							
Q PGM Search O												Save
System ID & Numbering Plans	Check All	Index	Proxy IP	Domain Name	Port	Firewall	E164 Type	To Prefix	From/Contact Prefix	Outband Prefix	Outband Usage	Diversio Usage
Station Data	8	1			5060	Apply •	Unknown 💌				OFF .	ON .
Board Based Data	6	2			5060	Apply •	Unknown •				OFF .	ON .
		3			5060	Apply •	Unknown 🔻				OFF .	ON .
CO Line Data	63	4			5060	Apply •	Unknown •				OFF .	ON .
System Data		5			5060	Apply V	Unknown 🔹				OFF .	ON .
C1001-50-40200	- 63	6			5060	Apply •	Unknown •				OFF .	ON .
Station Group Data		7			5060	Apply *	Unknown •				OFF .	ON .
ISDN Line Data	62	8			5060	Apply •	Unknown •				OFF .	ON .
SIP Data v	0	9			5060	Apply •	Unknown 🔻				OFF .	ON .
Sir Data *	-00	10			5060	Apply •	Unknown •				OFF .	ON .
SIP Common Attibutes[210] SIP Trunk Status Oveniew SIP CO Attibutes[713] SIP Registration Status Oveniew SIP UID Alloc Status Oveniew SIP User ID Attributes[126] SIP Phane Attributes[211] SIP Phane Provisioning[212] Provisioning Fak View&Delete VMEX station Dets[215] VMEX Station Dets[215]												

Figure 6.8.11-1 VMEX Connection Table

With VMEX, the carrier's Mobile network sends calls to and from the Mobile phone directly to the system employing a SIP Call server. For proper operation, the SIP Call server must be configured and special prefix codes must be defined for calls from and to the mobile phone.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Proxy IP	This field assigns the IP address or URL of the Service Provider's SIP Proxy server.		
Domain Name	Domain name of the Service Provider's SIP Call server that is used in SIP "To:" headers.		
Port	Normally SIP signaling messages are sent on port 5060. If desired a different port can be defined.		5060
Firewall	The iPECS UCP can use the Firewall address or LAN address of the UCP module when communicating with the VMEX.	Not Apply	Apply
E164	The structure of the received SIP invite To header from the VMEX can be defined for proper conversion. This field is not presently used.	Unknown International National Local	Unknown
To Prefix	A special prefix code is included in the SIP invite "To" header sent from the iPECS UCP to the carrier's SIP Call server to identify VMEX service	3 to 5 digits	
From Contact Prefix	A special prefix code is included in the SIP invite "From" and "Contact" header sent from the iPECS UCP to the carrier's SIP Call server to identify VMEX service	3 to 5 digits	
Outbound Prefix	A special prefix code that must be in the SIP invite "To" header received by the iPECS UCP for calls from the VMEX. If the prefix received does not match this entry, the call is rejected.	8 digits	

Table 6.8.10-1 VMEX Connection	Table
--------------------------------	-------

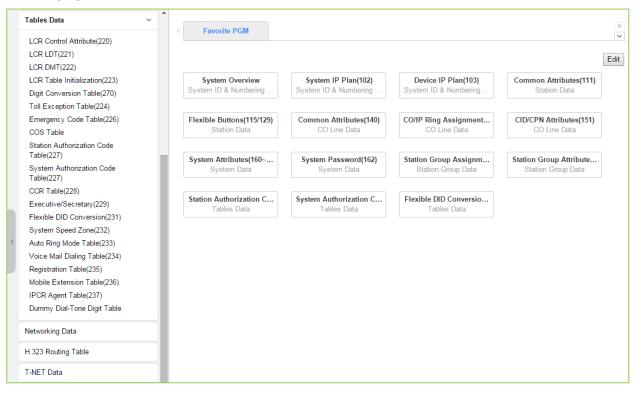
ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Outbound Usage	Not presently used.	OFF ON	OFF
Diversion Usage	Not used	OFF ON	ON

Table 6.8.10-1 VMEX Connection Table

Issue 1.3

6.9 Tables Data

Selecting the Tables Data group returns the sub-menu displayed in the left frame as shown in the following figure.





6.9.1 LCR Control Attributes - PGM 220

Selecting LCR Control Attributes will display the LCR Control Attributes data entry page.

The LCR Tables provide a mechanism to define the database, which will route outgoing calls, particularly long distance, using the most cost effective route. User dialed digits are compared to table entries and modified appropriately based on time of day, day of week, and assigned routes. There are four LCR Tables, LCR Control Attributes, LCR Leading Digit Table, LCR Digit Modification Table, and LCR Initialization Table. Click **[Save]** button after changing Value.

Tables Data		Favorite PGM	LCR Control Att	x			
LCR Control Attribute(220)		avointe i Oiwi	Lett control Au	C			
LCR LDT(221)	_						
LCR DMT(222)							
LCR Table Initialization(223)	Order	Attribute	1	/alue		Range	
Digit Conversion Table(270)	1	LCR Access Mode	Disable			▼	
Toll Exception Table(224)			Monday	Zone 1	' I		
Emergency Code Table(226)			Tuesday	Zone 1	·]		
COS Table			Wednesday	Zone 1	·]		
Station Authorization Code	2	Day Zone	Thursday	Zone 1	·]		
Table(227)			Friday	Zone 1	·		
System Authorization Code			Saturday	Zone 1	·]		
Table(227)			Sunday	Zone 1	·		
CCR Table(228)			Time Of Day Zone 1	0	- 24	00-24	
Executive/Secretary(229)	3	Time Zone 1	Time Of Day Zone 2]-[00-24	
Flexible DID Conversion(231) System Speed Zone(232)			Time Of Day Zone 3]-[00-24	
Auto Ring Mode Table(233)			Time Of Day Zone 1	0	- 24	00-24	
/oice Mail Dialing Table(234)	4	Time Zone 2	Time Of Day Zone 2]-[00-24	
Registration Table(235)			Time Of Day Zone 3		-	00-24	
Mobile Extension Table(236)			Time Of Day Zone 1	0	- 24	00-24	
IPCR Agent Table(237)	5	Time Zone 3	Time Of Day Zone 2		-	00-24	
Dummy Dial-Tone Digit Table			Time Of Day Zone 3]-[00-24	

Figure 6.9.1-1 LCR Control Attributes

The LCR Control Attributes Table, among other items, allows assignment of the LCR Access Modes. The LCR Access Modes defines the user operations that will access the LCR feature. The LCR Access Modes are:

- LCR Disabled
- Loop (user dials '9' or CO/IP Group code (8xx), or presses a Loop button)
- Loop and Internal (user dials digits without a CO/IP Access Code prefix)
- Loop and Direct CO Line (user dials CO Line Access Code (88xx) or pressing a {CO line} button)
- Loop, Direct CO Line, and Internal
- Loop, Direct CO Line, and Internal and Direct Loop

In addition, days of the week are grouped into Zones (Day Zones) and the time of day that the Zone is active is defined (Time Zones). Table 6.9.1-1 provides general descriptive information and input ranges.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Access Mode	This entry defines the effective LCR modes, the modes by which the user can access LCR.	Disable, Only Loop LCR, Internal and Loop LCR, Loop and Direct CO LCR, Internal, Loop and Direct CO LCR, Internal, Loop, Direct CO and Direct Loop LCR	Disable
Day Zone	Each day of the week is assigned to a Day Zone (1~3). The active Day Zone is the Zone assigned to the current day of the week.	Zone1~3	Zone 1
Time Zone1	This entry defines the hours of the day during which each Zone is active for Time Zone 1. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
Time Zone2	This entry defines the hours of the day during which each Zone 2 is active for Time Zone 2. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
Time Zone3	This entry defines the hours of the day during which Zone 3 is active for Time Zone 3. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24

Table 6.9.1-1 LCR ASSIGNMENT

6.9.2 LCR LDT (Leading Digit Table) - PGM 221

Selecting LCR-LDT (Leading Digit Table) will display the LCR-LDT data entry page. Select the LDT Index (1 - 32) and the Index range in the LDT Table then click **[Load]** to edit the LDT Table data. Click **[Save]** button after changing Value.

PGM Base	+ Function Base	< Fi	avorite PGM	LCR LDT(221)	X CO	
Q PGM Searc	ch 🔘	Enter L	DT Table Index (1 - 3	2) :		
			dex Range (0 - 249)			2 Load
System ID & I	Numbering Plans					
Station Data			ble Index 1 ange 1-10			
		Index	•	alue	Range	
Board Based I	Data		LCR Type	Both 🔻	5	
CO Line Data			Compared Digits		Max 12 Digits (Include '*' and '#'))
			Check Password	OFF T		
System Data		1	LDT Zone Number	1	1-100	
Station Group	Data		DMT 1		Must be 6 digits	
ISDN Line Dat			DMT 2		Must be 6 digits	
ISDIV LINE Dat	a		DMT 3		Must be 6 digits	
SIP Data			LCR Type	Both 🔻	, ,	
Tables Data	~		Compared Digits		Max 12 Digits (Include '*' and '#'))
			Check Password	OFF V		
	Attribute(220)	2	LDT Zone Number	1	1-100	
LCR LDT(22			DMT 1		Must be 6 digits	
LCR DMT(22	2) itialization(223)		DMT 2		Must be 6 digits	
	sion Table(270)		DMT 3		Must be 6 digits	
Toll Exceptio			LCR Type	Both 🔻		
	Code Table(226)		Compared Digits		Max 12 Digits (Include '*' and '#'))
COS Table			Check Password	OFF •		
	orization Code	3	LDT Zone Number	1	1-100	
Table(227)	norization Code		DMT 1		Must be 6 digits	
Table(227)	ionzation Code		DMT 2		Must be 6 digits	
CCR Table(2	28)		DMT 3		Must be 6 digits	
Executive/Se	ecretary(229)		LCR Type	Both 🔻	-	
	Conversion(231)		Compared Digits		Max 12 Digits (Include '*' and '#'))
	ed Zone(232)	•	Check Password	OFF V		
Auto Ring M	ode Table(233)	•				-

Figure 6.9.2-1 LCR Leading Digit Table

The Leading Digits Table is used to analyze the user-dialed digits to determine an appropriate Digit Modification Table Index. There are 32 LDT Tables each with up to 249 entries. The applicable LCR Access Modes (LCR Type) and the digits (up to the first 12) dialed by the user are compared with the entries in the Leading Digit Table. In addition, indices to the Digit Modification Table are defined for each of the three (3) Zones and Time Zones configured in the LCR Control Attributes. Table 6.9.2-1 provides a brief description and entries for the Leading Digit Table.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Type	This entry defines the LCR modes that will apply to this LDT index.	Internal, CO Line, Both	Both
Compared Digits	Up to 12 digits that, if matched by the user dialed digits, will	Max. 12 digits	

Table 6.9.2-1 LCR LEADING DIGITS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	access the DMT Indices of the associated Leading Digit	(Include * and #)	
	Table bin.		
	If enabled (ON), when the dialed digits match the LDT	OFF	
Check Password	digits, the system will send second dial tone to request the	ON	OFF
	user input a valid Authorization code.		
	If the LDT Zone Number of a station/co line is equal to this		
LDT Zone Number	value, this LDT table is available to the station/co line.	1-100	1
	(Station Data->Common Attributes(111), CO Line Data-	1-100	I
	>Common Attributes(140))		
	This entry defines the Digit Modification Table index		
DMT1	(00~99) for Day Zone 1. One entry (DMT index) is made for	Must be 6 digits	
	each Time Zone (1~3), six (6) digits. The appropriate index	3 DMT indices	
	is selected for the current Day and Time Zone.		
	This entry defines the Digit Modification Table index		
DMT2	(00~99) for Day Zone 2. One entry (DMT index) is made for	Must be 6 digits	
DIVITZ	each Time Zone (1~3), six (6) digits. The appropriate index	3 DMT indices	
	is selected for the current Day and Time Zone.		
	This entry defines the Digit Modification Table index		
	(00~99) for Day Zone 3. One entry (DMT index) is made for	Must be 6 digits	
DMT3	each Time Zone (1~3), six (6) digits. The appropriate index	3 DMT indices	
	is selected for the current Day and Time Zone.		

Table 6.9.2-1 LCR LEADING DIGITS

6.9.3 LCR DMT (Digit Modification Table) - PGM 222

Selecting LCR DMT (Digit Modification Table) will display the LCR-DMT data entry page. Enter the DMT Table Index range then click **[Load]** to modify the DMT data. Click **[Save]** button after changing Value.

PGM Base Function Base	< F	Favorite PGM LCR DM	AT(222) ×						
Q PGM Search	Enter Index Range (0 - 99) : Coad								
System ID & Numbering Plans		Range 1-3							
Station Data	Index	<	Value	Range					
Board Based Data		Add Digits		MAX 25 Digits (Include '*', '#' and following characters) D : Tone Detect, P : Pause, F : Billing STN					
CO Line Data		Removal Position	1	01-12					
System Data		Number of digits to be removed	0	00-12					
Station Group Data	1	Add Position	1	01-13					
		CO/IP Group	1	01-201					
ISDN Line Data		Alternative DMT Index		00-99					
SIP Data		Networking Number Plan Bin		001-251					
Tables Data v		SMDR code		MAX 4 Digits (Include '*' and '#')					
LCR Control Attribute(220) LCR LDT(221)		Add Digits		MAX 25 Digits (Include '*', '#' and following characters) D : Tone Detect, P : Pause, F : Billing STN					
LCR DMT(222)		Removal Position	1	01-12					
LCR Table Initialization(223) Digit Conversion Table(270)		Number of digits to be removed	0	00-12					
Toll Exception Table(224)	2	Add Position	1	01-13					
Emergency Code Table(226)		CO/IP Group	1	01-201					
COS Table		Alternative DMT Index		00-99					
Station Authorization Code Table(227)		Networking Number Plan Bin		001-251					
System Authorization Code		SMDR code		MAX 4 Digits (Include '*' and '#')					
Table(227) CCR Table(228)		Add Digits		MAX 25 Digits (Include '*', '#' and following characters) D : Tone Detect, P : Pause, F : Billing STN					
Executive/Secretary(229) Flexible DID Conversion(231)		Removal Position	1	01-12					
System Speed Zone(232)	•	Number of digits to be removed	0	00-12					

Figure 6.9.3-1 LCR Digit Modification Table

Using the index determined from the analysis of the LCR Leading Digits Table, the dialed number is modified in accordance with the Digit Modification Table and sent over the CO/IP group assigned for the index.

Digits of the dialed number can be deleted based on the "Removal Position" and "Number of digits to be removed" entries and a digit stream can be inserted in the resulting number. Counting from the first dialed digit, the Removal Position defines the location of the digit where removal begins and, the Number of digits to be removed defines the number of digits to remove. The "Add Digits" are then inserted in the resulting number at the digit position assigned by the Add Position entry. The resulting number is then dialed over the CO/IP path assigned. If the assigned path is not available, the "Alternate DMT index" is used to determine the number and CO/IP path to be used.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Add Digits	This entry defines the digit stream to insert in the number after digit removal. Digits 0~9, '*', '#', and special characters, P: timed Pause D: Dial tone detect F: Billing station number	Max. 25 digits	
Removal Position	This entry defines the position of the digit where removal is to begin, starting with the 1st dialed digit (01).	01~12	1
Number of digits to be removed	This entry defines the number of digits to remove starting at the "Removal Position	00~12	0
Add Position	This entry defines the position in the number, after digit removal, where the Add Digits are inserted.	01~13	1
CO/IP Group	This entry defines the CO/IP Group that the system will attempt to use for the call.	01-21	1
Alternative DMT Index	This entry defines an Alternate Digit Modification Table Index to use if no path is available in the assigned CO/IP Group.	00~99	
Networking Number Plan Bin	This entry defines the Net Number Plan Table bin that the system will attempt to use for a transit out call.	001-251	
SMDR Code	This code is sent to the CM of a T-Net to notify the CM of the local SMDR code required for the CM to complete a call.	Max. 4 digits (Include * and #)	

Table 6.9.3-1 LCR DIGIT MODIFICATION

6.9.4 LCR Table Initialization - PGM 223

Selecting LCR Table Initialization will display the LCR Table Initialization data entry page. Use the check boxes to identify the data items to initialize then click **[Initialize]**.

PGM Base Function Base	< F	avori	ite PGM LCR T	able Initiali	×	
Q PGM Search						
System ID & Numbering Plans	Order		Attribute	,	/alue	Range
				Day Zone 1		Must be 6 digits
Station Data	1		DMT	Day Zone 2		Must be 6 digits
Board Based Data				Day Zone 3		Must be 6 digits
	2		CO Group			01- 201
CO Line Data	3		Alternative DMT Index			00-99
System Data	4		All LCR			
Station Group Data						
ISDN Line Data						
SIP Data						
Tables Data V						
LCR Control Attribute(220)						
LCR LDT(221)						
LCR DMT(222)						
LCR Table Initialization(223)						
Digit Conversion Table(270)						

Figure 6.9.4-1 LCR Table Initialization

The LCR Table Initialization allows global values to be assigned to the Digit Modification Table entries for each Day Zone, the CO Group and DMT. In addition, all LCR data can be initialized to the default (global) values.

6.9.5 Digit Conversion Table - PGM 270

Selecting Digit Conversion Table will display the following page. Enter the Table number (1 through 100), and the index of the Table then click **[Load]** modify the Digit Conversion data. Click **[Save]** button after changing Value.

PGM Base Function Base	<	Favorite PGM	Digit Conversion Table(270) ×				
PGM Search	Enter Ta	able Number (1 - 32) :					S
	Enter In	ndex Range (1 - 200) :		2 6	oad		
System ID & Numbering Plans	Table N	lumber 1					
Station Data		lange 1-20					
Board Based Data	Index	Apply Time	Auto Ring Mode Table (0 - 32)	Dialed Digit (Max 24 Digits)	Changed Digit (Max 24 Digits)	ARS CO Access Code (Max 8 Digits)	Apply Optio
CO Line Data	1	Unconditional •					All
	2	Unconditional •					All
System Data	3	Unconditional •					All
Station Group Data	4	Unconditional •					All
	5	Unconditional •					All
ISDN Line Data	6	Unconditional •					All
SIP Data	7	Unconditional •					All
Tables Data V	8	Unconditional •					All
Tubico Data	9	Unconditional •					All
LCR Control Attribute(220)	10	Unconditional •					All
LCR LDT(221)	11	Unconditional •					All
LCR DMT(222)	12	Unconditional •					All
LCR Table Initialization(223)	13	Unconditional •					All
Digit Conversion Table(270) Toll Exception Table(224)	14	Unconditional •					All
Emergency Code Table(226)	15	Unconditional •					All
COS Table	16	Unconditional •					All
Station Authorization Code	17	Unconditional •					All
Table(227)	18	Unconditional •					All
System Authorization Code Table(227)	19	Unconditional •					All
CCR Table(228)	20	Unconditional •					All

Figure 6.9.5-1 Digit Conversion Table

A Digit Conversion Table is assigned to Stations and CO/IP lines. Digit conversion can be applied according to the Apply Time Type (Unconditional, Day, Night, Timed, or LCR Time) as necessary. Each Table has 200 entries of up to 24 digits. Entries in the Tables can be any digit (0-9), "*", "#","X" (Mask Digit), "F" (Ignore digit). Digit conversion applies to the types of calls assigned for the Apply Option.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Apply time	Digit conversion from this entry is applied for the period indicated by this setting. In addition to the individual Day/Night/Timed mode, LCR and Unconditional settings are available.	Unconditional, Follow Day/Night/Timed, Follow LCR time	Unconditional
Auto Ring Mode table	Digit conversion applies to calls which ring based on the specific Auto Ring Mode table selected.	N/A, 00-32	N/A
Dialed digit	Digit conversion applies to the specific user- dialed digits.	Max. 24 Digits	
Changed digit	Digits are converted to the assigned digit string.	Max. 24 Digits	
ARS CO Access Code	If a selected path is not available for some reason (All Busy, Line Fault etc.) after digit	Max. 8 Digits	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	conversion, Alternative Route Selection (ARS) will connect calls using predefined designated ARS digit in digit conversion table.		
Apply option	Digit conversion applies to the types of calls defined in the Apply Option. The Apply Option is reserved for future use.	All Reserved CO line Disable	All

 Table 6.9.5-1 Digit Conversion table

6.9.6 Toll Exception Table - PGM 224

Selecting Toll Exception Table will display the Toll Table data entry page. Select the desired Allow or Deny Table then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favorit	e PGM Toll Exc	ceptio <mark>×</mark>	
Q PGM Search	Select Table	: Allow A 🔻 Load]	Save
System ID & Numbering Plans	Table Type :	Allow A		
Station Data	Index	Value	Range Max 20 Digits	
Board Based Data	1		(E: Stop, D: Don't Care)	
	2		Max 20 Digits (E: Stop, D: Don't Care)	
CO Line Data	3		Max 20 Digits	
System Data			(E: Stop, D: Don't Care) Max 20 Digits	
Station Group Data	4		(E: Stop, D: Don't Care)	
ISDN Line Data	5		Max 20 Digits (E: Stop, D: Don't Care)	
SIP Data	6		Max 20 Digits (E: Stop, D: Don't Care)	
Tables Data 🗸	7		Max 20 Digits (E: Stop, D: Don't Care)	
LCR Control Attribute(220)	8		Max 20 Digits (E: Stop, D: Don't Care)	
LCR LDT(221) LCR DMT(222)	9		Max 20 Digits (E: Stop, D: Don't Care)	
LCR Table Initialization(223) Digit Conversion Table(270)	10		Max 20 Digits (E: Stop, D: Don't Care)	
Toll Exception Table(224)	11		Max 20 Digits (E: Stop, D: Don't Care)	
Emergency Code Table(226) COS Table	12		Max 20 Digits (E: Stop, D: Don't Care)	
Station Authorization Code Table(227)	13		Max 20 Digits (E: Stop, D: Don't Care)	
System Authorization Code Table(227)	14		Max 20 Digits (E: Stop, D: Don't Care)	
CCR Table(228)	15		Max 20 Digits (E: Stop, D: Don't Care)	
Executive/Secretary(229) Flexible DID Conversion(231)	16		Max 20 Digits (E: Stop, D: Don't Care)	
System Speed Zone(232) Auto Ring Mode Table(233)	• 17		Max 20 Digits	

Figure 6.9.6-1 Toll Exception Table

There are ten Toll restriction Tables arranged in pairs. Each pair consists of an Allow Table and a Deny Table. Allow and Deny entries for Table `A' apply to Station and DISA Class of Service 2/4 and 11. Allow and Deny entries for Table `B' apply to Station and DISA Class of Service 3/4 and 11. Allow and Deny entries for Table `C' apply to Station and DISA Class of Service 5 and 6. Allow and Deny entries for Table `D' apply to Station and DISA Class of Service 8/10 and 11. Allow and Deny entries for Table `D' apply to Station and DISA Class of Service 8/10 and 11. Allow and Deny entries for Table `E' apply to Station and DISA Class of Service 9 to 11.

The Allow and Deny Tables each permit up to 50 entries of up to 20 digits. Entries in the Tables can be any digit (0-9), "#" as a wild card (don't care) digit, or "*" as an end of entry digit. Based on Table entries, stations or DISA users are allowed or denied dialing specified numbers. The following rules apply to establishing restrictions based on the Table entries:

- If the appropriate Allow/Deny Table pair has no entries and COS is 2 to 4, no restrictions are applied. If the COS is 5 or 6, no Long Distance dialing is allowed.
- If entries are only made in the Allow Table, only those numbers entered can be dialed, all other dialed numbers will be restricted.

- If entries are only made in the Deny Table, only those numbers entered will be restricted and all other numbers can be dialed.
- If there are both Allow and Deny entries, the Deny entries are searched. If the dialed number matches a Deny entry, and it is not part of an Allow entry the call is restricted; if no match is found the call is allowed. For example, if 2223 is assigned in the Allow Table and 222 is assigned in the Deny Table numbers starting with 222 are denied except for 2223.

6.9.7 Emergency Code Table - PGM 226

Selecting Emergency Code Table will display the Emergency Code Table data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favo	rite PGM Emerg	jency C X	
Q PGM Search C				s
System ID & Numbering Plans	Index	Value	Range	
Station Data	1 9	11	Max 15 Digits (Include E:Stop, D: Don't Care)	
Board Based Data	2		Max 15 Digits (Include E:Stop, D: Don't Care)	
CO Line Data	3		Max 15 Digits (Include E:Stop, D: Don't Care)	
System Data	4 [Max 15 Digits (Include E:Stop, D: Don't Care)	
Station Group Data	5		Max 15 Digits (Include E:Stop, D: Don't Care)	
ISDN Line Data	6		Max 15 Digits (Include E:Stop, D: Don't Care)	
SIP Data	7		Max 15 Digits (Include E:Stop, D: Don't Care)	
Tables Data 🗸	8		Max 15 Digits (Include E:Stop, D: Don't Care)	
LCR Control Attribute(220) LCR LDT(221)	9		Max 15 Digits (Include E:Stop, D: Don't Care)	
LCR DMT(222)	10		Max 15 Digits (Include E:Stop, D: Don't Care)	
LCR Table Initialization(223) Digit Conversion Table(270)				
Toll Exception Table(224)				
Emergency Code Table(226)				
COS Table				
Station Authorization Code Table(227)				

Figure 6.9.7-1 Emergency Code Table

The Emergency Code Table is used to identify emergency numbers which, when dialed, will override all COS dialing restrictions. An Emergency Code number may be up to fifteen (15) digits in length.

6.9.8 COS Table

Selecting COS Table will display the COS Table data entry page. Data can be filtered to display specific modes and the values to change can be limited to a specific mode and type, Station or System Authorization codes.

	PGM Base Function Base	Favorite PGM	СС	S Table	×					
2	PGM Search	Day: N/A Vight: N/	A 🔻 Tim	ed Ring:	N/A v Filter					
	System ID & Numbering Plans	COS value to change :		▼ Nigh	t N/A 🔻 Timed Rir					
	Station Data		Type : Station System							
	Board Based Data									
	Board Babba Bata		COS T	able						
	CO Line Data	Station Number	Day	Night	Timed Ring					
	System Data		Station	COS						
	System Data	1000	1	1	1					
	Station Group Data	1001	1	1	1					
		1002	1	1	1					
	ISDN Line Data	1003	1	1	1					
	SIP Data	1004	1	1	1					
		1005	1	1	1					
	Tables Data 🗸		1	1	1					
	LOD Original Attribute (200)	1007	1	1	1					
	LCR Control Attribute(220)	1008	1	1	1					
	LCR LDT(221)	1009	1	1	1					
	LCR DMT(222)	1010	1	1	1					
	LCR Table Initialization(223)	1011	1	1	1					
	Digit Conversion Table(270)	1012	1	1	1					
	Toll Exception Table(224)	1013	1	1	1					
	Emergency Code Table(226)	1014	1	1	1					
	COS Table	1015	1	1	1					
	Station Authorization Code	1016	1	1	1					
	Table(227)	1017	1	1	1					
	System Authorization Code	1018	1	1	1					
	Table(227)	1019	1	1	1					
	CCR Table(228)	1020	1	1	1					
	Executive/Secretary(229)	1021	1	1	1					
	Flexible DID Conversion(231)	1022	1	1	1					
	System Speed Zone(232)	1023	1	1	1					
	Auto Ring Mode Table(233)	• 1024	1	1	1					

Figure 6.9.8-1 COS Table

Assignments for COS are made for the Day, Night, and Timed Ring for each station and system Authorization code. The standard Station COS 1 to 11 is assigned to each Authorization code. Note the COS may also be defined in the Station and System Authorization Code Tables.

6.9.9 Authorization Codes Table - PGM 227

There are two Authorization Code Tables, the System Authorization Code Table and Station Authorization Code Table. Selecting Station Authorization Code Table will display the data entry page in Figure 6.9.9-1 and selecting System Authorization Code Table will display the page in Figure 6.9.9-2. Enter a Station or System Index range and click **[Load]** to modify the data. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favorite PGM	Station Autho	×		
PGM Search	Enter Station Range				Coad
System ID & Numbering Plans	Station Range 1000-	1050			
Station Data		Auth Cod	le / COS valu		
Station Data	 Enter Station F 	Range :		Authorization	
Board Based Data	Enter Station F	Range :		Day 1 🔻	Night 1 • Timed Ring 1 •
CO Line Data			Range Sav	/e	
System Data	Station Number <u>↓</u> ª	Authorization Code		COS	
	1000	****	Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
Station Group Data	1001		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
ISDN Line Data	1002		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
	1003		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
SIP Data	1004		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
ables Data 🗸 🗸	1005		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
_CR Control Attribute(220)	1006		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
CR LDT(221)	1007		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
CR DMT(222)	1008		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
CR Table Initialization(223)	1009		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
Digit Conversion Table(270)	1010		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
Foll Exception Table(224)	1011		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
Emergency Code Table(226)	1012		Day 1 🔻	Night 1 🔻	Timed Ring 1 V
OS Table	1013		Day 1 🔻	Night 1 🔻	Timed Ring 1 🔻
Station Authorization Code Table(227)	1014		Day 1 V	Night 1 🔻	Timed Ring 1 V
System Authorization Code	1015		Day 1 🔻	Night 1 🔻	Timed Ring 1 V
Table(227)	1016		Day 1 🔻	Night 1 🔻	Timed Ring 1 V
CCR Table(228)	1017		Day 1 🔻	Night 1 V	Timed Ring 1 V
Executive/Secretary(229)	1018		Day 1 🔻	Night 1 🔻	Timed Ring 1 V
Flexible DID Conversion(231) System Speed Zone(232)	1019		Day 1 V	Night 1 V	Timed Ring 1 V
Auto Ring Mode Table(233)	1020		Day 1 V	Night 1 V	Timed Ring 1 V

Figure 6.9.9-1 Station Authorization Code Table

Auth Code / COS value to change						
\odot	Enter Station Range :	-	Authorization Code :			
	Enter Station Range :	-	Day 1 Vight 1 Vimed Ring 1 V			
Range Save						

User can change the authorization code and COS for the station range across the board and click the Range save button to save.

PGM Base Function Base	< Favorite PGM		3		
PGM Search	Enter System Index Ran	ge (1 - 2800) :			Coad
System ID & Numbering Plans	System Index Range Fro				
Station Data	 Enter System Inde 		S value to o	bange Day 1 ▼ Nig	ght 1 🔻 Timed Ring 1 🔻
Board Based Data			Range Sa	ave	
CO Line Data	Index Authorization (Code	COS		Remark
System Data	1		ght 1 🔻	Timed Ring 1 🔻	
Station Group Data	2		ght <u>1</u> ▼ ght <u>1</u> ▼	Timed Ring 1 •	
ISDN Line Data	4		ght 1 🔻	Timed Ring 1 V	
SIP Data	5		ght 1 🔻	Timed Ring 1 V	
Tables Data V	6		ght <u>1</u> ▼ ght <u>1</u> ▼	Timed Ring 1 •	
LCR Control Attribute(220)	8		ght 1 🔻	Timed Ring 1 V	
LCR LDT(221)	9	Day 1 🔻 Ni	ght 1 🔻	Timed Ring 1 🔹	
LCR DMT(222)	10	Day 1 🔻 Ni	ght 1 🔻	Timed Ring 1 🔹	
LCR Table Initialization(223)	11	Day 1 🔻 Ni	ght 1 🔻	Timed Ring 1 •	
Digit Conversion Table(270)	12	Day 1 🔻 Ni	ght 1 🔻	Timed Ring 1 🔻	
Toll Exception Table(224)	13	Day 1 🔻 Ni	ght 1 🔻	Timed Ring 1 🔻	
Emergency Code Table(226)	14	Day 1 V	ght 1 🔻	Timed Ring 1 V	
COS Table	15	Day 1 V	ght 1 🔻	Timed Ring 1 V	
Station Authorization Code Table(227)	16	Day 1 V	ght 1 🔻	Timed Ring 1 V	
System Authorization Code	17	Day 1 V	ght 1 🔻	Timed Ring 1 •	
Table(227)	18	Day 1 V	ght 1 🔻	Timed Ring 1 V	
CCR Table(228)	19		aht 1 ▼	Timed Ring 1 V	
Executive/Secretary(229) Flexible DID Conversion(231)	20		ght 1 ▼	Timed Ring 1 V	

Figure 6.9.9-2 System Authorization Code Table

COS value to change								
Enter System Index Range :	-	Day 1 ▼ Night 1 ▼ Timed Ring 1	•					
	Range Sa	ave						

User can change COS for the system index range across the board and click the Range save button to save.

Authorization codes are employed to control access to system resources and facilities. Walking COS, CO/IP Group access, DISA calls and certain Call Forward types may require input of a valid Authorization code. Codes up to 12 digits may be entered into the system database.

The Station Authorization Code Table entries are associated with individual stations. The number of system Authorization codes varies based on the configuration; the number of available codes is provided in Table 2.1-1. Each Authorization code is assigned a separate COS for Day, Night and Timed Ring mode operation.

The system will allow the station associated Authorization codes to be duplicated. However, the iPECS will not allow duplicate or conflicting system level codes unless the '*' and Authorization Table indexing is used to enter codes. Conflicting codes occur when a shorter code contains the first digits of a longer code, i.e. 12 conflicts with 1234.

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default "0", and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count cannot exceed the LD digit counter, default 8 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny numbers.
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny numbers.

Table 6.9.9-1 STATION CLASS-OF-SERVICE

Table 6.9.9-2 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, "1" or "0") and Table C	Local Call only (LD Code, "1" or "0") and Table C	Local Call only (LD Code, "1" or "0") and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction

Table 6.9.9-2 STATION/CO LINE COS TOLL RESTRICTIONS

6.9.10 Customer Call Routing Table - PGM 228

Selecting CCR Table will display the Customer Call Routing data entry page. Enter an index to select the appropriate CCR Table and click **[Load]** to modify the table. Click **[Save]** button after changing Value.

Enter Inde	x (1 - 200)			
	-	-		1440
-				STA :
				STA :
-				STA :
				STA :
				STA :
6		N/A	- ·	STA :
7	7 Destination	N/A	-	STA :
8	8 Destination	N/A	▼	STA :
9	9 Destination	N/A	v	STA :
10	0 Destination	N/A	•	STA :
11	Busy Destination	ATD •		
12	Error Destination	ATD •		
13	NoAns Destination	ATD •		
14	CCR 1 Digit Only	OFF T		
15	Temporary Announcement Use	OFF •		
16	Temporary Announcement No (0 - 200, 0: Unused)		0	
	Customer Order 10 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 5	Customer Call Routing Table Index 1 Order L ^a Attribute 1 1 Destination 2 2 Destination 3 3 Destination 4 4 Destination 5 5 Destination 6 6 Destination 7 7 Destination 8 8 Destination 9 9 Destination 10 0 Destination 11 Busy Destination 12 Error Destination 13 NoAns Destination 14 CCR 1 Digit Only 15 Temporary Announcement Use	Customer Call Routing Table Index 1 Order 1° Attribute Type 1 1 Destination N/A 2 2 Destination N/A 3 3 Destination N/A 4 4 Destination N/A 5 5 Destination N/A 6 6 Destination N/A 7 7 Destination N/A 8 8 Destination N/A 9 9 Destination N/A 10 0 Destination N/A 11 Busy Destination ATD 12 Error Destination ATD 13 NoAns Destination ATD 14 CCR 1 Digit Only OFF • 15 Temporary Announcement Use OFF •	Customer Call Routing Table Index 1 Order 1ª Attribute Type Value 1 1 Destination N/A • • 2 2 Destination N/A • • 3 3 Destination N/A • • 4 4 Destination N/A • • 5 5 Destination N/A • • 6 6 Destination N/A • • 7 7 Destination N/A • • 9 9 Destination N/A • • 10 0 Destination N/A • • 11 Busy Destination ATD • • 12 Error Destination ATD • • 13 NoAns Destination ATD • • 14 CCR 1 Digit Only OFF • • •

Figure 6.9.10-1 Customer Call Routing Table

The system incorporates IVR (Interactive Voice Response) capabilities called CCR (Customer Call Routing). After, or during a System Announcement, the caller may dial digits to select a destination or route for the call. The CCR Table defines the destination type and value associated with the digit dialed by the caller in response to the specified Announcement (01-70). The available destinations are shown in Table 6.9.10-1 below.

Up to 70 single-level Audio Text menus may be assigned or, multi-level menu structures (maximum 70 levels) can be established using one menu as a destination for the previous level.

Each CCR announcement has a re-route destination for Busy, Error, or No Answer routing.

The Re-route destinations available are Tone, Attendant, Station Group, and a VSF System Announcement.

The table includes a "CCR 1 Digit Only" option. When this option is enabled, the system will accept only a single digit as the entry. When the option is OFF, the caller can dial multiple digits that are accepted as DISA dialing.

Temporary announcement can be used in holiday, or emergency case.

When Temporary Announcement Usage is set to ON, programmed Temp Announcement is played instead of CCR table announcement.

This Temporary Announcement can be set also by Remote Access - by using [Remote Access to

Mobile Extension] feature.

After access to Mobile Extension,

to turn On Temp Announcement, 8 + CCR Announcement Number.

to turn Off Temp Announcement, 9 + CCR Announcement Number.

Table 6.9.10-1 CCR DESTINATIONS	(PGM 228)
---------------------------------	-----------

TYPE	DESCRIPTION						
01	Route to a Station						
02	Route to a Station Group						
03	Route with System Speed Dial						
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)						
05	Route to VSF Announcement						
06	Route to VSF Announcement and disconnect						
07	Route to Networked Station						
08	Conference Room						
09	Internal Page						
10	External page						
11	All Call Page						
12	Route to voice mail (station group/station number)						
13	Company Directory (USA Only)						
14	Record VM Greeting (USA Only)						
15	Room type Conf Group Join						

6.9.11 Executive/Secretary Table - PGM 229

Selecting Executive/Secretary will display the Executive/Secretary Table data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Fa	avorite PGM	Executive/Se.	×					[
Q PGM Search									Save
System ID & Numbering Plans	Index	Executive	Secretary		Call Executive If			Secretary	Executive
Station Data				Secretary	Secretary DND	Grade	Secretary	Auto Ans	Group
Board Based Data	1			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
CO Line Data	2			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
CO Line Data	3			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
System Data	4			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable v	0
Station Group Data	5			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
·	6			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
ISDN Line Data	7			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
SIP Data	8			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
	9			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
Tables Data 🗸	10			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
LCR Control Attribute(220)	11			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
LCR LDT(221)	12			Disable •	Disable 🔻	12	Disable •	Disable 🔻	0
LCR DMT(222)	13			Disable •	Disable 🔻	12	Disable 🔻	Disable 🔻	0
LCR Table Initialization(223)	14			Disable •	Disable 🔻	12	Disable 🔻	Disable 🔻	0
Digit Conversion Table(270)	15			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
Toll Exception Table(224) Emergency Code Table(226)	16			Disable •	Disable 🔻	12	Disable 🔻	Disable 🔻	0
COS Table	17			Disable 🔻	Disable •	12	Disable 🔻	Disable 🔻	0
Station Authorization Code	18			Disable •	Disable •	12	Disable 🔻	Disable •	0
Table(227)	19			Disable 🔻	Disable 🔻	12	Disable 🔻	Disable 🔻	0
System Authorization Code Table(227)	20			Disable •	Disable •	12	Disable 🔻	Disable •	0
CCR Table(228)	21			Disable •	Disable •	12	Disable 🔻	Disable •	0
Executive/Secretary(229)	22			Disable •	Disable •	12	Disable •	Disable 🔻	0
Flexible DID Conversion(231)	23			Disable •	Disable •	12	Disable •	Disable 🔻	0
System Speed Zone(232)	24			Disable v	Disable •	12	Disable •	Disable 🔻	0
Auto Ring Mode Table(233)	•			(B) (1) -		40			6

Figure 6.9.11-1 Executive/Secretary Table

Stations can be paired as Executive/Secretary pairs so that when the Executive enters DND, intercom and transferred calls are automatically routed to the Secretary. An Executive may have only one Secretary however, a Secretary can be assigned to multiple Executives. A Secretary of one pair may be the Executive of another however, assignments that form a loop-back are not allowed. In addition, when active, the Secretary can be assigned to receive the Executive's voice messages, refer to Common Attributes section 6.2.2.

The "CO Call to Sec" option will route all CO calls to the Executive to the defined Secretary's station regardless of the Executive's station status. The "Call Exec if Sec DND" option will route Executive calls to the Executive if the Secretary is in DND. The Exec Grade permits higher grade Executives to override the Executive/Secretary Forward feature to call a lower grade Executive (Korea only). The highest grade is 1 and the lowest grade is 12. The "ICM Call to Sec" option will route all internal calls to the Executive, except for calls from higher or same grade executives, to the defined Secretary's station regardless of the Executive's station status.

Refer to Table 6.9.11-1 for a description of the Executive/Secretary parameters and the input required

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Executive	The Station numbers of the Executive is assigned here.	Station Number	
Secretary	The Station number of the Secretary is assigned here.	Station Number	
CO Call to Secretary	If desired, all incoming CO calls to the Executive route to the Secretary's station regardless of the Executive's status.	Enable/ Disable	Disable
Call Executive if Secretary is in DND	If the Secretary is in DND, Executive calls can be routed to the Executive.	Enable/ Disable	Disable
Executive grade	Higher or equal grade Executives can override the Executive/Secretary Forward feature to call a lower grade Executive. Highest grade: 01, Lowest grade: 12	01~12	12
ICM Call to Secretary	If this option is ON, all internal calls to the Executive station, except for calls from the same or higher executives, are routed to the Secretary's station regardless of the Executive's status. The default value for Korea, India, Israel, Turkey, and Thailand is Enable	Enable Disable	Disable
Secretary Auto Answer	When enabled, calls from the Executive to the secretary employ the HF ICM signaling mode.	Enable Disable	Disable
Executive Group	When assigned to the same group, lower grade Executives can call higher grade Executives overriding the Executive/Secretary feature.	00-50	0

Table 6.9.11-1 Executive/Secretary Table

6.9.12 Flexible DID Conversion Table - PGM 231

Selecting Flexible DID Conversion Table will display the Flexible DID Table data entry page. Enter an index range and click [Load] to modify the DID Conversion data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of DID indices when saved. Click **[Save]** button after changing Value.

Tables Data	~	<	Favorite PGN	Λ	Flexible DID Conv	rersi ×							2
LCR Control Attribute(220)						C							
LCR LDT(221)		Enter Inc	dex Range (0 -	9999) -			2	Load					Save
LCR DMT(222)		Entor In	uox rungo (o					Load					
LCR Table Initialization(223)		Index Ra	ange 1									e All Table	
Digit Conversion Table(270)		Order ↓	a Check All		Attribute	Туре		Value	VMID	Ran	ge	All Table	e Data
Toll Exception Table(224)		1		Day R	ing Mode Destination	N/A	•		STA:				
Emergency Code Table(226)		2			Ring Mode Destination	N/A			STA:				
COS Table			-	•	0				STA:				
Station Authorization Code		3			Ring Mode Destination	N/A	•						
Table(227)		4		Rerou	te Destination	N/A			STA:				
System Authorization Code		5		ICLID	Table Usage	OFF V							
Table(227) CCR Table(228)	- 1	6			enancy Group Ring Mode Table)					0-100			
Executive/Secretary(229)		7		MOH		Refer To CO Hold	•						
Flexible DID Conversion(231)		8		Ring 1	one	0				0-16 (D:N/A)		
System Speed Zone(232)	_	9		Name									
Auto Ring Mode Table(233)													
Voice Mail Dialing Table(234)									ICI	M Tenancy			
Registration Table(235)		Index	Day Ring M		Night Ring Mode	Timed Ring Mode	Reroute	ICLID Tab		Group	MOH	Ring	Nan
Mobile Extension Table(236)			Destinatio	on	Destination	Destination	Destination	Usage	(Auto	o Ring Mode Table)		Tone	
IPCR Agent Table(237) Dummy Dial-Tone Digit Table	- 1	1	N/A		N/A	N/A	N/A	OFF		,	Refer To CO Hold	0	

Figure 6.9.12-1 Flexible DID Conversion Table

When the received DID digits are converted, the resulting four-digit number may be used as an index to the Flexible DID Conversion Table. The Flexible DID Table index is used when DID Line is assigned a Conversion type 2, refer to the DID Service attributes section 6.4.6. Using the index from the digit conversion a destination for the DID call is determined by a Look-up in the Flexible DID Conversion Table. The destination for the call is generally defined as a type and a value. The type selects options such as station, station group, VSF, etc. The value specifies the particular station, station group, etc. In addition, ICLID routing can be enabled for DID lines or can be assigned an index to the Auto Ring Mode table.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Day Ring Mode Destination	The destination for Day Ring mode is entered here.	N/A, Station,	
Night Ring Mode Destination	The destination for Night Ring mode is entered here.	Station Group, System Speed,	
Timed Ring Mode Destination	The destination for Timed Ring mode is entered here.	PBX Transfer with System Speed,	
Reroute Destination	The destination for calls that need reroute service is entered here	VSF Announcement, VSF Announcement and disconnect, Networking, Conference Room, Internal Page,	

Table 6.9.12-1 FLEXIBLE DID CONVERSION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		External page,	
		All Call Page,	
		Voice Mail,	
		ICLID Table,	
		Company Directory,	
		Record VM Greeting,	
		Room type Conf	
		Group Join	
	A DID Conversion Table index can be	OFF	
ICLID Table	assigned to employ ICLID routing, section 6.7.4.	ON	OFF
ICM Tenancy Group	A DID Conversion Table Index can be	0~100	0
(Auto Ring Table)	assigned to employ an ICM Tenancy		
	Group Auto Ring Table to determine		
	Day/Night/Timed operation mode.		
МОН	A Music source is assigned so that calls to	Refer to CO Hold,	Refer to CO
	the destination receive audio from the	Internal/External	Hold
	source while on hold.	Music 1,	
		External Music 2,	
		VSF MOH,	
		SLT MOH 1,	
		SLT MOH 2,	
		SLT MOH 3,	
		SLT MOH 4,	
		SLT MOH 5,	
		VSF MOH 2,	
		VSF MOH 3	
Ring Tone	A call routed with the DID Conversion	0-12	0
	Table will employ the selected Ring tone to		
	alert the destination.		
Name	An eleven character Name can be	11 characters	
	configured for the Table bin		

Table 6.9.12-1 FLEXIBLE DID CONVERSION

6.9.13 System Speed Zone Table - PGM 232

Selecting System Speed Zone will display the System Speed Zone data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Fa	avorite PGM System Spe	ed ×	
System ID & Numbering Plans	Index	Feature	Value	Save
		Speed Bin Range In Zone	20200 - 31999	
Station Data		Station Range to Access Zone	1000 -	
Board Based Data	1	Toll Checking	ON V	
CO Line Data		Auth Checking	ON T	
		Speed Bin Range In Zone	-	
System Data		Station Range to Access Zone	<u> </u>	
Station Group Data	2	Toll Checking	OFF •	
· · · · · · · · · · · · · · · · · · ·		Auth Checking	OFF V	
ISDN Line Data		Speed Bin Range In Zone	-	
SIP Data	3	Station Range to Access Zone	-	
	3	Toll Checking	OFF V	
Tables Data ~		Auth Checking	OFF T	
LCR Control Attribute(220)		Speed Bin Range In Zone	-	
LCR LDT(221)	4	Station Range to Access Zone	-	
LCR DMT(222)	4	Toll Checking	OFF T	
LCR Table Initialization(223)		Auth Checking	OFF T	
Digit Conversion Table(270)		Speed Bin Range In Zone	-	
Toll Exception Table(224)	5	Station Range to Access Zone	-	
Emergency Code Table(226)	5	Toll Checking	OFF T	
COS Table		Auth Checking	OFF T	
Station Authorization Code Table(227)		Speed Bin Range In Zone	-	
System Authorization Code	6	Station Range to Access Zone	-	
Table(227)	0	Toll Checking	OFF •	
CCR Table(228)		Auth Checking	OFF •	
Executive/Secretary(229)		Speed Bin Range In Zone	-	
Flexible DID Conversion(231)	7	Station Range to Access Zone	-	
System Speed Zone(232)	I	Toll Checking	OFF V	
Auto Ring Mode Table(233)	-	Auth Checking	OFF T	

Figure 6.9.13-1 System Speed Zone

System Speed Dial Bins assigned to a zone are only available to stations allowed access to that zone. Each zone can be assigned to apply the appropriate Station and CO Line COS for the speed dial number prior to dialing. Available parameters and values are shown in Table 6.9.13.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT								
Speed Bin Range in Zone	A range of Speed Dial Bins is assigned to a zone.	20000-31999	20200-31999								
Station Range to Access	A range of Stations is permitted access to the	1000~	1000~3399								
Zone	System Speed dials in the Zone.										
Toll Checking	Toll restriction can be applied to Speed Dials in the	OFF	ON								
	Zone.	ON									
Auth Checking	The user can be required to enter a valid	OFF	ON								
	Authorization code to use Speed Dials in the zone.	ON									

Table 6.9.13-1 SYSTEM SPEED ZONES

6.9.14 Auto Ring Mode Table - PGM 233

Selecting Auto Ring Mode Table will display the Auto Ring Mode Table data entry page. Enter the desired index (Tenancy Group) and click **[Load]** to enter data. Click **[Save]** button after changing Value.

	PGM Base Function Base		Favorite	PGM Auto Ring M	NodeS	
Q	PGM Search		Enter Index (0	- 100) : Lo	ad	
s	ystem ID & Numbering Plans		Auto Ring Mod	le Table Index 1		
s	tation Data		Week	Index	Value	Range
в	oard Based Data			Day Start Time	0900	Must be 4 Digits(hhmm) 0000-2359
С	O Line Data		Monday	Night Start Time	1800	Must be 4 Digits(hhmm) 0000-2359
s	ystem Data		wonuay	Timed Ring Start Time		Must be 4 Digits(hhmm) 0000-2359
s	tation Group Data			Timed Ring End Time		Must be 4 Digits(hhmm) 0000-2359
15	SDN Line Data			Day Start Time	0900	Must be 4 Digits(hhmm) 0000-2359
s	IP Data		Tuesday	Night Start Time	1800	Must be 4 Digits(hhmm) 0000-2359
Т	ables Data 🗸 🗸			Timed Ring Start Time		Must be 4 Digits(hhmm) 0000-2359
	LCR Control Attribute(220)			Timed Ring End Time		Must be 4 Digits(hhmm) 0000-2359
	LCR LDT(221) LCR DMT(222)			Day Start Time	0900	Must be 4 Digits(hhmm) 0000-2359
	LCR Table Initialization(223) Digit Conversion Table(270)			Night Start Time	1800	Must be 4 Digits(hhmm) 0000-2359
	Toll Exception Table(224)		Wednesday	Timed Ring Start Time		Must be 4 Digits(hhmm) 0000-2359
	Emergency Code Table(226) COS Table			Timed Ring End Time		Must be 4 Digits(hhmm) 0000-2359
	Station Authorization Code Table(227)			Day Start Time	0900	Must be 4 Digits(hhmm) 0000-2359
	System Authorization Code Table(227)			Night Start Time	1800	Must be 4 Digits(hhmm) 0000-2359
	CCR Table(228)		Thursday	Timed Ring Start Time		Must be 4 Digits(hhmm)
	Executive/Secretary(229)			-		0000-2359 Must be 4 Digits(hhmm)
	Flexible DID Conversion(231) System Speed Zone(232)			Timed Ring End Time		0000-2359
	Auto Ring Mode Table(233)	-		Day Start Time	0900	Must be 4 Digits(hhmm) 0000-2359

Figure 6.9.14-1 Auto Ring Mode Table

The system can be programmed to automatically select the Ring and COS based on time of day and day of the week. Three Ring & COS modes are available, Day, Night, and Timed. The Ring assignments are as defined in CO Ring Assignments, section 6.4.5. COS assignments are made in the Station COS and DISA COS programs discussed in sections 6.2.6 and 6.5.6, respectively.

The start times for Day, Night and start and end times for Timed modes are entered for each day of the week. After the Timed mode "End time", the mode returns to previous mode. The Attendant can override the Automatic selection and select the desired mode (Day, Night, and Timed) manually. A separate Auto Ring Table is established for each ICM Tenancy Group in (indices 1 ~ 100) and for the system (index 00).

6.9.15 Voice Mail Dialing Table - PGM 234

Selecting Voice Mail Dialing Table will display the Voice Mail Dialing data entry page. Click **[Save]** button after changing Value.

Tables Data V	< Fa	avorite PGM Voice N	lail Diali×	
LCR Control Attribute(220)			U	
LCR LDT(221)				
LCR DMT(222)	Order	Index	Value	Range
LCR Table Initialization(223)	order	macx	Prefix :	
Digit Conversion Table(270)	1	Voice Mail 1 (Put)		Max 12 Digits (Include*,#,P,D,F) P : Pause, D : DND, F : Flash
Toll Exception Table(224)			Suffix :	
Emergency Code Table(226)	2	Voice Mail 2 (Get)	Prefix :	Max 12 Digits (Include*,#,P,D,F)
COS Table			Suffix :	P : Pause, D : DND, F : Flash
Station Authorization Code	3	Voice Mail 3 (Busy)	Prefix :	Max 12 Digits (Include*,#,P,D,F)
Table(227)	3	voice Mail 5 (Busy)	Suffix :	P : Pause, D : DND, F : Flash
System Authorization Code Table(227)			Prefix :	Max 12 Digits (Include*,#,P,D,F)
CCR Table(228)	4	Voice Mail 4 (No Answer)	Suffix :	P : Pause, D : DND, F : Flash
Executive/Secretary(229)			Prefix :	Max 12 Digits (Include*,#,P,D,F)
Flexible DID Conversion(231)	5	Voice Mail 5 (Error)	Suffix :	P : Pause, D : DND, F : Flash
System Speed Zone(232)				
Auto Ring Mode Table(233)	6	Voice Mail 6 (DND)	Prefix :	Max 12 Digits (Include*,#,P,D,F) P : Pause, D : DND, F : Flash
Voice Mail Dialing Table(234)			Suffix :	F. Fause, D. DND, F. Hash
Registration Table(235)	7	Voice Mail 7	Prefix :	Max 12 Digits (Include*,#,P,D,F)
Mobile Extension Table(236)			Suffix :	P : Pause, D : DND, F : Flash
IPCR Agent Table(237)	8	Voice Mail 8 (CLI)	Prefix :	Max 6 Digits (Include*,#,P,D,F)
Dummy Dial-Tone Digit Table	0	VOICE MAILO (CEL)	Suffix :	P : Pause, D : DND, F : Flash
Flexible Button Default Table(239) Preset Flexible Button Default(240)	9	Voice Mail 9 (Disconnect)		Max 12 Digits (Include*,#,P,D,F) P : Pause, D : DND, F : Flash
reser revible button belaut(240)	10	CLI Usage	Not Use 🔻	
Vetworking Data	11	Fixed CLI Length	10	10-20
	12	Fixed CLI Pad	0	0-9.*.#

Figure 6.9.15-1 External Voice Mail Dialing Table

When an external Voice Mail system is used that connects to an SLT port, a digit sequence must be defined for the system to signal various call characteristics to the Voice Mail system. The external Voice Mail uses the sequences to determine appropriate announcements or further call routing. The Table permits the definition of digits as either a prefix or suffix to other digits (station number for mailbox identification). Sequences are defined for such call characteristics as Put Mail, Get Mail, No Answer call, etc. as described in Table 6.9.15-1.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Voice Mail 1 (Put)	Code sent when the Voice Mail is to receive a call to record a message. Put Mail	Prefix Suffix (Max. 12 Digits- Include *, #, P, D, F)	
Voice Mail 2 (Get)	Code to send when the voice mail is to playback a recorded message. Get Mail	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 3 (Busy)	Code to send when the voice mail is to receive a	Prefix	

Table 6.9.15-1 VOICE MAIL	DIAL FUNCTIONS
---------------------------	----------------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	call when the user is busy. Busy Mail	Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 4 (No Answer)	Code to send when the voice mail is to receive a call when the user did not answer. No Answer Mail	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 5 (Error)	Code to send when the voice mail is to receive a call when a user dialing error exists. Error Mail	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 6 (DND)	Code to send when the voice mail is to receive a call when the user is in DND. DND Mail	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 7	When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 8 (CLI)	When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 9 (Disconnect)	Code to send when the call disconnects. Disconnect Mail. When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
CLI Usage	Not use: Do not send CLI Real CLI length: Send CLI without padding before prefix code. Fixed CLI length: Send CLI with fixed length	Not use, Real CLI length, Fixed CLI length	Not use
Fixed CLI Length	Define length of CLI	10-20	10
Fixed CLI Pad	Define padding character for CLI	0-9,*,#	0

Table 6.9.15-1 VOICE MAIL DIAL FUNCTIONS

6.9.16 Registration Table - PGM 235

Selecting Registration Table will display the Registration data entry page. Click **[Save]** button after changing Value.

Tables Data	× ^	< Fa	vorite PGM	Rec	jistration Ta	x	
LCR Control Attribute(220)						9	
LCR LDT(221)							
LCR DMT(222)		Index	MAC Addr	ess	Maximu	n Port	Device ID
LCR Table Initialization(223)		1	000000000000		0		0
Digit Conversion Table(270)		2	000000000000		0		0
Toll Exception Table(224)							
Emergency Code Table(226)		3	0000000000		0		0
COS Table		4	00000000000	00	0		0
Station Authorization Code Table(227)		5	0000000000	00	0		0
System Authorization Code Table(227)							
CCR Table(228)							
Executive/Secretary(229)							
Flexible DID Conversion(231)							
System Speed Zone(232)							
Auto Ring Mode Table(233)							
Voice Mail Dialing Table(234)							
Registration Table(235)							
Mobile Extension Table(236)							
IPCR Agent Table(237)							
Dummy Dial-Tone Digit Table							
Flexible Button Default Table(239)							
Preset Flexible Button Default(240)							

Figure 6.9.16-1 MAC Registration Table

When multiple iPECS UCP are located on the same LAN, it may be desirable to register add-on devices employing the Registration Table.

Table 6.9.16-1 MAC REGISTRATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MAC Address	Enter the MAC address of a device to register		000000000000000000000000000000000000000
Maximum Port	Enter the maximum number of ports (channels) for the device.	00-99	0
Device ID	A device Id may be entered for registration. The Device Ids available are shown at the bottom of the System Overview Web page.	0-255	0

6.9.17 Mobile Extension Table - PGM 236

Selecting Mobile Extension Table will display the Mobile Extension data entry page. Enter a Station Range then click **[Load]** to modify data. Click **[Save]** button after changing Value.

Tables Data 🔍	<		Favorite	PGM			Mobile Extensio	on Table((36)	ĸ									
LCR Control Attribute(220)									Y	0									
LCR LDT(221)	En	ter Station	Range :					1	Load										Save
LCR DMT(222)	Sh	ation Rang	e 1000-1045																
LCR Table Initialization(223)		0074.91						Notify	Retry					Announcement				Suffix DID	Tel Nun
Digit Conversion Table(270)		Station Sumber	PGM Auth	Usage	É.	Station Group Call Through	VSF Notify	Retry	Interval	Notity CI	1 6	II Back	Delay Timer (0.255)	0 - 200 (0 :	CO Group	Telephone Number	CLI Number	Thi To	As CL
Toll Exception Table(224) Emergency Code Table(226)								(1.9)	(1-3 min)				factor.	Unused)				cu	Num
COS Table	1	1000	Disable •	Disable	•	Disable •	Unused •	3	3	Caler	•	OFF .	0	0	1			OFF .	OFF
Station Authorization Code	. 1	1001	Disable •	Disable	•	Disable •	Unused •	3	3	Cafer	•	OFF .	0	0	1			OFF .	QFF
Table(227)		1002	Disable •	Disable	•	Disable •	Unused •	3	3	Caler	•	OFF .	0	0	1			OFF ·	OFF
System Authorization Code		1003	Disable •	Disable	٠	Disable •	Unused •	3	3	Cater	•	OFF .	0	0	1			OFF .	QFF
Table(227)	1	1004	Disable •	Disable	٠	Disable •	Unused •	3	3	Caler	•	OFF .	0	0	1			OFF .	QFF
CCR Table(228)	1	1005	Disable •	Disable	•	Disable •	Unused •	3	а	Caler	•	OFF .	0	0	1			OFF .	OFF
Executive/Secretary(229)	1	1005	Disable •	Disable	•	Disable •	Unused •	3	3	Caler	•	OFF .	0	0	1			OFF .	OFF
Flexible DID Conversion(231)	1	1007	Disable •	Disable		Disable •	Unused •	3	3	Cater		OFF .	0	0	t			OFF .	OFF
System Speed Zone(232) Auto Ring Mode Table(233)	1	1008	Disable •	Disable		Disable •	Unused •	3	3	Caller		OFF .	0	0	1			OFF .	OFF
Voice Mail Dialing Table(234)		1009	Desable •	Disable		Disable •	Unused •		3	Caler		OFF .	0	0	1			OFF +	OFF
Registration Table(235)	1 A A	1010	Disable •	Disable		Disable •	Unused •		3			OFF .		0				OFF +	OFF
Mobile Extension Table(236)		1011	Disable •	Disable		Disable •	Unused •		3			OFF .		0				OFF +	OFF
PCR Agent Table(237)		1012	Disable •	Disable		Disable •	Unused •		3	Caler		OFF +		0				OFF +	OFF
Dummy Dial-Tone Digit Table		1013	Disable •	Disable		Disable +	Unused •		3			OFF +		0				OFF .	OFF
Flexible Button Default Table(239)		1014	Disable •	Disable					3			OFF +		0				OFF .	OFF
Preset Flexible Button Default(240)		1015				Disable •	Unused •			Caler					1				
			Disable •	Disable	•	Disable •	Unused •		3	Caller		OFF .		0				OFF .	CIFF
stworking Data		1016	Disable •	Disable	•	Disable •	Unused •		3	- windi		OFF .		0	1			OFF •	OFF
323 Routing Table		1017	Disable •	Disable	•	Disable •	Unused •		3	Cafer		OFF .		0	1			OFF ·	OFF
· · · · · · · · · · · · · · · · · · ·		1018	Disable •	Disable	•	Disable •	Unused •	3	3	Cafer	•	OFF .	0	0	1			OFF .	OFF
NET Data		1019	Disable •	Disable	•	Disable •	Unused •	3	3	Cafer	•	OFF .	0	0	1			OFF .	OFF
ine Data		1020	Disable •	Disable	•	Disable •	Unused •	3	3	Cafer	•	OFF .	0	0	1			OFF ·	OFF
	1	1021	Disable •	Disable	٠	Disable •	Unused •	3	3	Cater	•	OFF .	0	0	1			OFF .	QFF
evice Login	1	1022	Disable •	Disable	٠	Disable •	Unused •	3	3	Caller	•	OFF .	0	0	1			OFF *	OFF
ICS Standard	. 1	1023	Disable •	Disable		Disable *	Unused *	3	3	Caller	•	OFF .	0	0	1			OFF +	OFF

Figure 6.9.17-1 Mobile Extension Table

A mobile phone can be used in conjunction with an iPECS Phone. The Mobile phone can access system resources available to the user's wired phone and will receive ring for incoming iPECS calls. The user may be allowed to enable the Mobile extension and define the mobile number. The system can be defined to employ a specific CO/IP Line Group to place calls to the Mobile phone. In addition, the mobile phone can be assigned to receive Station group calls to the primary extension. In addition, parameters for notification of new VSF voice mails can be defined.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT							
PGM Authority	The user may be allowed to activate the Mobile Extension feature.	Disable Enable	Disable							
Usage	The Mobile Extension feature can be enabled or the Table can be used to configure Fail-Over operation.	Disable Mobile Ext Fail Over	Disable							
Station Group Call through	When the associated station is a member of a Station group (ACD, Circular, Ring or Terminal), group calls can be sent to the active Mobile Extension.	Disable Enable	Disable							
VSF Notify	When enabled the active Mobile Extension will receive notification by the system when the user has a new message in the built-in Voice Mail.	Unused Use	Unused							
Notify Retry	The number of attempts the system will make to complete a notification when receiving busy/no-answer is defined.	1 – 9 times	3							
Retry Interval	This field defines the time between notification attempts. If a notification fails, the system will retry after the timer expires.	1 – 3 minutes	3							

Table 6.9.17-1	MOBILE EXTENSION TABLE
----------------	------------------------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Notify CLI	When the system sends CLI to the Mobile Extension, the CLI can be either the original caller's CLI or the CLI of the station.	Caller My Ext.	Caller
Call Back	If "ON", an incoming Mobile Extension call will be released before answered and system places a call to Mobile Extension. After the Mobile answers, the dial tone is provided and the Mobile Extension can place internal or external calls.	OFF ON	OFF
Delay Timer	When the Mobile Extension requests a Call Back, the system will place the Call Back after expiration of this Delay timer.	0 ~ 255 seconds	0
Announcement	A system announcement can be recorded to provide the Mobile caller with a menu of dialing commands available to the remote Mobile user, remote control.	0-200	0
CO Group	The CO/IP Line group used to call (ring) the Mobile Extension is defined.	0~201	1
Telephone Number	The telephone number of the Mobile extension or Fail-over number of the station must be assigned for proper operation.		Not assigned
CLI Number	When the Mobile Telephone number and CLI do not match, the CLI entered here is used to authorize incoming calls from the Mobile.		Not assigned
Suffix DID table index to the CLI	An incoming DID call is passed to the Mobile Extension with the original caller's CLI and the Flexible DID Conversion Table index. (format: 'original CLI' + '*' + 'DID Table Index')	OFF ON	OFF
Tel Num As CLI Num	If this option is set to ON, Telephone Number is used the same as CLI Number. That means, when the mobile user calls to his station, if Telephone Number or CLI Number is matched with his mobile number, then the mobile user hears system dial tone, and calling to outside is available. If this option is set to OFF, only CLI Number is matched, system dial tone is served.	OFF/ON	ON

6.9.18 IPCR Agent Table - PGM 237

Selecting IPCR Agent Ta ble will display the IPCR Agent data entry page. Click **[Save]** button after changing Value.

Tables Data V	< Eavor	ite PGM		×	
LCR Control Attribute(220)	Favor		PCK Agent	C	
LCR LDT(221)	Enter the	number of IPCR \$	Server (1 - 10) :		Save
LCR DMT(222)	Enter the	Agent Order (1 - 2	2400) :		2 Load
LCR Table Initialization(223)	IPCR Num Agent Ord				
Digit Conversion Table(270)	, igoint ora				
Toll Exception Table(224)	IPCR Age	nt License : 0 / T	otal(3300)		
Emergency Code Table(226)	Index Ja	Agent ID ↓ª	Object Type	Linked Object	
COS Table	1	(ACR)	N/A 🔻		
Station Authorization Code Table(227)	2	(ACR)	N/A T		
System Authorization Code	3	(ACR)	N/A T		
Table(227)	4	(ACR)	N/A •		
CCR Table(228)	5	(ACR)	N/A T		
Executive/Secretary(229)	6	(ACR)	N/A T		
Flexible DID Conversion(231)	7	(ACR)	N/A T		
System Speed Zone(232)	8	(ACR)	N/A T		
Auto Ring Mode Table(233)					
Voice Mail Dialing Table(234)	9	(ACR)	N/A T		
Registration Table(235)	10	(ACR)	N/A T		
Mobile Extension Table(236)	11	(ACR)	N/A •		
IPCR Agent Table(237)	12	(ACR)	N/A •		
Dummy Dial-Tone Digit Table	13	(ACR)	N/A T		
Flexible Button Default Table(239)	14	(ACR)	N/A T		
Preset Flexible Button Default(240)	15	(ACR)	N/A 🔻		
Preset Hexible Dutton Delaut(240)	16	(ACR)	N/A 🔻		
Introduing Data	17	(ACR)	N/A 🔻		
letworking Data	18	(ACR)	N/A T		
1.323 Routing Table	19	(ACR)	N/A 🔻		
	20	(ACR)	N/A 🔻		
-NET Data	21	(ACR)	N/A •		
Zone Data	22	(ACR)	N/A •		

Figure 6.9.18-1 IPCR Agent Table

This table correlates an Object Type (Station or CO/IP Line) to the IP CR (Call Recording) Agent index in the IP CR server. The iPECS UCP can support up to 2400 agents on up to ten different IPCR serves. The table is also employed with third-party servers for call recording. When a call is placed or received by the station or CO/IP Line, the call is recorded in the IP CR server under the Agent Id (Order number).

6.9.19 Dummy Dial-Tone Digit Table

Selecting Dummy Dial-Tone Digit Table will display the Dummy Dial-Tone Digit data entry page. Click **[Save]** button after changing Value.

ables Data 🗸 🗸	< Favorite	PGM Dummy	y Dial-To×	
LCR Control Attribute(220) LCR LDT(221)			0	[
LCR DMT(222)	Index	Value	Denne	l
LCR Table Initialization(223)	Index	value	Range	
Digit Conversion Table(270)	1		Max 6 Digits ('0~9', '*', #', 'X')	
Toll Exception Table(224)	2		Max 6 Digits ('0~9', **', #', 'X')	
Emergency Code Table(226)	3		Max 6 Digits ('0~9','*','#','X')	
COS Table	4		Max 6 Digits ('0~9', '*', '#', 'X')	
Station Authorization Code	5		Max 6 Digits ('0~9', '*', '#', 'X')	
Table(227)	6		Max 6 Digits ('0~9', '*', '#', 'X')	
System Authorization Code Table(227)	7		Max 6 Digits ('0~9','*',#','X')	
CCR Table(228)	8		Max 6 Digits ('0~9', '*', '#', 'X')	
Executive/Secretary(229)	9		Max 6 Digits ('0~9', '*', '#', 'X')	
Flexible DID Conversion(231)	10		Max 6 Digits ('0~9', '*', '#', 'X')	
System Speed Zone(232)	11		Max 6 Digits ('0~9', '*', '#', 'X')	
Auto Ring Mode Table(233)	12		Max 6 Digits ('0~9', '*', #', 'X')	
Voice Mail Dialing Table(234)	13		Max 6 Digits ('0~9', '*', '#', 'X')	
Registration Table(235) Mobile Extension Table(236)	14		Max 6 Digits ('0~9', '*', '#', 'X')	
IPCR Agent Table(237)	15		Max 6 Digits ('0~9', '*', #', 'X')	
Dummy Dial-Tone Digit Table	16		Max 6 Digits ('0~9', '*', #', 'X')	
Flexible Button Default Table(239)	17		Max 6 Digits ('0~9', '*', #', 'X')	
Preset Flexible Button Default(240)	18		Max 6 Digits ('0~9', '*', #', 'X')	
	19		Max 6 Digits ('0~9', '*', #', 'X')	
etworking Data	20		Max 6 Digits ('0~9', '*', '#', 'X')	

Figure 6.9.19-1 Dummy Dial-Tone Digit Table

When digit conversion is programmed, the CO line is seized after digit conversion is completed and therefore user cannot hear the CO dial tone from PX until completing digit conversion. For this case, a dummy dial tone can be programmed. Pressing one of pre-programmed digits ('0–9', '*', '#', X') will provide CO dial tone to the user regardless of CO line seizure.

6.9.20 Flexible Button Default Table – PGM 239

Selecting Flexible button default table will display the below page. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Tables Data V	< Favorite	PGM Fle	xible Button Defa×			
LCR Control Attribute(220)						
LCR LDT(221)	Enter Index Rar	nge(1 - 30) :		2	Load	Save
LCR DMT(222)	Index Range 1					
LCR Table Initialization(223)			-			
Digit Conversion Table(270)	Check All	Button	Туре	Value	Label	
Toll Exception Table(224)		Flex Button 1	N/A	•		
Emergency Code Table(226)		Flex Button 2	N/A	▼		
COS Table		Flex Button 3	N/A	•		
Station Authorization Code Table(227)		Flex Button 4	N/A	v		
System Authorization Code		Flex Button 5	N/A	•		
Table(227)		Flex Button 6	N/A	•		
CCR Table(228)		Flex Button 7	N/A	•		
Executive/Secretary(229)		Flex Button 8	N/A	•		
Flexible DID Conversion(231)		Flex Button 9	N/A	•		
System Speed Zone(232)		Flex Button 10	N/A	•		
Auto Ring Mode Table(233)		Flex Button 11	N/A	•		
Voice Mail Dialing Table(234)						
Registration Table(235)		Flex Button 12	N/A	•		
Mobile Extension Table(236)		Flex Button 13	N/A	•		
IPCR Agent Table(237)		Flex Button 14	N/A	•		
Dummy Dial-Tone Digit Table		Flex Button 15	N/A	▼		
Flexible Button Default Table(239)		Flex Button 16	N/A	•		
Preset Flexible Button Default(240)		Flex Button 17	N/A	▼		
		Flex Button 18	N/A	•		
Networking Data		Flex Button 19	N/A	•		
		Flex Button 20	N/A	•		
H.323 Routing Table	0	Flex Button 21	N/A	•		
T-NET Data		Flex Button 22	N/A	■ [
		Flex Button 23	N/A	•		
Zone Data		Flex Button 23				
Device Login			N/A	• [

Figure 6.9.20-1 Flexible Button Default Table

The system provide 30 default flexible button table so administrator can be configured each table for using 'Preset Flexible Button Default (240).

Administrator can assign the type among the below types on Flexible button.

ТҮРЕ	REMARK						
N/A	Empty (unassigned), may be defined by the user.						
CO Line	Assigns button to access a defined CO/IP line.						
CO Group	Assigns button to access a free line in the CO/IP Group.						
Loop	Assigns button to access a loop line.						
Station Number	Assigns button as DSS/BLF for the assigned station number.						
Programming (Numbering Plan)	Assigns button to dial a code from the Flexible Numbering Plan, see Appendix B section.						
Programming (PGM)	Assigns button to perform a User Program function from the Fixed Numbering Plan, Appendix B section.						
Station Speed Bin	Station Speed Dial bin.						
System Speed Bin	System Speed Dial bin.						
Net Station Number	Refer to section Network Numbering Plan Table - PGM 324.						
U-Loop	U-Loop button for call wait of internal & external call						

6.9.21 Preset Flexible Button Default – PGM 240

Selecting Preset flexible button default will display the below page. Click **[Save]** button after changing Value.

		< Fav	orite PGM P	reset Flexible B 🗙		
LCR Control Attribute(220)						
LCR LDT(221)						Save
LCR DMT(222)				Condition (And Operation)		
LCR Table Initialization(223) Digit Conversion Table(270)		Priority	Station Type	No. of Flexible Buttons Station Range (E	Blank means all station range.) Preset Index	
Toll Exception Table(224)		1	All	AII •	N/A 🔻	
Emergency Code Table(224)		2	All	AII	N/A 🔻	
COS Table		3	All		N/A 🔻	
Station Authorization Code		4	All	All	N/A 🔻	
Table(227)		5	All	All	N/A 🔻	
System Authorization Code Table(227)		6	All	All	N/A •	
CCR Table(228)		7	All	All	N/A 🔻	
Executive/Secretary(229)		8	All	AIL	N/A T	
Flexible DID Conversion(231)		9	All	All	N/A 🔻	
System Speed Zone(232)		10	All	All	N/A T	
Auto Ring Mode Table(233)		11	All	All T	N/A T	
Voice Mail Dialing Table(234)		12	All		N/A ▼	
Registration Table(235)		13	All		N/A T	
Mobile Extension Table(236)		14	All		N/A ▼	
IPCR Agent Table(237) Dummy Dial-Tone Digit Table		15	All		N/A ▼	
Flexible Button Default Table(239)		16	All		N/A T	
Preset Flexible Button		17	All			
Default(240)		18	All			
	- 1	19	All			
etworking Data		20	All			
323 Routing Table		21	All			
NET Data		22	All			
NET Data		23	All			
one Data		24	All	All		
evice Login		25	All			
	-	26	All			

Figure 6.9.21-1 Preset Flexible Button Default

Administrator can assign Preset flexible button table to the station automatically by default. Before connecting the station, administrator has to set this table according to Priority, Station Type, the number of Button, Station Range, and check the preset Index (1~30). The preset index means the range of Flexible Button Default Table (PGM 239).

6.10 Networking Data

Selecting the Networking Data program group will display the sub-menu displayed in the left frame as shown in the following figure.

PGM Base Function Base	< Favorite PGM			
Q PGM Search				
System ID & Numbering Plans	System IP Plan(102) System ID & Number	Device IP Plan(103) System ID & Number	Common Attributes(Station Data	
Station Data		Oystellin D & Number	Otation Data	
Board Based Data	Flexible Buttons(11 Station Data	Common Attributes(CO/IP Ring Assign CO Line Data	
CO Line Data		OO Line Data	CO Line Data	
System Data	CID/CPN Attributes(CO Line Data	System Attributes(1 System Data	System Password(1 System Data	
Station Group Data				
ISDN Line Data	Station Group Assig Station Group Data	Station Group Attri Station Group Data	Station Authorizati Tables Data	
SIP Data				
Tables Data	System Authorizati Tables Data	Flexible DID Conve Tables Data		
Networking Data ~				
Net Basic Attributes(320)				
Net Supplementary Attr(321)				
Net CO Line Overview				
Net CO Line Attributes(322)				
Net Numbering Plan Overview				
Net Numbering Plan(324)				
Net Feature Code Table(325)				

Figure 6.10-1 Networking Data

6.10.1 Network Basic Attributes - PGM 320

Selecting Network Basic Attributes will display the Network Basic Attributes entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favo	orite PGM Net Bas	ic At X		
Q PGM Search	D				
System ID & Numbering Plans	Order <u>↓</u> ª	Attribute	Value	Range	
	1	Net Enable	OFF V		
Station Data	2	NET Retry Count	0	00-99	
Board Based Data	3	NET CNIP Enable	ON 🔻		
	4	NET CONP Enable	OFF T		
CO Line Data	5	NET Signal Method	Facility 🔻		
System Data	6	NET Cas Enable	OFF T		
System Data	7	NET VPN Enable	OFF T		
Station Group Data	8	NET CC Retain Mode	OFF T		
ISDN Line Data	9	NET IP AUTH	OFF •		
SIP Data					
Tables Data					
Networking Data ~					
Net Basic Attributes(320)					
Net Supplementary Attr(321)					
Net CO Line Overview					
Net CO Line Attributes(322)					
Net Numbering Plan Overview					
Net Numbering Plan(324)					
Net Feature Code Table(325)					

Figure 6.10.1-1 Network Basic Attributes

Basic Network Attributes are used to enable networking and to configure the basic characteristics of the network as detailed in Table 6.10.1-1.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Enable	For operation, the Networking function must be enabled here. Note a license is required.	OFF ON	OFF
Net Retry Count	Not used.	00-99	0
Net CNIP Enable	The name of calling station is sent to the called iPECS UCP. CNIP is shown in the LCD of the called party's station.	OFF ON	ON
Net CONP Enable	The name of the connected station is sent to the calling iPECS UCP system. The CNOP is shown in the LCD of the calling party's station.	OFF ON	OFF
Net Signal Method	Network signaling can be sent in the Facility or User QSIG supplementary service message.	UUS/ Facility	Facility
Net Cas Enable	Not used.	OFF ON	OFF
Net VPN Enable	Not used.	OFF ON	OFF
Net CC Retain Mode	This field defines the Network signaling retain mode for CCBS service.	OFF ON	OFF

Table 6.10.1-1 NETWORK BASIC ATTRIBUTES

6.10.2 Network Supplementary Attributes - PGM 321

Selecting Network Supplementary Attributes will display the Network Supplementary Attributes entry page. Click **[Save]** button after changing Value.

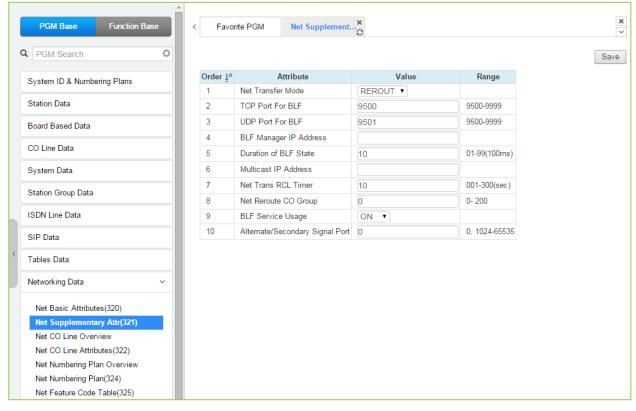


Figure 6.10.2-1 Network Supplementary Attributes

Supplementary attribute configure signaling for supplementary features and characteristics of the BLF Manager.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
Net Transfer Mode	Call Forward and Transfer over the network employs the selected Rerouting or Join method	REROUT JOIN	REROUT				
TCP Port for BLF	The TCP/IP port for BLF message packets to BLF Manager is defined.	9500-9999	9500				
UDP Port for BLF	The UDP port for BLF message packets to BLF Manager is defined.	9500-9999	9501				
BLF Manager IP	The IP Address of BLF Manager server is required when iPECS UCP is configured with eMG80 systems in the Network		0.0.0.0				
Duration of BLF State	The system sends BLF messages to the BLF Manager at intervals of this timer.	01-99 (100 ms)	10				
Multicast IP	The multicast IP address for BLF service.		0.0.0.0				
Net Trans Recall timer	When a call forward or transfer does not receive a response for the Network system, the call recalls the transferring party at expiration of this timer.	001-300 (msec)	10				

Table 6.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
NET Reroute CO Group	If an outgoing SIP call receives no response after expiration of this timer, the call is rerouted to the alternate CO line.	1-200	0
BLF Service Usage	BLF Manager support must be enabled for use.	OFF ON	ON
Alternate/Secondary signal port	This signal port is used to add an alternate or secondary receiving signal port. A default receiving signal port is TCP 1720 and an additional signal port will be opened if this field is configured to valid value. When the system is installed behind xDSL modem, the problem of consecutive second call can happen by uncontrolled H.323 ALG function at xDSL modem. This field can be used to solve the problem of consecutive second call.	0, 1024-65535	0

Table 6.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTES

6.10.3 Net CO Line Overview

Selecting Net CO Line Overview will return the overview display page.

PGM Base Function Base	< Favorite F	GM	Net CO Lin	×		
PGM Search	Device Type			Not CO G	oup ↓ª Net CO Type ↓ª	
	T1IM GW	1 LINE	Normal	0	PSTN	
System ID & Numbering Plans	T1IM GW	2	Normal	0	PSTN	
	T1IM GW	3	Normal	0	PSTN	
Station Data	T1IM GW	4	Normal	0	PSTN	
Board Based Data	T1IM GW	5	Normal	0	PSTN	
	T1IM GW	6	Normal	0	PSTN	
CO Line Data	T1IM GW	7	Normal	0	PSTN	
Custom Data	T1IM GW	8	Normal	0	PSTN	
System Data	T1IM GW	9	Normal	0	PSTN	
Station Group Data	T1IM GW	10	Normal	0	PSTN	
	T1IM GW	11	Normal	0	PSTN	
SDN Line Data	T1IM GW	12	Normal	0	PSTN	
SIP Data	T1IM GW	13	Normal	0	PSTN	
	T1IM GW	14	Normal	0	PSTN	
Tables Data	T1IM GW	15	Normal	0	PSTN	
	T1IM GW	16	Normal	0	PSTN	
Networking Data V	T1IM GW	17	Normal	0	PSTN	
Net Basic Attributes(320)	T1IM GW	18	Normal	0	PSTN	
Net Supplementary Attr(321)	T1IM GW	19	Normal	0	PSTN	
Net CO Line Overview	T1IM GW	20	Normal	0	PSTN	
Net CO Line Attributes(322)	T1IM GW	21	Normal	0	PSTN	
Net Numbering Plan Overview	T1IM GW	22	Normal	0	PSTN	
°	T1IM GW	23	Normal	0	PSTN	
Net Numbering Plan(324)	T1IM GW	24	Normal	0	PSTN	

Figure 6.10.3-1 Network CO Line Overview

6.10.4 Network CO Line Attributes - PGM 322

Selecting Network CO Line Attributes will display the Network CO Line Group entry page. Enter a valid CO/IP Line range and click **[Load]** to enter the Network CO Line data. Click **[Save]** button after changing Value.

	PGM Base Function Ba	ase	< Favori	te PGM Net CO Lin	e X			×
	Q PGM Search	0	Enter CO F	Range (1 - 998) :			2 Load	Save
	System ID & Numbering Plans		CO Range					
	Station Data		<mark>Order </mark> <u>↓</u> a 1	Attribute Networking CO Group	Value 0	Range 0-24		
	Board Based Data		2	Network CO Line Type	PSTN V			
	CO Line Data							
	System Data							
	Station Group Data							
	ISDN Line Data							
	SIP Data							
<	Tables Data							
	Networking Data	~						
	Net Basic Attributes(320)							
	Net Supplementary Attr(321)							
	Net CO Line Overview							
	Net CO Line Attributes(322)							
	Net Numbering Plan Overview							
	Net Numbering Plan(324)							
	Net Feature Code Table(325)							



ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
Networking CO Group	The CO/IP Lines in the assigned group are employed as Network CO Lines, connecting to other systems in the network.	00-24	0				
Network CO Line Type	The CO/IP Line is assigned for use by the network as a PSTN (carrier) or connection to the network.	NET PSTN	PSTN				

Table 6.10.4-1 NETWORK CO LINE ATTRIBUTES

6.10.5 Network Numbering Plan Table Overview

Selecting Network Numbering Plan Overview will return the overview display page.

PGM Base Function Bas	•	: 	Favo	nite PGM		Hot Nu	mbering Plan O	rerview o													1
PGM Search	0		Networking	Numbering	Net CO	CPN ISDN	CPN INFORMATION1	CPN	CPN	CPN	ALT I	DCP		PSTN	PSTN		Firewall		SMDR Dgt	Site F	Emergenc
System ID & Numbering Plans	_	Te.	Type 1ª	Plan 1ª	Group	10	19	INFORMATION2	INFORMATION3	INFORMATION4	SPEED Ad	If them	Repeat	Enblock	Method	Code	Routing	Auth COS	Hide	4ame	Rerout
Station Data	_	0	NET										No	No	NET	OFF		140	No		0
0	_	1	NET										140	140	NET	OFF		No	No		0
Board Based Data	_	2	NET									5588	No	No	NET	OFF	ON	No	No		0
CO Line Data		3	NET									5588	No	No	NET	OFF	ON	No	No		0
		4	NET									5688	No	140	NET	OFF	ON	No	No		0
System Data		5	NET									5688	No	No	NET	OFF	ON.	No	No		0
		8	NET									5588	No	No	NET	OFF	ON	No.	No		0
Station Group Data		7	NET									5588	No	No	NET	OFF	ON	No	No		0
ISDN Line Data	_	8	NET									5588	No	No	NET	OFF	ON	No	No		0
CODIT LINE DATA	_	9	NET									5588	No	No	NET	OFF	ON.	No	No		0
SIP Data		10	NET									5588	No	No	NET	OFF	ON	No	No		0
	- 8	11	NET									6688	No	No	NET	OFF	ON	No	No		0
Tables Data	_	12	NET									5588	No	140	NET	OFF	ON	No	No		0
Networking Data		13	NET									5588	No	No	NET	OFF	ON	No	No		0
Networking Data		14	NET									5588	No	No	NET	OFF	ON	No	No		0
Net Basic Attributes(320)		15	NET									5588	No	No	NET	OFF	ON	No	No		0
Net Supplementary Attr(321)		16	NET									5588	No	No	NET	OFF	ON	No	No		0
Net CO Line Overview		17	NET									5588	No	No	NET	OFF	ON	No	No		0
Net CO Line Attributes(322)		18	NET									5588	No	No	NET	OFF	ON	No	No		0
Net Numbering Plan Overview		19	NET									5588	No	No	NET	OFF	ON	No	No		0
Net Numbering Plan(324)		20	NET									6688	No	No	NET	OFF	ON	No	No		0
		21	NET										No	No	NET	OFF		No	No		0
Net Feature Code Table(325)		22	NET										No	No	NET	OFF		No	No		0
T-NET Data	_	23	NET										No	No	NET	OFF		No	No		0
riner osta		24	NET										No	No	NET	OFF		No	No		0
Zone Data		25	NET										No	No	NET	OFF		No	No		0
		26	NET										No	No	NET	OFF		No	No		0
Device Login		20	NET										No	No	NET	OFF		No	No		0
1000 Dr. 1 - 1		28	NET										No	No	NET	OFF		No	No		0
UCS Standard		29	NET										No	No	NET	OFF		No	No		0

Figure 6.10.5-1 Network Numbering Plan Table overview

6.10.6 Network Numbering Plan Table - PGM 324

Selecting Network Numbering Plan Table will display the Network Numbering Plan Table data entry page. Enter a valid table index and click **[Load]** to enter the Network Numbering Plan data. Click **[Save]** button after changing Value.

PGM Base Function B	ase	< Favor	ite PGM Net Numbering	×	
PGM Search	0	Enter Inde	x (0 - 251) : Load		
System ID & Numbering Plans			g Numbering Plan Table Index 1		
Station Data		Order <u>↓</u> a	Attribute	Value	Range
		1	Networking Type	NET V	
Board Based Data		2	Numbering Plan Code		Max 16 Digits (include**','#')
CO Line Data		3	Networking CO Group		0-24
CO Line Data		4	CPN ISDN INFORMATION		Max 16 Digits
System Data		5	CPN INFORMATION 1		Enter IP Address
Station Group Data		6	CPN INFORMATION 2		Enter IP Address
		7	CPN INFORMATION 3		Enter IP Address
ISDN Line Data		8	CPN INFORMATION 4		Enter IP Address
SIP Data		9	SETUP WAIT RESPONSE TIME	0	0, 3-15 sec
	_	10	ALT SPEED NUMBER		20000 - 31999
Tables Data	_	11	UCP IP Address		
Networking Data	~	12	UCP Port Number	5588	0-9999
		13	Digit Repeat	No 🔻	
Net Basic Attributes(320)		14	PSTN Enblock	No 🔻	
Net Supplementary Attr(321)		15	PSTN CLI Method	NET •	
Net CO Line Overview		16	CO Attendant Code CLI	OFF •	
Net CO Line Attributes(322)		17	Firewall Routing	ON V	
Net Numbering Plan Overview	_ 11	18	Transit Out Auth COS	No 🔻	
Net Numbering Plan(324)		19	SMDR Dgt Hide	No 🔻	
Net Feature Code Table(325)		20	Site Name		Max 12 Characters
H.323 Routing Table		21	Emergency Reroute Timer	0	0-10 sec
		22	Tunneled SIG MSG	OFF •	
T-NET Data		23	Alternate/Secondary Signal Port	0	0-65535
Zone Data		24	Local Route ID		Max 15 Characters
Dovino Login		25	Remote Route ID		Max 15 Characters
Device Login	-	26	Sending Name option	OFF 🔹	

Figure 6.10.6-1 Network Numbering Plan Table

The Network Numbering Plan establishes the digit strings that make-up the numbering plan and associated routing for each Plan code.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Network Type	The type or use of the code is defined as directed to the PSTN (carrier) or a Networked system.	NET PSTN	NET
Numbering Plan Code	This field defines the digits, 0 ~ 9 that make up a Network Numbering Plan code. An '*' will represent any digit. To assign the code for the stations in another system, enter the common station number digits followed by "#".	Max. 16 digits (Include * and #)	
Networking CO	The Numbering Plan CO Group indicates the Network	00-24	

Table 6.10.6-1 NETWORK NUMBERING PLAN TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Group	CO/IP Group that is used for the connection. A '00' entry is an internal net station number.		
CPN ISDN Information	When an ISDN Line is used to place a network call, the CPN ISDN Information and the network Number are used as the Called party number.	Max. 16 digits	
CPN Information	 When a VoIP channel is used to place a network call, the CPN used is the IP address associated with the VoIP channel. 1: 00 CPN INFORMATION 01 2: 00 CPN INFORMATION 02 3: 00 CPN INFORMATION 03 4: 00 CPN INFORMATION 04 	Enter IP address	
Setup Wait	Networking call-setup failure timer when there is no	0, 3~15 Sec.	0
Response Time	proceeding message from network (i.e. IP-Network is down) Should the Network path fail, the system can place the call	0, 5~15 5ec.	0
ALT Speed bin	over an alternative path using a System Speed Dial number.`	20000~31999	
UCP IP Address	This field is the IP Address of the destination system for the code		0.0.0.0
UCP Port number	The TCP/IP port number of destination system for the Net Numbering Plan code is defined.	0000-9999	5588
Digit Repeat	When the number plan code, see above, is for PSTN call or transit-call, the number code can be included in SETUP message.	YES NO	NO
PSTN Enblock	When a PSTN receives a Transit-out call from a networked user, the digits can be sent En-block (YES) or Over-lap (NO).	YES NO	NO
PSTN CLI Method	The CLI sent with the call for this code can be set as the NET CLI (station number) or PSTN, which sends the CLI configured for the CO/IP Line and Station CLI.	NET PSTN	NET
CO Attendant Code CLI	When a networked system places a transit out call, the Centralized ATD CLI can be sent.	OFF ON	OFF
Firewall Routing	When the system can communicate with the networked system directly, over a common VPN, the systems Non Firewall address is sent in IP packets (OFF). Otherwise, the Firewall IP address is sent (ON).	OFF ON	ON
Transit Out Auth COS	When a user requests a transit-out call by seizing a CO line, COS may be applied according to the authorization code.	YES NO	NO
SMDR Digit Hide	For a Transit-out call from the iPECS, the networked system that places the call may desire to receive the Authorization code	YES NO	NO
Site name	A twelve-character name can be assigned to the system for use with network calls.	Max. 12 characters	
Emergency reroute timer	When a networked station places an Emergency call and the "Emergency CO or Group" in the Station Common Attributes is a Transit-out CO/IP Line or group, the call will Fail-over to the "Fail-over CO Group" in PGM 133 or the "Net Reroute CO Group" in PGM 321 after this timer expires. The "Fail-over CO Group" will have priority.	0-10 (seconds)	0

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Tunneled SIG MSG	Send and Receive H323 message that include ISDN QSIG message. It is used to make networking with Panasonic system.	OFF ON	OFF
Alternate/Secondary signal port	This destination signal port is used on calling to remote network system. A default destination signal port is TCP 1720 but the port number is changed if this field is configured to valid value. When the system is installed behind xDSL modem, the problem of consecutive second call can happen by uncontrolled H.323 ALG function at xDSL modem. This field can be used to solve the problem of consecutive second call. Here, the value should be an alternate or secondary receiving signal port which is configured at remote system.	0-65535	
Local route ID	These two fields are used when a remote network system want to check the route ID value to authenticate the system.	Max. 15 characters	
Remote route ID	Here, 'Local Route ID' is the route ID string for local system. And 'Remote Route ID' is the route ID string for remote system.	Max. 15 characters	
Sending Name option	Basically the calling party name is transferred in QSIG messages. This field is an additional way to send the calling party name. In some PBX systems, the Q.931 Display IE field is used to transferring the calling party name and this value can be used as an interoperating solution for displaying the calling party name.	OFF, Display IE(CISCO)	OFF

Table 6.10.6-1 NETWORK NUMBERING PLAN TABLE

6.10.7 Network Feature Code Table - PGM 325

Selecting Network Feature Code Table will display the data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favori	te PGM	Net Feature	×Q	
Q PGM Search					
System ID & Numbering Plans		je : Internal Pag Room(1-9), Cal	e(1-100), External I Park(1-200)	Page(1	1-2), All Ca
Station Data	Index Net	Feature Code	Туре		Value
Board Based Data	1		N/A	•	
CO Line Data	2		N/A	•	
	4		N/A	•	
System Data	5		N/A	•	
Station Group Data	6		N/A	•	
ISDN Line Data	7		N/A	•	
	8		N/A	•	
SIP Data	9		N/A	•	
Tables Data	10		N/A	•	
Networking Data ~	11		N/A	•	
	12		N/A	•	
Net Basic Attributes(320) Net Supplementary Attr(321)	13		N/A	•	
Net CO Line Overview	14		N/A	-	
Net CO Line Attributes(322)	15		N/A	-	
Net Numbering Plan Overview	16 17		N/A	• •	
Net Numbering Plan(324)	17		N/A	•	
Net Feature Code Table(325)	19		N/A	•	
H.323 Routing Table	20		N/A	•	

Figure 6.10.7-1 Network Feature Code Table

Codes can be assigned to activate special features over the network.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Feature Code	Digit sequence or code used to activate special Network Features.	16 digits	None
Net Feature type	Each Network Feature Code is assigned to activate a feature in the destination system.	N/A, Internal Page, External Page, All Call Page, Net Door Open, Conference Room, Call Park	N/A

Table 6.10.7-1 NETWORK FEATURE CODE TABLE

6.11 H.323 Routing Table

Selecting the H.323 Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

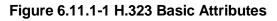
PGM Base Function Base	Favorite PGM			
Q PGM Search				
System ID & Numbering Plans	System Overview System ID & Numberi	System IP Plan(102) System ID & Numberi	Device IP Plan(103) System ID & Numberi	Common Attributes(Station Data
Station Data				
Board Based Data	Flexible Buttons(115/ Station Data	Common Attributes(CO Line Data	CO/IP Ring Assignm CO Line Data	CID/CPN Attributes(1 CO Line Data
CO Line Data				
System Data	System Attributes(16 System Data	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attrib Station Group Data
Station Group Data				
ISDN Line Data	Station Authorizatio Tables Data	System Authorizatio Tables Data	Flexible DID Convers Tables Data	
SIP Data				
Tables Data				
Networking Data				
H.323 Routing Table V				
H.323 Basic Attributes(326)				
H.323 CO Group Attributes(327) H.323 Incoming route table(328)				
T-NET Data				
Zone Data				
Device Login				
UCS Data				
DECT Data				

Figure 6.11-1 H.323 Routing Table Main Page

6.11.1 H.323 Basic Attributes -PGM 326

Selecting H.323 Basic Attributes will display the data entry page. Click **[Save]** button after changing Value.

PGM Base Function B	ase	< Favorite F	PGM H.323 Basic A	× 0	
Q PGM Search	0	Enter Device/G	W Slot Sequence Number	(1 - 3688) :	Load
System ID & Numbering Plans		Device/Gatewa	y Sequence(Slot) Number 2	2430	
Station Data		Order <u>↓</u> ª	Attribute	Value	
		1	IP BIND USAGE	OFF V	
Board Based Data					
CO Line Data					
System Data					
Station Group Data					
ISDN Line Data					
SIP Data					
Tables Data					
Networking Data					
H.323 Routing Table	~				
H.323 Basic Attributes(326)					
H.323 CO Group Attributes(327)					
H.323 Incoming route table(328)					



H.323 Signaling can be operated with each VOIM or UCP.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	If it is set to ON, system allows H.323 signaling with system IP address. Or, each VOIB IP Address can be used.	OFF ON	OFF

Table 6.11.1-1 H.323 Basic Attributes

6.11.2 H.323 CO Group Attributes -PGM 327

Selecting H.323 CO Group Attributes will display the data entry page. Click **[Save]** button after changing Value.

	PGM Base Function Base	< Favor	ite PGM H.323 CO Grou	×	×					
(PGM Search	Enter Grou	Enter Group Number (1 - 200) : Load							
	System ID & Numbering Plans	Group Nun	Group Number 1							
	Station Data	Order <u>↓</u> a	Attribute	Value	Range					
	Board Based Data	1	H323 Setup Mode	Fast •						
	board based Data	2	H323 Tunneling Mode	ON T						
	CO Line Data	3	H323 Early Media (earlyH245)	Setup Proceeding Alerting						
	System Data	4	H323 DTMF Path	IN T						
	System Data	5	TCP Keep Alive	ON T						
	Station Group Data	6	TCP No Delay	OFF •						
	ISDN Line Data	7	Sending Setup Ack message	OFF •						
		8	Name Service option	OFF •						
	SIP Data			Gatekeeper Attributes						
<	Tables Data	1	RAS Usage	OFF •						
	Tables Data	2	RAS MultiCast IP Port	1718	1-65535					
	Networking Data	3	RAS MultiCast IP Address	224.0.1.41						
	H.323 Routing Table V	4	RAS UniCast IP Port	1719	1-65535					
	1.525 Routing Puble	5	RAS UniCast IP Address	82.134.80.2						
	H.323 Basic Attributes(326)	6	RAS Keep Alive Time	120	001-999(1sec)					
	H.323 CO Group Attributes(327)	7	RAS IIR Multiplier Ratio	80	10-100 %					
	H.323 Incoming route table(328)	8	RAS Number Plan Prefix	9	Max 23 Digits					
		9	RAS Light RRQ Usage	OFF T						
	T-NET Data	10	RAS GateWay ID(128Char)							
	Zone Data	11	Fail Over Usage	OFF						
		12	Call Setup No Response Time	5	0, 3 - 15 sec					
	Device Login	13	FailOver CO Group Number		1 - 200					

Figure 6.11.2-1 H.323 CO Group Attributes

H.323 Signaling can be operated with each VOIB board or UCP.

The VOIP channels are used for Distributed Networking, access to SIP or H.323 networks and for remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established.

Also for H.323 support, a RAS (Registration, Admissions and Status) channel can be defined. The RAS channel IP addresses (uni-cast and multi-cast) as well as the IP port Numbering Plan and other H.323 set-up characteristics are defined.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H.323 Setup mode	H.323 IP calls can be set-up using the H.323 normal	Fast	Fast
H.323 Setup mode	or Fast Start mode.	Norm	Fasi
LL 202 Turneling mode	H.323 IP calls can be set-up using the H.245	OFF	
H.323 Tunneling mode	encapsulation (Tunneling).	ON	ON

Table 6.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H323 Early Media (early H245)	This feature is the ability of two user endpoints to communicate before call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast'. * Setup: Caller party tries to open early media on receiving the Setup message. * Proceeding: Calling party tries to open early media on receiving the Proceeding message. * Alerting: Calling party tries to open early media on receiving the Alerting message.	Setup, Proceeding, Alerting	
H.323 DTMF Path	During a connection, DTMF Digits can be sent in- band or out of band (H.245).	IN, OUT, 2833	IN
TCP Keep Alive	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	OFF ON	ON
TCP No Delay	Normally small chunks of TCP (H323) messages are combined into one packet and be sent to remote party to improve the efficiency of network. Sometimes this action yields the H323 signaling problem when system is behind NAT router and there is H323 ALG is running. 'OFF' value can be a solution to overcome the problem.	OFF ON	OFF
Sending Setup Ack message	System provides SETUP ACK message when there is no 'sending complete IE' in SETUP message.	OFF ON	OFF
Name Service option	Basically the calling party name is transferred in QSIG messages. This field is an additional way to send the calling party name. In some PBX systems, the Q.931 Display IE field is used to transferring the calling party name and this value can be used as an interoperating solution for displaying the calling party name.	OFF, Display IE (CISCO)	OFF
Gatekeeper Attribute	9S		
RAS Usage	Determine whether VOIU/VOIB Board will be used as a Gatekeeper.	OFF ON	OFF
RAS MultiCast IP Port	Multi-cast IP Port for RAS Information of Gatekeeper.	1~65535	1718
RAS MultiCast IP Address	Multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS UniCast IP Port	Uni-cast IP Port for RAS Information of Gatekeeper.	1~65535	1719
RAS UniCast IP	Uni-cast IP address for RAS Information of	IP Address	82.134.80.2
Address RAS Keep Alive Time	Gatekeeper. The time between exchange of RAS Information between GK and VOIB/VOIU.	001-999 (SEC)	120
RAS IIR Multiplier Ratio	This feature is used when H323 call is routed by RAS gatekeeper. Keep alive interval time between the system and gatekeeper is provided by gatekeeper on registration time. This value of ratio is used to change the keep alive interval time from gatekeeper.	10~100%	80
RAS Number Plan	The numbering plan for Calling Number in RAS	Max. 23 digits	9

Table 6.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Prefix	Setup.		
RAS Light RRQ usage	The Gatekeeper ID (This can be programmed only via WEB Admin).	OFF ON	OFF
RAS Gateway ID	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	Max. 128 characters	
Fail over Usage	The H.323 call will be failover to another line (FAIL OVER USAG: ON).	OFF ON	OFF
Call Setup No Response time	The H.323 call will be failover. The time will be set.	0, 3-15 (Sec.)	5
Fail over CO Group number	If the H.323 call will be failover, assign another CO group.	1-200	

Table 6.11.2-1 H.323 CO Group Attributes

6.11.3 H.323 Incoming Route table -PGM 328

Selecting H.323 Incoming Route table will display the data entry page. Click **[Save]** button after changing Value.

PGM Base Function Base	* F	avorite PGM H.323 Inc.	omi <mark>×</mark> Ø	
PGM Search				
System ID & Numbering Plans	Index	Calling IP Address	CO Group (1	- 200)
	1	255.255.255.255	0	
Station Data	2	0.0.0.0	0	
Board Based Data	3	0.0.0.0	0	
CO Line Data	4	0.0.0.0	0	
oo Line Data	5	0.0.0.0	0	
System Data	6	0.0.0.0	0	
Station Group Data	7	0.0.0.0	0	
Station Group Data	8	0.0.0.0	0	
ISDN Line Data	9	0.0.0.0	0	
SIP Data	10	0.0.0.0	0	
	11	0.0.0.0	0	
Tables Data	12	0.0.0.0	0	
Networking Data	13	0.0.0.0	0	
H.323 Routing Table V	14	0.0.0.0	0	
	15	0.0.0.0	0	
H.323 Basic Attributes(326)	16	0.0.0.0	0	
H.323 CO Group Attributes(327)	17	0.0.0.0	0	
H.323 Incoming route table(328)	18	0.0.0.0	0	
T-NET Data	19	0.0.0.0	0	
	20	0.0.0.0	0	
Zone Data	21	0.0.0.0	0	
Device Login	22	0.0.0.0	0	
	23	0.0.0.0	0	
UCS Standard	24	0.0.0.0	0	
DECT Data	25	0.0.0.0	0	
Hotel Data	26	0.0.0.0	0	
	• 27	0.0.0.0		

Figure 6.11.3-1 H.323 Incoming Route table

To get the direct H.323, the From IP-Address and 'incoming CO Group number' to be routed should be assigned.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling IP Address	IP address associated with H.323 incoming calls. 255.255.255.255 is used when external call cones from unknown IP Address which is not listed in this table entry.		0.0.0.0
CO Group	CO group number associated with H.323 incoming calls.	1~200	0

Table 6.11.3-1 H.323 Incoming Route table

6.12 T-NET (Central Control Networking) Data

Selecting the T-NET Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

PGM Base	Function Base	< Favorite PGM				×
Q PGM Search	Θ					Edit
System ID & Numbering	g Plans	System Overview System ID & Numb	System IP Plan(102) System ID & Numb	Device IP Plan(103) System ID & Numb	Common Attribute Station Data	
Station Data						
Board Based Data		Flexible Buttons(11 Station Data	Common Attribute CO Line Data	CO/IP Ring Assign CO Line Data	CID/CPN Attributes CO Line Data	
CO Line Data						
System Data		System Attributes(System Data	System Password(System Data	Station Group Assi Station Group Data	Station Group Attri Station Group Data	
Station Group Data						
ISDN Line Data		Station Authorizati Tables Data	System Authorizati Tables Data	Flexible DID Conve Tables Data		
SIP Data						
< Tables Data						
Networking Data						
H.323 Routing Table						
T-NET Data	~					
T-NET Basic Attribute	es(330)					
T-NET CM attributes(
T-NET LM attributes(· ·					
T-NET FoPSTN Table						
T-NET Control Contac T-NET Music/Alarm(3						

Figure 6.12-1 T-NET Data Main Page

In a Centralized Control T-NET (Transparent Network), remote devices may be registered to a Central UCP Module (CM) and to a Local UCP Module (LM). In this way, the CM maintains control of the remote device. Should the WAN connection between an LM and CM fail (polling error), the LM will initiate operational control of the locally registered devices. Calls between the systems (CM and LM) can automatically shift to PSTN Modules registered with the LM for Fail-over operation. The configuration and characteristics of LMs and CM are configurable as is Fail-over operation.

6.12.1 T-NET Basic Attributes -PGM 330

Selecting T-Net Basic Attributes will display the data entry page. Click **[Save]** button after changing Value.

	PGM Base Function Base	Favorite PGM	T-NET Basic X	2
	Q PGM Search			
	System ID & Numbering Plans	Order La 1 T-NE	Attribute	Value
	Station Data			JFF •
	Board Based Data			
	CO Line Data			
	System Data			
	Station Group Data			
	ISDN Line Data			
	SIP Data			
<	Tables Data			
	Networking Data			
	H.323 Routing Table			
	T-NET Data ~			
	T-NET Basic Attributes(330)			
	T-NET CM attributes(331)			
	T-NET LM attributes(332)			
	T-NET FoPSTN Table (333)			
	T-NET Control Contact(334)			
	T-NET Music/Alarm(335~336)			

Figure 6.12.1-1 T-NET Basic Attributes

Each UCP in a Central Control network environment must be enabled for T-NET operation in order to function as part of the network.

6.12.2 T-NET CM Attributes -PGM 331

Selecting T-Net CM Attributes will display the data entry page. Click **[Save]** button after changing Value.

	PGM Base Function Base	< F	avorite PGM T-	NET CM attr X		[
c	PGM Search					Save
	System ID & Numbering Plans	Orde a	r Attribute		Value	Range
	Station Data	1	Register Enable	OFF V		
	D 10 10 1	2	CM Server Type	eMG/UCP V		
	Board Based Data	3	CM 1	IP Address : 0.0.0.0	MAC Address :	
	CO Line Data		0			
	System Data	4	CM 2	IP Address : 0.0.0.0	MAC Address :	
	Station Group Data	5	IPKTS Port Number	5588		0001- 9999
	ISDN Line Data	6	Total number of port	0		0000- 9999
	SIP Data	7	Polling Count	5		00-99
<	Tables Data	8	Polling Interval	2		00-99
	Tables Data	9	Zone Number			1 - 32
	Networking Data					
	H.323 Routing Table					
	T-NET Data ~					
	T-NET Basic Attributes(330)					
	T-NET CM attributes(331)					
	T-NET LM attributes(332)					
	T-NET FoPSTN Table (333)					
	T-NET Control Contact(334)					
	T-NET Music/Alarm(335~336)					

Figure 6.12.2-1 T-NET CM Attributes

Each LM (Local UCP), which is part of a Central Control Network, must be defined with the IP Address of the CM (Central UCP). The LM configuration data is sent to the CM at the time the LM registers with the CM. Total port counts define the ports, which are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM must be equal to or less than the ports defined in the CM for the LM, see PGM 332, in order to register properly.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Register Enable	This field informs the LM to attempt registration with the CM. This field must be set to ON for proper registration.	0: OFF 1: ON	OFF
CM server type	Assign the type of CM server; iPECS UCP or iPECS CM.	eMG/UCP, CM	eMG/UCP
IP Address	This field defines the IP address of the CM that will be used by the LM.	IPv4 address	
IPKTS Port number	In the TNET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0000-9999	5588

Table 6.12.2-1 T-NET CM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Total no of port	This field defines the total number of ports the LM will request be allocated by the CM for devices attached to the LM. This value must be equal to or less than the port count in the CM for the LM devices.	000-999	0
Polling Count	This field defines the maximum polling failures an LM considers a WAN fault.	00-99	5
Polling interval	This field defines the interval time between LM to CM polling attempts.	00-99	2
Zone Number	Zone number can be assigned to Device or GW.	1-32	

Table 6.12.2-1 T-NET CM ATTRIBUTES

6.12.3 T-NET LM Attributes -PGM 332

Selecting T-Net LM Attributes will display the data entry page. Click **[Save]** button after changing Value.

PGM Search			vorite PGM T-NE	ET LM attri X		
	Θ					S
System ID & Numbering Plans		Index		Value	Range	
Otation Data			MAC Address			
Station Data	_		IP Address			
Board Based Data		1	IPKTS Port	5588	0001-9999	
CO Line Data			Total number of port	0	000-999	
CO Line Data	_		Multicast IP Address	239.20.19.1		
System Data			Zone Number		1 - 32	
Station Group Data			MAC Address			
Station Group Data	_		IP Address			
ISDN Line Data		2	IPKTS Port	5588	0001-9999	
SIP Data			Total number of port	0	000-999	
	_		Multicast IP Address	239.20.19.1		
Tables Data			Zone Number		1 - 32	
Networking Data			MAC Address			
	- 11		IP Address			
H.323 Routing Table			IPKTS Port	5588	0001-9999	
T-NET Data	~	3	Total number of port	0	000-999	
			Multicast IP Address			
T-NET Basic Attributes(330)			Zone Number		1 - 32	
T-NET CM attributes(331)			MAC Address			
T-NET LM attributes(332)			IP Address			
T-NET FoPSTN Table (333)			IPKTS Port	5588	0001-9999	
T-NET Control Contact(334) T-NET Music/Alarm(335~336)		4			000-999	
r-n∟ i music/Alami(555~536)			Total number of port	0	000-999	
Zone Data			Multicast IP Address	239.20.19.1		
	_		Zone Number		1 - 32	
Device Login			MAC Address			
UCS Standard	-		IP Address	5588	0001-9999	

Figure 6.12.3-1 T-NET LM Attributes

The CM (Central UCP) must be programmed with the MAC and IP address of each LM (Local UCP) in the Centralized Control network as well as the maximum configuration of each LM. Up to 100 Local UCPs (LMs) may be defined and configuration entered. The port counts define the ports that are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database for each LM in PGM 331, must be equal to or less than the ports defined in the CM for the LM, in order to register properly.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mac Address	This field defines the MAC address of the LM that will be part of	MAC	
Mac Address	the T-NET environment and is used by the CM for authorization.	address	
	This field is the ID address of the IM	IPv4	
IP Address	This field is the IP address of the LM.	address	

Table 6.12.3-1 T-NET LM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
IPKTS Port	In the T-NET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0000-9999	5588
Total no of port	This field defines the total number of ports the LM will request from the CM for devices attached to the LM. This value must be equal to or more than the port count defined in the LM.	000-999	
Multicast IP address	This field defines the multicast IP address that could be used in T- NET branch site.	IPv4 address	
Zone Number	Zone number can be assigned to Device or GW.	1-32	

Table 6.12.3-1 T-NET LM ATTRIBUTES

6.12.4 T-NET FoPSTN table -PGM 333

Selecting T-NET FoPSTN Table will display the data entry page. Enter an index range then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

	PGM Base Function Base	Favorite PGM T-NET FoPS X		x >
	Q PGM Search	Enter Index Range (0 - 599) :	load	Save
	System ID & Numbering Plans	Index Range 1-50 Enable FoPSTN : OFF ▼		
	Station Data	Initialize FoPSTN :		
	Board Based Data	Index Numbering Plan CO Group Tel Number		
	CO Line Data			
	System Data	3 1		
	Station Group Data	4 1 5 1		
	ISDN Line Data			
	SIP Data	7 . 1 .		
<	Tables Data	8 1 9 1		
	Networking Data	10 1		
	T-NET Data			
	T-NET Basic Attributes(330) T-NET CM attributes(331) T-NET LM attributes(332)	12 1 13 1 14 1 15 1		
	T-NET FoPSTN table (333) T-NET Control Contact(334) T-NET Music/Alarm(335~336)	16 1 17 1		

Figure 6.12.4-1 T-NET FoPSTN Table

The Fail-over function allows the systems in T-NET environment to complete calls between systems over a PSTN (analog or digital) line should the WAN connection to the CM fail. A CO gateway Module must be registered to the LM for local CO services. Users may call others in the normal manner and the call is routed over CO facilities to the remote CM. When calls are directed to a DID line at the receiving system, the system will select a line from the assigned CO Group and dial the Tel Number with the station number dialed as the trailing digits.

Table 6.12.4-1 Fail Over to	PSTN ATTRIBUTES
-----------------------------	-----------------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Numbering Plan	Station numbers associated with the remote system. A range can be indicated by using "*" to indicate the range. Example: 21** covers 2100 to 2199.	Station number	
CO Group	This field defines the CO Group of the local system that will be used to place calls to the stations entered in the Fail Over Numbering Plan above, should WAN failure occur.	CO/IP group	
Tel Number	This field defines the telephone number the system should dial to place a call to the stations entered in the FO Numbering Plan, should WAN failure occur. An "*" may be entered as a wild card to indicate insertion of the dialed station number.	24 digits	

6.12.5 T-NET Control Contact -PGM 334

Selecting T-NET Control Contact will display the data entry page. Enter the T-NET range from the T-Net LM Attributes then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

	PGM Base Function Base	< Favorite PGM T-	NET Contr 🗙		×
	Q PGM Search	Enter T-NET Range (1 - 100)	:	2 L	oad
	System ID & Numbering Plans	T-NET Range 1-50			
	Station Data	External Control Contact	Value		
	Station Data		Onused		
	Board Based Data				
	CO Line Data	First	Door Open		
	CO Line Data		External Control Device 1		
	System Data		External Control Device 2		
	Station Group Data		Onused		
	Station Group Data				
	ISDN Line Data	Second	Door Open		
	SIP Data		External Control Device 1		
			External Control Device 2		
<	Tables Data		Onused		
	Networking Data				
		Third	Door Open		
	T-NET Data ~		External Control Device 1		
	T-NET Basic Attributes(330)		External Control Device 2		
	T-NET CM attributes(331)		Onused		
	T-NET LM attributes(331)				
	T-NET FoPSTN table (333)	Fourth	Door Open		
	T-NET Control Contact(334)		External Control Device 1		
	T-NET Music/Alarm(335~336)		External Control Device 2		

Figure 6.12.5-1 T-NET Control Contact

Each LM incorporates relay contacts that can be employed as a Door Lock Release. The contact activates a third party Door Lock Release mechanism activated by dialing the Door Unlock code at a local station.

6.12.6 T-NET Music/Alarm -PGM 335 ~ 336

Selecting T-NET Music/Alarm will display the data entry page. Enter the T-NET range from the T-Net LM Attributes then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

PGM Base Function Base	Favor	ite PGM T-NET M	usic/Al <mark>×</mark>		
Q PGM Search	C Enter T-NE	ET Range (1 - 100) :		2	Load
System ID & Numbering Plans	T-NET Rai	0			~
Station Data	Order <u>↓</u> a	Attribute	Value		
	1	T-NET Mus BGM Type	Ic Assign		
Board Based Data	2	MOH Type	Internal/External Music 1		
CO Line Data	3	Internal/External Music	Internal Music		
	4	Internal Music Type	First V		
System Data		T-NET Alarm			
Station Group Data	1	Alarm Enable	OFF T		
	2	Alarm Contact Type	Close •		
ISDN Line Data	3	Alarm Mode	Alarm 🔻		
SIP Data	4	Alarm Single Mode	Repeat •		
Tables Data					
Networking Data					
H.323 Routing Table					
T-NET Data	·				
T-NET Basic Attributes(330)					
T-NET CM attributes(331)					
T-NET LM attributes(332)					
T-NET FoPSTN Table (333)					
T-NET Control Contact(334)					
T-NET Music/Alarm(335~336)					

Figure 6.12.6-1 T-NET Music/Alarm

To minimize WAN traffic, the CM does not provide BGM/MOH to an LM. The LM employs local BGM and MOH facilities to reduce traffic load on the WAN and IP channel processors. The LM uses IP Multicast for local BGM and MOH transport. In addition, the Alarm contacts of the LM can be defined for use as a local alarm or doorbell.

6.13 Zone Data

Selecting the Zone Data program group returns the sub-menu displayed in the following figure.

	PGM Base Function Base		< Favorite PGM				×
0	PGM Search	0					Edit
	System ID & Numbering Plans						
	Station Data		System ID & Numb	System IP Plan(102) System ID & Numb	Device IP Plan(103) System ID & Numb	Common Attribute Station Data	
	Board Based Data		Flexible Buttons(11	Common Attribute	CO/IP Ring Assign	CID/CPN Attributes	
	CO Line Data		Station Data	CO Line Data	CO Line Data	CO Line Data	
	System Data		System Attributes(System Password(Station Group Assi	Station Group Attri	
	Station Group Data		System Data	System Data	Station Group Data	Station Group Data	
	ISDN Line Data		Station Authorizati	System Authorizati	Flexible DID Conve		
	SIP Data		Tables Data	Tables Data	Tables Data		
<	Tables Data						
	Networking Data						
	H.323 Routing Table						
	T-NET Data						
	Zone Data						
	Zone Number of Device/Gateway Overview						
	Device Zone Number(436)						
	Device Zone Attrtibutes(437)						
	Access & Page Relay(438)						
	Inside Zone Attributes Overview						
	Zone Attribute(439)						
	Zone RTP Relay Group(440)						
	Inter-Zone Attributes(441)						
	Zone Holiday Assignment(444)						

Figure 6.13-1 Zone Data Main Page

6.13.1 Zone Number Overview

Selecting Zone Number Overview will display the data entry page.

PGM Base Function Base		Fa	vorite PGM	Zone Number o	3		
Q PGM Search	0	Seq <u>↓</u> ª	Zone Number <u>↓</u> ª	^a T-NET Number <u>↓</u> ^a	Туре	MAC Address <u>↓</u> ª	IP Address <u>↓</u> ª
		1	1		LIP-8024D	b40edcba0e67	10.10.42.1
System ID & Numbering Plans		2401	1		BRIM4 GW	ffff0000ffff	10.10.10.10
Station Data		2402	1		T1IM GW	ffff0005ffff	10.10.10.11
Station Data	_	2403	1		ISDN-PRI GW	ffff000affff	10.10.10.12
Board Based Data		2404	1		VOIM8 GW	ffff000fffff	10.10.10.13
	_	3001	1		UVM GW	ffff0014ffff	10.10.10.14
CO Line Data		3201	1		MCIM GW	ffff0019ffff	10.10.10.15
System Data		3231	1		UCS Server	ffff0023ffff	0.0.0
System Data	_	3257	1		WTIM4 GW	ffff001effff	10.10.10.16
Station Group Data ISDN Line Data							
SIP Data							
Tables Data							
Networking Data							
H.323 Routing Table							
T-NET Data							
Zone Data	~						
Zone Number of Device/Gateway Overview							
Device Zone Number(436)							
Device Zone Attrtibutes(437)							
Access & Page Relay(438)							
Inside Zone Attributes Overview							

Figure 6.13.1-1 Zone Number Overview

Zone data is a tool employed to manage the characteristics of groups of devices under the control of an UCP. Such devices can be grouped to a Zone to define common characteristics including Country Code, DSCP, RTP packet handling, etc. Common attributes are defined at the device, Zone and Inter-zone level. Device settings have priority over system and Zone settings, while Zone settings have priority over system settings.

Generally, transport of RTP packets should be a peer-to-peer communication over either a LAN or VPN. If iPECS devices are separated by a NAPT server or direct peer-to-peer communications is not available, packet relay must be employed to assure communication. In packet relay, RTP packets are received by a local VoIP channel (UCP or VOIM), which is under control of the UCP, and the IP address is translated from a public to the device's private address. The VoIP channel implements a secure channel using IPSec protocol. Devices can be assigned as part of an "RTP Relay group" to use the same VoIP channels to implement relay of RTP packets. Packet relay groups also provide for conversion of multi-cast packets from the UCP to uni-cast and back again at the group level to multi-cast. Note packet relay require a VoIP channel be available locally for each simultaneous call that requires packet relay.

6.13.2 Device Zone Number – PGM 436

Selecting the Device Zone Number will display the Zone Number data input page. Enter the Sequence number range for the devices, refer to section 6.1.5 Device IP Address Plan - PGM 103, and click **[Load]** to assign a Zone number for the device. Click **[Save]** button after changing Value.

	PGM Base Function Base	e	Fav	orite PGM	Device Zone Nu.	× 0	
	Q PGM Search	0	Enter Devi	ce/GW Slot Sequ	ence Range (1 - 368	3) :	
	System ID & Numbering Plans		Device/Ga	teway Sequence(Slot) Range 1		
	Station Data		Order <u>↓</u> ª 1	Attribute Zone Number	Value 1		Range 1 - 32
	Board Based Data		•	Zone Number	Ľ		1 - 32
	CO Line Data						
	System Data						
	Station Group Data						
	ISDN Line Data						
	SIP Data						
<	Tables Data						
	Networking Data						
	H.323 Routing Table						
	T-NET Data						
	Zone Data	~					
	Zone Number of Device/Gateway Overview						
	Device Zone Number(436) Device Zone Attrtibutes(437)						
	Access & Page Relay(438)						

Figure 6.13.2-1 Device Zone Number

Device Zone Number assigns a device to one of up to 32 specific Zones.

6.13.3 Device Zone Attributes – PGM 437

Selecting the Device Zone Attributes will display the Device Zone Attributes data input page. Enter the Sequence number Range (refer to section 6.1.5 Device IP Address Plan - PGM 103) and click **[Load]** to assign Zone attributes for the device. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of devices when saved.

	PGM Base Function Base		< Fav	orite PGM	Device Zone Attr X						
c	PGM Search		Enter Devi	ce/GW Slot	Sequence Range (1 - 3688) :			? Load	5		
	System ID & Numbering Plans	Device/Gateway Sequence(Slot) Range 1									
	Station Data	Ŀ	Order <u>↓</u> ª	Check All	Attribute	Value	Range				
	otation Data	Ŀ	1		Remote Access Password		Max 12 Digits				
	Board Based Data	Ŀ	2		Diff Serv	46	00-63				
	CO Line Data	Ŀ	3		Nation Code	North America 🔹					
		Ŀ	4		Language Code	English •					
	System Data	Ŀ	5		Codec Type	FOLLOW ME(ADM132) V					
	Station Group Data	Ŀ	6		RTP Relay Group	RLY GRP 00 V					
	Station Group Data	Ŀ	7		Page Area Group	PAGE AREA 00 V					
	ISDN Line Data	Ŀ	8		VM Device Slot Seq.		3001				
	SIP Data					 English(North America) Unknown Unknown 					
	Tables Data	Ŀ	9		Select Default Multi Language	Unknown					
	Networking Data					UnknownUnknown					
	H.323 Routing Table	Ŀ	10		VM Retry Count	3	0 - 9				
			11		Remark		Max 21 Characters				
	T-NET Data	Ŀ									
	Zone Data v										
	Zone Number of Device/Gateway Overview										
	Device Zone Number(436)										
	Device Zone Attrtibutes(437) Access & Page Relay(438)										

Figure 6.13.3-1 Device Zone Attributes

Device Zone Attributes define characteristics specific to the device including the registration password, Diff Serv Code Point, Nation, etc. In addition, Zone characteristics set at the device level take precedence over characteristics for the Zone Attributes. While a Zone may incorporate up to 15 different RTP packet Relay Groups, for clarity a single RTP Relay Group should be used within a Zone.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Remote Access Password	For a standalone remote device, the password assigned in device for Remote for registration	Max. 12 digits	None
Diff Serv	This parameter defines the Diff Serv Code Point for IP packets from the device. Note the system Code Point will take precedence.	0-63	4
Nation Code	The device can be located in a different country then the system. Available selections are given in Table 6.1.1-1.		
Language Code	Each device can be assigned a local language or English as the LCD Display Language.		English

Table 6.13.3-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Codec Type	The codec selection method can be defined as device (board) based (Follow-Me), see PGM 132, or based on the codec type assigned to the Zone.	Follow Me (PGM132 Board Based Follow Zone	Board based
RTP Relay Group	This attribute defines the RTP Relay group employed by the device, 00-no relay. Zone parameters define the VoIP device to employ.	00-15	00
Page Area Group	The Paging Area Group identity is employed to determine when multicast to unicast conversion is needed to relay paging data across the network using a VoIP channel of a VOIU/VOIM or Paging Agent (VoIP channel of an iPECS LIP Phone).	00-15	00 (same paging relay area)
VM Device Slot Sequence	The VSF gateway (VSF or UVM) used to support Voice Mail for a device is defined. The VSF/UVM must be under control of the same UCP as the device.	Max. 4 Digits	
Select Multi Language	The recorded language selection prompt is played to the user when accessing the built-in AA/VM. The system supports up to six languages.	1 ~ 6	1
VM Retry Count	The user may select an available language. If the language is unavailable, the user may attempt to enter a valid language type based on this retry counter. If the user cannot enter a valid language, the announcement is provided in the default language.	0-9	3
Remark	Descriptive information to help installer/programmer in identifying the device Zone, i.e. Branch1.	Max. 21 characters	

Table 6.13.3-1 DEVICE ZONE ATTRIBUTES

6.13.4 Access & Page Relay – PGM 438

Selecting Access & Page Relay will display the Access & Page RTP packet relay data input page. Enter the Sequence number Range (refer to section 6.1.5 Device IP Address Plan - PGM 103) and click **[Load]** to define packet relay characteristics for Paging between Zones. Use the check boxes to indicate which Zones to modify; data for checked Zones is stored for the entire range of devices when saved.

PGM Base Function Base	<	Favorite PGM	Access & Page	×	
PGM Search	C Enter D	evice/GW Slot Seq	uence Range (1 - 3688)		C Load Save
System ID & Numbering Plans		/Gateway Sequence			
Station Data	Order	-	e Page RTP Relay To	Zone Paged By RTP Relay From Zone	
Station Data	1	Zone 1	Disable 🔻	Disable •	
Board Based Data	2	Zone 2	Disable 🔻	Disable 🔻	
	3	Zone 3	Disable 🔻	Disable •	
CO Line Data	4	Zone 4	Disable 🔻	Disable 🔻	
System Data	5	Zone 5	Disable 🔻	Disable 🔻	
	6	Zone 6	Disable 🔻	Disable 🔻	
Station Group Data	7	Zone 7	Disable 🔻	Disable 🔻	
	8	Zone 8	Disable 🔻	Disable 🔻	
ISDN Line Data	9	Zone 9	Disable 🔻	Disable 🔻	
SIP Data	10	Zone 10	Disable 🔻	Disable 🔻	
	11	Zone 11	Disable 🔻	Disable 🔻	
Tables Data	12	Zone 12	Disable 🔻	Disable 🔻	
Networking Data	13	Zone 13	Disable 🔻	Disable T	
Networking Data	14	Zone 14	Disable 🔻	Disable T	
H.323 Routing Table	15	Zone 15	Disable •	Disable	
	16	Zone 16	Disable V	Disable	
T-NET Data	17	Zone 17	Disable V	Disable	
Zone Data	v 18	Zone 18	Disable V	Disable T	
Lono Dula	19	Zone 19	Disable V	Disable T	
Zone Number of Device/Gateway	20	Zone 20	Disable V	Disable T	
Overview	21	Zone 21	Disable V		
Device Zone Number(436)	22	Zone 22	Disable V		
Device Zone Attrtibutes(437)	22	Zone 22	Disable •		
Access & Page Relay(438)	23	Zone 23			
Inside Zone Attributes Overview	24	Zone 24	Disable	Disable	
Zone Attribute(439)			Disable	Disable	
Zone RTP Relay Group(440)	26	Zone 26	Disable •	Disable	
Inter-Zone Attributes(441)	27	Zone 27	Disable •	Disable	
Zone Holiday Assignment(444)	 28 29 	Zone 28	Disable 🔻	Disable 🔻	

Figure 6.13.4-1 Zone Page RTP Packet Relay

iPECS protocol employs multicast to send RTP packets to multiple devices at one time. This improves efficiency and lowers traffic by sending a single multicast packet to multicast group members. In particular, paging employs this multicast technique. However, since multicast is not commonly supported outside of the LAN, unicast must be used to transport such signals between routers. At the receiving Zone, a local VoIP channel receives the unicast signal from the controlling UCP. Then the VoIP channel converts the packet address to a multicast signal for delivery to devices in the same RTP Page Relay Group.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Page RTP Relay to Zone	The device can be configured to relay RTP packets for paging to other zone members, Paging Rely.	Disable Enable	Disable
Page By RTP Relay From Zone	The device can be configured to receive relayed packets from the assigned Zones(s).	Disable Enable	Disable

Table 6.13.4-1 Zone Page RTP Packet R	lelay
---------------------------------------	-------

6.13.5 Inside Zone Attributes Overview

Selecting Inside Zone Attributes Overview returns the data display page.

PGM Base Function Base	< Favorite PGM	Inside Zone Attributes Over			
PGM Search O	Zone Nation Code Language Code	Codec RTP Relay Rule RTP Relay Device UVMU/I	VM Remark Time Zone 1-Z Conns OGT Calls	MOH Emer Noti Emer Noti2 DCOB Noti SI	P Noti
	1 North America English	System If Need	Sys Time 0 0	Sys Hold	
System ID & Numbering Plans	2 North America English	System If Need	Sys Time 0 0	Sys Hold	
Station Data	3 North America English	System If Need	Sys Time 0 0	Sys Hold	
Station Data	4 North America English	System If Need	Sys Time 0 0	Sys Hold	
Board Based Data	5 North America English	System If Need	Sys Time 0 0	Sys Hold	
	6 North America English	System If Need	Sys Time 0 0	Sys Hold	
CO Line Data	7 North America English	System If Need	Sys Time 0 0	Sys Hold	
ystem Data	8 North America English	System If Need	Sys Time 0 0	Sys Hold	
yaten bata	9 North America English	System If Need	Sys Time 0 0	Sys Hold	
tation Group Data	10 North America English	System If Need	Sys Time 0 0	Sys Hold	
	11 North America English	System If Need	Sys Time 0 0	Sys Hold	
Ine Data	12 North America English	System If Need	Sys Time 0 0	Sys Hold	
IP Data	13 North America English	System If Need	Sys Time 0 0	Sys Hold	
	14 North America English	System If Need	Sys Time 0 0	Sys Hold	
ables Data	15 North America English	System If Need	Sys Time 0 0	Sys Hold	
	16 North America English	System If Need	Sys Time 0 0	Sys Hold	
etworking Data	17 North America English	System If Need	Sys Time 0 0	Sys Hold	
NET Data	18 North America English	System If Need	Sys Time 0 0	Sys Hold	
101000	19 North America English	System if Need	Sys Time 0 0	Sys Hold	
one Data ~	20 North America English	System If Need	Sys Time 0 0	Sys Hold	
	21 North America English	System If Need	Sys Time 0 0	Sys Hold	
Zone Number of Device/Gateway Overview	22 North America English	System If Need	Sys Time 0 0	Sys Hold	
Device Zone Number(436)	23 North America English	System If Need	Sys Time 0 0	Sys Hold	
Device Zone Attitibutes(437)	24 North America English	System If Need	Sys Time 0 0	Sys Hold	
	25 North America English	System If Need	Sys Time 0 0	Sy's Hold	
Access & Page Relay(438)	26 North America English	System If Need	Sys Time 0 0	Sys Hold	
Inside Zone Attributes Overview	27 North America English	System If Need	Sys Time 0 0	Sys Hold	
Zone Attribute(439)	28 North America English	System If Need	Sys Time 0 0	Sys Hold	
Zone RTP Relay Group(440)	29 North America English	System if Need	Sys Time 0 0	Sys Hold	
Inter-Zone Attributes(441)	30 North America English	System If Need	Sys Time 0 0	Sys Hold	
Zone Holiday Assignment(444)	31 North America English	System If Need	Sys Time 0 0	Sys Hold	
	32 North America English	System If Need	Sys Time 0 0	Sys Hold	

Figure 6.13.5-1 Inside Zone Attributes Overview

6.13.6 Zone Attributes – PGM 439

Selecting the Zone Attributes will display the Zone Attributes data input page. Enter the desired Zone number range and click **[Load]** to assign Zone characteristics. Click **[Save]** button after changing Value.

PGM Base Function Base	< 1	Favorite PGM	Zone Attribute(439)			
PGM Search	Enter Z	one Number I	Range (1 - 32) :		Load	Save
System ID & Numbering Plans		umber Range	1			
Station Data	Order a	Check All	Attribute	Value	Range	
Board Based Data	1	E.164 Man	Nation Code agement Information (Outgoing Dial Num	North America	Number : Normal -> E164)	
CO Line Data	1		Area Code		Max 5 Digits	
System Data	2		International Access Code		Max 5 Digits	
System Data	3		Local Number Digit Count	0	00 - 30 (for incoming CL	I)
Station Group Data	4		Leading Zero Insertion For Area Code	No	ex.031 (for outgoing call number)	ed
ISDN Line Data	5		My Area Code Insertion	No •	ex. 31, 031 (for outgoing number)	(called
SIP Data	Exceptional Conversion : for Outgoing Dial Number					
Tables Data	1		Conversion Case #1 : From (4 dgt)	> To (6 dgt)		
Networking Data	2		Conversion Case #2 : From (4 dgt)	> To (6 dgt)		
H.323 Routing Table	3		Conversion Case #3 : From (4 dgt)	> To (6 dgt)		
T-NET Data			Conversion Case #4 : From (4 dgt)	> To (6 dgt)		
Zone Data 🗸 🗸	4					
Zone Number of Device/Gateway	5		Conversion Case #5 : From (4 dgt)	> To (6 dgt)		
Overview			Exceptional Convers	ion : for Incoming CLI Number		
Device Zone Number(436) Device Zone Attrtibutes(437)	1		Conversion Case #1 : From (6 dgt)	> To (6 dgt)		
Access & Page Relay(438) Inside Zone Attributes Overview	2		Conversion Case #2 : From (6 dgt)	> To (6 dgt)		
Zone Attribute(439) Zone RTP Relay Group(440)	3		Conversion Case #3 : From (6 dgt)	> To (6 dgt)		
Inter-Zone Attributes(441)	4	0	Conversion Case #4 : From (6 dgt)	> To (6 dgt)		

Figure 6.13.6-1 Zone Attributes

The Nation code, codec and VSF/UVM assigned for a Zone will be employed by all devices in the Zone unless a different entry is made in Device Zone data. If the Device Zone data is default or assigned by the UCP, the Zone data will take precedence.

The Zone Attributes define when and which VoIP channels to use for RTP packet relay. Local VoIP channels are assigned to perform the packet relay function and the use can be defined as "if needed" or use the assigned RTP Relay Group. For "if Need", the UCP will employ the IP KTS STUN protocol to determine when packet relay is required. If assigned "RTP Relay Group", packet relay will always be employed for RTP packet receipt.

	Table	6.13.6-1	ZONE	ATTRIBU	ITES
--	-------	----------	------	---------	------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Nation Code	Nation code of devices in the zone. Available	Country code	North America

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ATTRIBUTE		RANGE	
	selections are given in Table 6.4.1-2.		
E.164 Managemer	nt Information (Outgoing Dial Number: E164/Normal)	(Incoming CLI Number	: Normal/164)
Area Code	Assign the Area Code that is used to convert the CLI format (normal <-> E.164)	Max 5 Digits	
International Access Code	Assign the International call access code that is used to convert the CLI format (normal <-> E.164)	Max 5 Digits	
Local Number Digit Count	If the incoming CLI exceeds this digit length, the call is consider long distance call.	00-30	0
Leading Zero Insertion for Area code	For an outgoing call, the system can insert a zero ('0') in front of area code.	No Yes	No
My Area Code Insertion	For an outgoing call, the system can insert my area code in the CLI.	No Yes	No
Insertion	Exceptional Conversion : for Outgoing Dia		
Conversion Case #1 Conversion Case #2 Conversion Case #3 Conversion Case #4 Conversion Case #5	The first digits, up to four (4), dialed by the user can be converted to a digit string of up to six (6) digits and may include a plus (+) sign. For example if the "From" digits are 00 and the "To" digits are +820, if the user dials 002233432, the system converts the number to +820 2233432.	From (4-digits) and To (6-digits)	
	Exceptional Conversion : for Incoming CL	Number	
Conversion Case #1 Conversion Case #2 Conversion Case #3 Conversion Case #4	The first digits, up to four (4), received as the CLI can be converted to a digit string of up to six (6) digits and may include a plus (+) sign. For example if the "From" digits are 00 and the "To" digits are +820, if the user dials 002233432, the system converts the number to +820 2233432.	From (4-digits) and To (6-digits)	
	Normal Zone Management Informati	on	
Language Code	The Language code for devices in the zone is assigned.	Language Code	English
Codec Type	The codec employed by devices in the Zone is defined.	System codec G.711 G.723.1 G.729 G.722	System codec
RTP Relay Rule	Assigns when to use the packet relay function, with "If Need" the UCP will automatically determines when to use packet relay, while "Forced to Relay" will always implement packet relay for RTP packets.	If need Relay Group Forced to Relay	If need
1st RTP Relay Device Slot Seq.	The local VoIP channels that will be used to implement packet relay for devices in the Zone is	Sequence Number	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	assigned.		
2nd RTP Relay Device Slot Seq.	Back-up VoIP channels for RTP packet relay use in the Zone can be assigned.	Sequence Number	
VM Device Slot Sequence	The UVMU/UVM used to support Voice Mail for devices in the Zone is assigned. The UVMU/UVM must be under control of the same UCP as the device being assigned.	Sequence Number	
Remark	Descriptive information to help installer/programmer in identifying the device Zone, i.e. Branch1.	Max. 21 characters	
Display time zone	The time & date displayed at the station are based on the time zone selected or the system time.	Time zone	System time
Max Total Inter Zone Connections	This parameter may be used to limit the number of maximum Inter Zone connections. When this value is set to 0, there is no limit on the total Inter Zone connections.	0-2400, 0: No limit	0
Max Outgoing CO Calls	This field may be used to limit the number of outgoing CO/IP calls from the Zone. When this value is set to 0, there is no limit on the number of outgoing CO/IP calls.	0-998, 0: No limit	0
Zone MOH Assign	A Music source can be assigned for calls placed on hold by devices in this zone.	Refer to Sys Hold, Internal/External Music1, External Music2, VSF MOH, SLT MOH1~5, VSF MOH2~3	Refer to Sys Hold
Emergency Call Notify Station	This field assigns the station to receive notification of an Emergency call from a device in the Zone.	Station number	
Emergency Call Notify 2 nd Station	This field assigns a secondary station to receive notification of an Emergency call from a device in the Zone	Station number	
DCOB Fault Notify Station	This field assigns the station to receive notification of a DCOB (Digital CO Board) fault.	Station number	
SIP Registration Fault Notify Station	This field assigns the station to receive notification of a SIP Trunk registration fault.	Station number	
Daylight Saving Usage	If option is "System DST mode", the zone will follow the system DST mode (System Date &Time (178)). If option is "OFF", the zone will not apply the Daylight Saving Time.	System DST mode, OFF	System DST mode

Table 6.13.6-1 ZONE ATTRIBUTES

6.13.7 Zone RTP Relay Group – PGM 440

Selecting the Zone RTP Relay Group will display the RTP Relay ON/OFF data input page. Enter the desired Zone and Group numbers and click **[Load]** button to assign Zone characteristics. Check the boxes to indicate if RTP Relay is required between the Relay groups in the Zone. Click **[Save]** button after changing Value.

PGM Base Function Base		e Attribute(439)	Zone RTP Relay X	
			с	
Q PGM Search	Enter Zone Number (1 - 32) :			
System ID & Numbering Plans	Enter RTP Relay Group Number (1 Zone Number 1	- 15) : Lo	bad	
Station Data	RTP Relay Group Number 1			
	Order <u>↓</u> ª	Force To RTP Relay		
Board Based Data	1 Relay G	roup 1		
CO Line Data	2 Relay G	roup 2		
	3 🖉 Relay G	roup 3		
System Data	4 Relay G	roup 4		
Station Group Data	5 🖉 Relay G	roup 5		
Granon Group Data	6 🖉 Relay G	roup 6		
ISDN Line Data	7 🖉 Relay G	roup 7		
	8 🖉 Relay G	roup 8		
SIP Data	9 🕑 Relay G	roup 9		
Tables Data	10 🕑 Relay G	roup 10		
	11 🕑 Relay G	roup 11		
Networking Data	12 Relay G	roup 12		
H.323 Routing Table	13 🕑 Relay G	roup 13		
Those rooming rubic	14 🕑 Relay G	roup 14		
T-NET Data	15 🕑 Relay G	roup 15		
Zone Data v				
Zone Number of Device/Gateway Overview				
Overview Device Zone Number(436)				
Device Zone Attrtibutes(437)				
Access & Page Relay(438)				
Inside Zone Attributes Overview				
Zone Attribute(439)				
Zone RTP Relay Group(440)				
Inter-Zone Attributes(441)				
Zone Holiday Assignment(444)				

Figure 6.13.7-1 Zone RTP Packet Relay Groups

While it is strongly recommended that a Zone only have a single RTP Relay Group, up to 15 Groups can be assigned to a Zone. Devices in an RTP Relay Group should have common requirements for packet relay use. In some situations, it may be necessary to implement packet relay to groups in a Zone. Note that when "if Need" is assigned as the RTP Relay Rule in the Zone Attributes, assignments here are ignored.

6.13.8 Inter Zone Attribute – PGM 441

Selecting the Inter Zone Attribute will display the data input page. Enter the desired Source and Destination Zone number and click **[Load]** to assign Zone characteristics. Use the check boxes to indicate the attributes to modify. Click **[Save]** button after changing Value.

PGM Base Function Ba	se	< Fav	orite PGM	Inter-Zone Attrib X			
Q PGM Search	0			e Number (1 - 32) :			Load
System ID & Numbering Plans							Load
Station Data			ne Range 1 n Zone Range	e 1			
Board Based Data		Order <u>↓</u> a	Check All	Attribute	Value	Range	
	_	1		Codec Type	N/A 🔻		
CO Line Data		2		RTP Relay Rule	If Need 🔻		
System Data		3		RTP Relay Device Utilization	For Both Side 🔹		
System Data		4		Src. RTP Relay Device Slot Seq		Sequence Number	
Station Group Data		5		Dest. RTP Relay Device Slot Seq.		Sequence Number	
ISDN Line Data		6		Max Inter Zone Connection	0	0-2400 (0:No Limit)	
SIP Data	_						
	_						
Tables Data							
Networking Data							
H.323 Routing Table							
T-NET Data							
Zone Data	*						
Zone Number of Device/Gateway Overview							
Device Zone Number(436)							
Device Zone Attrtibutes(437)							
Access & Page Relay(438)							
Inside Zone Attributes Overview							
Zone Attribute(439)							
Zone RTP Relay Group(440)							
Inter-Zone Attributes(441)							
Zone Holiday Assignment(444)	-						

Figure 6.13.8-1 Inter-Zone Attributes

Inter Zone Attributes define RTP packet relay treatment for communications between devices in different Zones.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Codec Type	Assigns the codec employed for inter-Zone communications.	N/A, System Codec, G.711, G.723.1, G.729, G.722	NA
RTP Relay Rule	The rule defines when to use RTP relay between the Source and Destination zone. With "If Need", the UCP will automatically determine when to use packet relay, while "Forced to do" will always implement packet relay for RTP packets between the Zones.	If need Always not Forced to do	If need

Table 6.13.8-1	INTER-ZONE	ATTRIBUTES
----------------	-------------------	------------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
RTP Relay Device Utilization	The assigned Source VoIP channels may be used for both sides of the communication or separately only for a device in the Source Zone. The Destination channels are then used as back-up channels or only for devices in the Destination Zone	For Both Side Separate (SRC to DEST)	For Both side
Src. RTP Relay Device Slot Seq.	The Sequence number associated with the VoIP channels in the Source Zone that handle Packet Relay.	Sequence Number	
Dest. RTP Relay Device Slot Seq.	The Sequence number associated with the VoIP channels to handle packet relay for the Destination Zone is defined. When Utilization is Separate the channels are used for devices in the destination Zone, otherwise they are used as back up for both sides.	Sequence Number	
Max Inter Zone connection	This field determines the maximum Inter Zone connections between the source zone and destination zone. When this value is set to 0, there is no limit on the number of connections between the zones.	0-2400 (0: no limit)	0

Table 6.13.8-1 INTER-ZONE ATTRIBUTES

6.13.9 Zone Holiday Assignment - PGM 444

Selecting the Zone Holiday Assignments will display the data input page. Enter the desired Source and Destination Zone numbers range and click **[Load]** to assign Zone holiday. Click **[Save]** button after changing Value.

	PGM Base Function Base	< Fa	vorite PGM	Zone Holiday As X		×			
	Q PGM Search Enter Zone Number Range (1 - 32): Image: Constraint of the search of the								
	System ID & Numbering Plans	Zone Nun	nber Range 1						
	Station Data	Order ⊥a	Attribute	V	alue	Range			
	Board Based Data	1	Ring Mode	Timed Ring Mode •					
	CO Line Data			1:					
	System Data	2	Vacation	3:		YY/MM/DD - YY/MM/DD format (Must be 12 digits)			
	Station Group Data			5: -					
	ISDN Line Data			01 : 02 : 03 :	04 : 05 :				
	SIP Data			06 : 07 : 08 :	09 : 10 :				
<	Tables Data			11 : 12 : 13 :	14 : 15 :				
	Networking Data			16 : 17 : 18 :	19 : 20 :				
	H.323 Routing Table	3	Holiday	21 : 22 : 23 :	24 : 25 :	MM/DD format (Must be 4 digits)			
	T-NET Data								
	Zone Data v			26 : 27 : 28 :	29 : 30 :				
	Zone Number of Device/Gateway Overview			31 : 32 : 33 :	34 : 35 :				
	Device Zone Number(436)			36 : 37 : 38 :	39 : 40 :				
	Device Zone Attrtibutes(437) Access & Page Relay(438)								
	Inside Zone Attributes Overview								
	Zone Attribute(439)								
	Zone RTP Relay Group(440)								
	Inter-Zone Attributes(441) Zone Holiday Assignment(444)	-							

Figure 6.13.9-1 Zone Holiday Assignment

Holidays and vacation day intervals for each Zone can be established to define the Service mode (Day, Night, and Timed). Up to 40 holidays and five (5) vacation intervals can be defined.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Ring Mode	Select the desired Service mode for the Holiday or Vacation.	Day Ring Mode Night Ring Mode Timed Ring Mode N/A	Timed Ring Mode
Vacation	Five ranges may be entered for vacation periods, enter the start and end dates as YY/MM/DD – YY/MM/DD.	Must be 12 digits	None
Holiday	Each Zone can have up to 40 holidays assigned, entering the date as MM/DD.	Must be 4 digits	None

Table 6.13.9-1	ZONE HOLIDAY	ASSIGNMENT

6.14 Device Login

Selecting the Device Login Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

PGM Base Function Base	< Favorite PGM			
PGM Search				
System ID & Numbering Plans	System Overview	System IP Plan(102)	Device IP Plan(103)	Common Attributes(111)
Station Data	System ID & Numbering	System ID & Numbering	System ID & Numbering	Station Data
Board Based Data	Flexible Buttons(115/129) Station Data	Common Attributes(140) CO Line Data	CO/IP Ring Assignment(CO Line Data	CID/CPN Attributes(151) CO Line Data
CO Line Data	Station Data	CO Line Data	CO Line Data	CO Line Data
System Data	System Attributes(160~1 System Data	System Password(162) System Data	Station Group Assignme Station Group Data	Station Group Attributes Station Group Data
Station Group Data	System Data	System Data	Station Group Data	Station Group Data
ISDN Line Data	Station Authorization Co Tables Data	System Authorization C Tables Data	Flexible DID Conversion Tables Data	
SIP Data				
Tables Data				
Networking Data				
H.323 Routing Table				
T-NET Data				
Zone Data				
Device Login ~				
Remote Device Registration(442) Station User Login(443)				
UCS Standard				
DECT Data				
Hotel Data				

Figure 6.14-1 Device Login Data Main Page

6.14.1 Remote Device Registration – PGM 442

Selecting the Remote Device Registration will display the Remote Registration Table data input page. Enter a Table index range and select **[Load]** to enter MAC address information. Click **[Save]** button after changing Value.

PGM Base Function Base	< F	avorite PGM	Remote Devi	×		
PGM Search	 Enter 	ndex Range (1 - 70)	:			2 Load
System ID & Numbering Plans	Index	Range 1-25				
Station Data	Index	MAC Address	Password	Zone	Nation Code	Remark
				1	North America	
rd Based Data	2] [North America	
Line Data	3			1	North America 🔻	
	4			1	North America	
stem Data	5			1	North America 🔻	
tion Group Data	6			1	North America 🔻	
DNU inter Data	7			1	North America 🔻	
DN Line Data	8			1	North America 🔹	
P Data	9			1	North America 🔹	
bles Data	10			1	North America 🔹	
Dies Dala	11			1	North America 🔹	
tworking Data	12			1	North America 🔹	
IET Data	13			1	North America 🔹	
	14			1	North America 🔻	
ne Data	15			1	North America 🔻	
vice Login	✓ 16			1	North America 🔻	
_	17			1	North America 🔻	
emote Device Registration(442)	18			1	North America 🔻	
tation User Login(443)	19			1	North America 🔻	
S Standard	20			1	North America	
	20			1	North America	
CT Data	21			1	North America	
tel Data	22			1	North America	
edundancy Data	24			1	North America	
tialization	25			1	North America 🔹	

Figure 6.14.1-1 Remote Device Registration

When a device attempts to register with the controlling iPECS, the system will check the device MAC address and password against the Registration table. If a match is found, the device is registered regardless of Dip Switch position 3. The system database is updated, the device receives device specific configuration data from the UCP and the entry in the Registration Table is deleted.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mac Address	The Mac address of remote device is entered for registration	MAC Address	
Password	A password, if any, is assigned in the devices database via Device Web admin.	Up to 12 digits	
Zone	The remote device can be assigned to a Zone.	01-32	01
Nation code	The Nation code for the device is assigned.	See Table 3.3.1-2	North America

Table 6.14.1-1 REMOTE DEVICE REGISTRATION

6.14.2 Station User Login – PGM 443

Selecting the Station User Login will display the User Login Registration data input page. Enter an index range then click **[Load]** to modify Station Login data. Click **[Save]** button after changing Value.

PGM Base Function Base	<	Favorite F	OW	5.800	n User Login(443)	Q						
PGM Search	Enter li	ndex Range (1 - 2400) : (Load			Save	
System ID & Numbering Plans	Index F	Range 1-50										
Station Data	Enter	ID / Desired Number Save										
Board Based Data		Enter Index Kange :										
CO Line Data	Save	Password (sa	ame with IC) value) : 🔲								
				ID S	ave							
System Data		Registered		ID	Password	Zone	Desired	Nation Code	Language	Linked Version	Remark	
Station Group Data		Number <u>↓</u> ª	Туре	10			Number					
ISDN Line Data	1							North America	English • English •			
SIP Data	2					1		North America				
on Data	3					1		North America North America	(
Tables Data	4							North America North America				
Networking Data	6							North America V	(
	7					1		North America	English • English •			
T-NET Data	8					1		North America V	English •			
Zone Data	9							North America	English •			
Device Login 🗸 🗸	10					1		North America V	English •			
-	11					1		North America	English •			
Remote Device Registration(442)	12							North America	English •			
Station User Login(443)	13					1		North America	English •			
UCS Standard	14					1		North America	English •			
DECT Data	15					1		North America	English •			
DECT Data	16					1		North America 🔻	English •			
Hotel Data	17					1		North America 🔻	English •			
Redundancy Data	18					1		North America	English •			
	19					1		North America 🔻	English •			

Figure 6.14.2-1 Station User Login

Station User Login configures User credentials for registration of iPECS Communicator Soft phones, UCS clients and initial registration of SIP phones. A station must register with the system each time it is connected to the system. The ID and password are assigned along with other characteristics of the remote station such as Zone, desired station number, country code, Language and a remark can be defined. The iPECS Communicator or UCS Client can be configured as link-paired station by assigning the same Desired-Number as a registered desktop iPECS LIP Phone.

Note for the UCS Client, the UCS Standard Client Login, PGM 446, may be employed in place of PGM 443 as a single point to configure the client information.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registered Number	Station number registered to the station, displayed only after registration.	Station number	
Linked	This field indicates the Linked pair status of the station.		
ID	The User Login ID must be entered for registration	12 Characters	
Password	The User Login password must be entered for registration.	12 digits	

Table 6.14.2-1 STATION USER LOGIN

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Zone	The device can be assigned to a Zone.	1-32	1
Desired Number	The desired number can be entered for the device. To link an iPECS UCS client to an iPECS LIP Phone, enter the station number of the registered iPECS LIP Phone prior to registration of the iPECS UCS. For the UCS Client, PGM 446 may be used as the single administration point.	Station number	
Nation code	The Nation code for the device is assigned.		North America
Language	The default Language type for system voice prompts can be assigned to the device from the available languages.	Language Code 1 ~ 6	English
Linked	This field indicates the Linked pair status of the station.		

Table 6.14.2-1 STATION USER LOGIN

6.15 UCS Data

Selecting the UCS data group returns the sub-menu displayed in the left frame as shown in the following figure.

PGM Base Function Base	1				
		< Favorite PGM			
Q PGM Search	0				
System ID & Numbering Plans					
Station Data		System ID & Numberi	System IP Plan(102) System ID & Numberi	Device IP Plan(103) System ID & Numberi	Common Attributes(Station Data
	-1				
Board Based Data	_	Flexible Buttons(115/	Common Attributes(CO/IP Ring Assignm	CID/CPN Attributes(1
CO Line Data		Station Data	CO Line Data	CO Line Data	CO Line Data
System Data					
Station Group Data	-	System Attributes(16 System Data	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attrib Station Group Data
	-1				
ISDN Line Data	_	Station Authorizatio	System Authorizatio	Flexible DID Convers	
SIP Data		Tables Data	Tables Data	Tables Data	
Tables Data					
Networking Data					
H.323 Routing Table					
T-NET Data					
Zone Data					
Device Login					
UCS Data	~				
Common Attributes(445)					
UCS Standard Client Login(446)					
UCS Premium Client Login(446)					
UCS Standard Client Attributes(447)					
Administrative Message(448)					
UCS Standard Client Audio Setting(449)	-				

Figure 6.15-1 UCS Data Main Page

6.15.1 Common Attributes – PGM 445

Selecting Common attributes will display the common attributes input page. Click **[Save]** button after changing Value.

PGM Base Function Base	F	avorite PGM Common Attribut		
Q PGM Search	0			Sav
System ID & Numbering Plans	Order			
Station Data	Įª	Attribute <u>↓</u> ª	Value	Range
Board Based Data	1	Concurrent Clients In Login	100	System Capacity
CO Line Data	2	Client Min. Changeable Password Lengt	1 12	0-12
System Data	3	Do Not Allow The Same Password And User ID	OFF •	
System Data	4	XML Port	8899	00001-6553
Station Group Data	5	Clients Check Interval	30	30-60 sec
ISDN Line Data	6	UCS Server Type	Standard Preserve UCS DB when server type is changed.	
SIP Data			LDAP Server Settings	
Tables Data	1	Server Display Name	LDAP Server	
Tables Data	2	Server IP		
Networking Data	3	Server Port		00001-6553
H.323 Routing Table	4	Require Login	ON •	
	5	Use SSL	OFF T	
T-NET Data	6	Search Base		
Zone Data				
Device Login				
UCS Data	~			
Common Attributes(445)				
UCS Standard Client Login(446)				
UCS Premium Client Login(446)				

Figure 6.15.1-1 Common attributes

Common Attributes for the UCS Clients include client login characteristics and LDAP server information shared with the clients as shown in Table 6.15.1-1.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Concurrent Clients in login	iPECS UCS employs a per-seat license. The number of UCS Clients that are active at a time cannot exceed the licensed capacity.	System capacity	100
Minimum Password Length	The minimum length of a UCS Client password can be defined up to 12 characters.	Max. 12	12
Do Not Allow the Same Password and User ID	The User Id can be employed as the password if permitted (OFF).	OFF ON	OFF
XML Port	The system employs XML to send or request certain information such as the User picture. The TCP/IP port can be defined.		8899
Clients Check Interval	Periodically, the iPECS system will verify the status of logged in UCS clients.	30~60 seconds	30
UCS Server Type	The server that provides UCS service can be the iPECS UCP (Standard) or the external UCS Server	Standard Premium	Standard

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	 (Premium). Additional video and collaboration features are provided by the UCS Server as Premium service. When the UCS Server is employed, the Standard Client Login information (PGM 446) is transferred from the iPECS UCP to the UCS Server after the client is registered. To preserve UCS DB when server type is changed, check the box. 		
	LDAP Server Settings		
Server Display Name	When the UCS Client requires access to an LDAP server, the system will provide the LDAP server information to the client. The server name is defined in this field.	15 characters	
Server IP	When an LDAP server is employed, the IP address of the server must be defined.		0.0.0.0
Server Port	When an LDAP server is employed, the TCP/IP port of the server must be defined.	00001-65535	
Require Login	The UCS Client ID and Password may be required for log in to the LDAP server.	OFF ON	ON
Use SSL	When supported by the server, the client can employ SSL (Secure Sockets Layer) for added security.	OFF ON	OFF
Search Base	Search base means Search option. You can get the search option from LDAP Server manager. For example, if OU (Organization Unit) is OC and DC (Directory Company) are ucapp and com, you can give the option "OU=OC, DC=ucapp, DC=com" in this field. You will get the desired directory.		

Table 6.15.1-1 Common attributes

6.15.2 UCS Standard Client Login – PGM 446

Selecting UCS Standard Client Login will display the UCS standard client login input page. Enter the Client index and click **[Load]** to modify the Client data. Use the check boxes to indicate the attributes to modify. Click **[Save]** button after changing Value.

	<	Favorite PGI	A	UCS 5tu	ndard Clie	int Login(446)	×								
PGM Search O	Enter	UCS Client Index (1 - 10	01 -				E Load								Save
System ID & Numbering Plans	1100.0	Client Index 1-20													Delete
Station Data															
Board Based Data	("): R	equired Input Item													
CO Line Data			(") User ID (")	User Password (*)	Name (*)	Office Phone	Cellular Phone	Home Phone	Office Name	Office Department (")	E-mail Address (")	Linked Pair	Unique ID	Mutual Presence Permission	Licer
	0.1											OFF			STDA
System Data	8 2											OFF			STDA
Station Group Data	0 1											OFF		ON	STDA
ISDN Line Data	0.4											OFF		ON .	STD-
	0.5											OFF		ON	STD
SIP Data	0.6	5										OFF		ON ·	STD-
Tables Data	E 7	T										OFF		ON	STD
	0.0	1										OFF		ON	STDA
Networking Data	0.5	9										OFF		ON	STD
H 323 Routing Table	0.1	10										OFF		ON	STDA
T-NET Data		11										OFF		ON	STD-
1-NET Cota	B 1	12										OFF		ON	STDA
Zone Data	0.1	13										OFF		ON	STD-
Device Login	8 1	14										OFF		ON	STDA
	0.1	15										OFF		ON	STD-
UCS Data ~		16										OFF 1		ON	STDA
Common Attributes(445)	0 1	17										OFF		ON	STDA
UCS Standard Client Login(446)	0 1	18										OFF		ON	STD-
UCS Premium Client Login(445)	8	19										OFF		ON .	STDA
UCS Standard Client Attributes(447)	8	20										OFF		ON .	STD-

Figure 6.15.2-1 UCS Standard Client Login

The UCS Client information is configured for each client prior to registration. When the UCS Server is employed to provide Premium service, the iPECS UCP will transfer the information to the server after the client registers and, after registration, any changes to the client configuration are accomplished in the UCS Server.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number for the UCS Client can be assigned here and will update PGM 103 and 4433		
User ID	The UCS Client Id for the UCS Client can be assigned here and will update PGM 103 and 443.	Min. 4 characters	
User PWD	The UCS Client password, up to 32 characters must be assigned.	Max. 32 characters	
Name	The user's name, up to 32 characters should be entered.	Max. 32 characters	
Office Phone	Set Office phone number.	Max. 32 characters	
Mobile Phone	Set Mobile phone number	Max. 32 characters	
Home Phone	Set Home phone number	Max. 32 characters	
Office Name	Set Office name	Max. 32 characters	
Office Department	Set Office Department	Max. 32 characters	
Email address	Set Email address	Max. 40 characters	
Linked Pair	If the UCS Client is part of a Linked pair, it must be enabled here. By entering the Station number of the iPECS IP Phone as the UCS Client Station Number, the stations will employ MAC linking.	OFF ON	OFF

Table 6.15.2-1 UCS Standard Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Unique ID	When the UCS Server is employed, each client must have a unique Id of at least 40 characters, which identifies the clients to the UCS Server. Once the Client registers, iPECS UCP will send the information to the UCS Server. Note that the UCS Server Type in PGM 445 must be configured as "Premium".	Min. 40 characters	
Mutual presence permission	The presence status of the Client can be shared with other clients.	OFF ON	ON
License	The status of license will be displayed and select the license for usage among range.	STD-V STD-NV MOBILE	

Table 6.15.2-1 UCS Standard Client Login

6.15.3 UCS Premium Client Login – PGM 446

Selecting UCS Premium Client Login will display the UCS Premium client login input page. Enter the Client index and click **[Load]** to modify the Client data. Use the check boxes to indicate the attributes to modify. Click **[Save]** button after changing Value.

	é	Favorite PGM		UCSI	fremium C	lient Login[446	× o							
PGM Search 0	Enter UCS 5	Server ID (1 - 15)	La	her.										Save
System ID & Numbering Plans			0.55	3571										Delete
Station Data	UCS Server	eID 1												0.000
Board Based Data	(*) Require	ed input item												
	Confirmation	ation from UCS Server												
CO Line Data	Page rolar	(100 users per page)	1.	ä										
System Data		(inclusion her helde).	C. C. Lines	9										
Itation Group Data	🗐 Index	Station Number (*)	User ID (")	User Password (*)	Name (*)	Office Phone	Cellular Phone	Home Phone	Office Name	Office Department (*)	E-mail Address (*)	Linked Pair	Unique ID Mutual Presence Permission	License
SDN Line Data	自1											OFF	ON -	PREM-V
SCOUT LC ST.	0.2											OFF	ON	PREM-V
IP Data	10.3											OFF	ON	PREM-V
ables Data	E 4											OFF	ON	PREM-V
	E 5											OFF	ON	PREM-V
letworking Data	8 6											OFF	ON	PREMV
323 Routing Table	8 7											OFF	ON	PREM-V
NET Data	B 1											OFF	ON	PREM-V
10010000	10 P											OFF	ON	PREMA
one Data	E 10											OFF	ON -	PREM-V
evice Login	B (11)											OFF	ON	PREM-V
	B 12											OFF	ON -	PREM-V
CS Data 🗸	E 13											OFF	ON -	PREM/V
Common Attributes(445)	E 14											OFF	ON	PREM-V
UCS Standard Client Login(446)	E 15											OFF.	ON -	PREM/V
UCS Premium Client Login(446)	B 16											OFF	ON	PREMIV
UCS Standard Client	0 17											OFF	ON	PREM-V
Attributes(447)	2 18											OFF	ON	PREM-V
Administrative Message(448)	E 19											OFF	ON -	PREM-V
UCS Standard Client Audio Setting(449)	EF 25											OFF	ON	PREM-V

Figure 6.15.3-1 UCS Premium Client Login

The UCS Client information is configured for each client prior to registration. When the UCS Server is employed to provide Premium service, the iPECS UCP will transfer the information to the server after the client registers and, after registration, any changes to the client configuration are accomplished in the UCS Server.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number for the UCS Client can be assigned here and will update PGM 103 and 4433		
User ID	The UCS Client Id for the UCS Client can be assigned here and will update PGM 103 and 443.	Min. 4 characters	
User PWD	The UCS Client password, up to 32 characters must be assigned.	Max. 32 characters	
Name	The user's name, up to 32 characters should be entered.	Max. 32 characters	
Office Phone	Set Office phone number.	Max. 32 characters	
Cellular Phone	Set Cellular phone number	Max. 32 characters	
Home Phone	Set Home phone number	Max. 32 characters	
Office Name	Set Office name	Max. 32 characters	
Office Department	Set Office Department	Max. 32 characters	
Email address	Set Email address	Max. 40 characters	
Linked Pair	If the UCS Client is part of a Linked pair, it must be enabled here. By entering the Station number of the iPECS IP Phone as the UCS Client Station Number, the stations will employ MAC linking.	OFF ON	OFF

Table 6.15.3-1 UCS Premium Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Unique ID	When the UCS Server is employed, each client must have a unique Id of at least 40 characters, which identifies the clients to the UCS Server. Once the Client registers, iPECS UCP will send the information to the UCS Server. Note that the UCS Server Type in PGM 445 must be configured as "Premium".	Min. 40 characters	
Mutual presence permission	The presence status of the Client can be shared with other clients.	OFF ON	ON
License	The status of license will be displayed and select the license for usage among range.	PREM-V PREM-NV MOBILE	

Table 6.15.3-1 UCS Premium Client Login

6.15.4 UCS Standard Client Attributes – PGM 447

Selecting UCS Standard client attributes will display the UCS standard client attributes input page. Enter the UCS Client index then click **[Load]** to modify the client data. Use the check boxes to identify the parameters to modify. Click **[Save]** button after changing Value.

PGM Base Function Base				×		
PGM Search	< Fav	orite PGM	UCS Standard Clie.	G		
	Enter UCS	Client Index (1	- 100) :			? Load
System ID & Numbering Plans	UCS Clien	t Index 1				
Station Data	Order <u>↓</u> a	Check All	Attribute	Value	Range	
Board Based Data	1		Allow Scheduled Dial	ON T	PC Client Only	
CO Line Data	2		Allow Flexible Button	ON T	PC Client Only	
	3		Allow Step Call	ON T	PC Client Only	
System Data	4		Allow Call Memo	ON T	PC Client Only	
Station Group Data	5		Allow Call Pickup	ON T	PC Client Only	
SDN Line Data						
SIP Data						
Tables Data						
Networking Data						
H.323 Routing Table						
I-NET Data						
Zone Data						
Device Login						
JCS Data ~						
Common Attributes(445)						
UCS Standard Client Login(446)						
UCS Premium Client Login(446)						
UCS Standard Client Attributes(447)						
Administrative Message(448)						
UCS Standard Client Audio Setting(449)						

Figure 6.15.4-1 UCS Standard Client Attributes

The UCS Client can be allowed or denied access to several features as described in Table 6.15.4-1.

Table 6.15.4-1 UCS Standard Client Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Allow Scheduled Dial	Allows Scheduled Dialing from the client.	OFF/ON	ON
Allow Flexible Button	Allows the user to access Flex buttons on the UCS Client.	OFF/ON	ON
Allow Step Call	Allows access to the step-call feature by the UCS client.	OFF/ON	ON
Allow Call Memo	Allows the UCS Client access to the Call Memo feature.	OFF/ON	ON
Allow Call Pickup	Permits the UCS Client use of the Direct and Group Call Pick- up features.	OFF/ON	ON

6.15.5 Administrative Message – PGM 448

Selecting Administrative Message will display the administrative message input page. Click **[Send]** button after filling out the subject and Contents and checking the destination.

	PGM Base Function Base									_
		<	Favor	ite PGM		Administra	ative Me	×		2
	PGM Search									
				tribute				Value		
	System ID & Numbering Plans		Subject(M		s)					
	Station Data		Destination	n		All Users	s 🔍 Login	User		
	Board Based Data									
	CO Line Data		Contents(N	Max 255 By	tes)					
	System Data									
	Station Group Data						Send			
	ISDN Line Data		Order	Date	Tin	ne Sut	oject	Contents		
	SIP Data									
<	Tables Data									
	Networking Data									
	H.323 Routing Table									
	T-NET Data									
	Zone Data									
	Device Login									
	UCS Data V									
	Common Attributes(445) UCS Standard Client Login(446)									
	UCS Premium Client Login(446)									
	UCS Standard Client Attributes(447)									
	Administrative Message(448)									
	UCS Standard Client Audio Setting(449)									

Figure 6.15.5-1 Administrative Message

An administrator can send a message to UCS Clients such as a Welcome message.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Subject	Message subject	Max. 80 bytes	
Destination	The message can be sent to currently active UCS Clients or to All Clients. For the All Clients selection, the message is sent to all active Clients and as each Client logs in.	Login All	All
Contents	Message body	Max. 255 bytes	

6.15.6 UCS Standard Client Audio Setting – PGM 449

Selecting UCS Standard Client Audio setting will display the audio setting input page. Enter the Client index and click **[Load]** to modify the Client data. Use the check boxes to indicate the attributes to modify. Click **[Save]** button after changing Value.

	PGM Base Funct	tion Base									
	•		Fav	orite PGM	UCS Standard Clie						
	Q PGM Search	0	Entor LICS	Client Index (1	100) -			? Load		O Lood	O Lood
	System ID & Numbering Plan	IS	Enter 003	Client Index (- 100).			Coad	Coau	Coau	Loau
	Station Data		UCS Client	t Index 1							
	Station Data										
	Board Based Data			etting By Mobi							
	CO Line Data				le User & Moblie Phone						
			Order <u>↓</u> a	Check All	Attribute	Value					
	System Data				e or Earphone Conversation Mo						
	Station Group Data		1		Enable Noise Suppression	OFF T					
	ISDN Line Data		2		Enable Automatic Mic Volume						
	ISDN LINE Data		3		Echo Control	Disable EC 🔻					
	SIP Data				peaker Conversation Mode	0.55					
	Tables Data		1		Enable Noise Suppression Enable Automatic Mic Volume	OFF T					
<	Networking Data		3		Echo Control	Disable EC •					
	Networking Data		3		Echo Control	DISADIE EC •					
	H.323 Routing Table										
	T-NET Data										
	Zone Data										
	Device Login										
	UCS Data	~									
	Common Attributes(445)										
	UCS Standard Client Login	(446)									
	UCS Premium Client Login	(446)									
	UCS Standard Client Attributes(447)										
	Administrative Message(44	_									
	UCS Standard Client Aud Setting(449)	io 🗸									

Figure 6.15.6-1 UCS Standard Client Audio setting

Audio characteristic for the Speaker and earphone mode can be established for best overall audio performance.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT						
Earpiece or Earphone conversion mode									
Enable Noise Suppression	The system can implement various levels of "Noise suppression from "OFF" to "Very High" in six levels.	OFF ON	OFF						
Enable Automatic Mic. Volume	The system can implement Auto gain control for the Earphone.	OFF ON	OFF						
Echo Control	Echo cancellation can be enabled for the Earphone.	Disable EC Minimum Low Moderate	Disable EC						

Table 6.15.6-1 Audio Se	Setting by Mobile	User & Mobile phone
-------------------------	-------------------	---------------------

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT						
		High							
		Maximum							
	Speaker Conversation Mo	de							
	The system can implement various	OFF							
Enable Noise Suppression	levels of "Noise suppression from	-	OFF						
	"OFF" to "Very High" in six levels.	ON							
Enable Automatic Mic. Volume	The system can implement Auto	OFF	OFF						
Enable Automatic Mic. Volume	gain control for the Speakerphone.	ON	OFF						
		Disable EC							
		Minimum							
Echo Control	Echo cancellation can be enabled	Low	Disable EC						
	for the Speakerphone.	Moderate							
		High							
		Maximum							

Table 6.15.6-1 Audio Setting by Mobile User & Mobile phone

6.16 DECT Data - PGM 491

Selecting the DECT Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

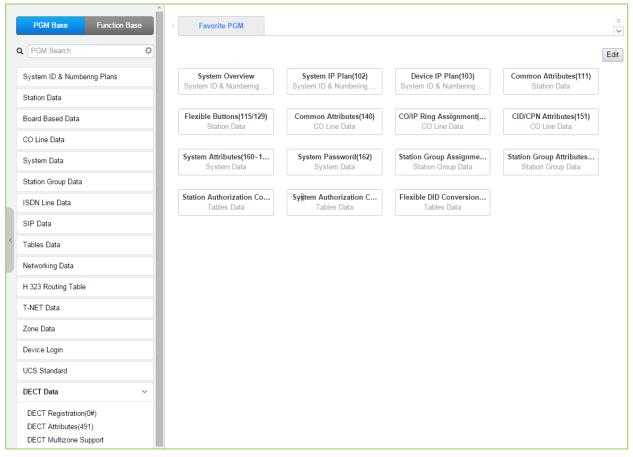


Figure 6.16-1 DECT Data Main Page

6.16.1 DECT Registration (0#)

Selecting DECT Registration will display the DECT Registration input page. Use the radial buttons to select the attributes to change. Click **[Save]** button after changing Value.

PGM Base Function Base	<	Favo	rite PGM DECT Reg	istrat ×				
Q PGM Search								
System ID & Numbering Plans	Order		Attrib	ute	Value	Comment		
· · · · · · · · · · · · · · · · · · ·	1		Park Code		NOT PROGRAMMED			
Station Data	2	۲	AC Code					
Board Based Data	3	۲	DECT Subscribe All Data B	Erase Password				
CO Line Data				Option				
System Data	1		DECT Subscribe enable	Desired Station Phone Type	GDC-480/500H T			
System Data	2	\bigcirc	DECT Unsubscribe	Desired Station				
Station Group Data	3		DECT User Authentication	Desired Station				
ISDN Line Data	4	0	DECT Mobility	Desired Station DECT Mobility ON/OFF	OFF V write			
SIP Data	5	0	Station Erase	Desired Station				
Tables Data		DECT Registered Station						
Networking Data	Or	Order Station Registration Status						
H.323 Routing Table								
T-NET Data								
Zone Data								
Device Login								
UCS Standard								
DECT Data ~								
DECT Registration(0#) DECT Attributes(491)								
DECT Multizone Support								

Figure 6.16.1-1 DECT Subscription Screen

On this page, the DECT PARK and authorization codes are defined. Several "Options" are available to enable subscription, unsubscribe a DECT station, enable mobility, etc. A chart is included displaying the registered and subscribed DECT terminals.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT				
Park Code	The PARK (Portable Access Rights Key) Code is a unique system Id entered at the DECT handset during the subscription process.	14 digits	Not programmed				
AC Code	The Authentication Code is entered at a DECT handset to verify subscription.	Up to 8 digits					
DECT Subscribe All Data Erase Password	To erase all data of DECT, enter the password.						
	Option						
DECT Subscribe Enable	Enables the system to accept subscription from a DECT handset.						
Desired Station	Desired station number for the wireless DECT handset.	Station Number					

Table 6.16.1-1	DECT	Registration
1 abie 0.10.1-1		Registration

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Phone Type	Several types of handsets may be selected.	GDC-480/500H GDC-400/450H Standard GAP	GDC- 480H/500H
	Press [Send] button after entering the number and type.		
DECT Unsubscribe	To terminate a subscription, enter the station number for the DECT handset. Note the Station must be connected, otherwise use Station Erase field below.	Station number	
DECT User Authentication	To subscribe successfully, the user will be required to enter the Station Authorization Code from PGM 227.		
DECT Mobility	When a DECT handset is registered to multiple systems that are networked, calls can be routed over the network to the DECT handset location.	Station number	
	Enter the registered station number, select Mobility ON or OFF and click [write] box then Save the page.	OFF ON	OFF
Station Erase	To terminate the registration for a DECT phone that is not connected, enter the registered station number and click [Save] button.	Station number	

Table 6.16.1-1 DECT Registration

6.16.2 DECT ATTRIBUTES - PGM 491

Selecting the DECT Attributes will display the DECT ATTRIBUTES input page. Click **[Save]** button after changing Value.

PGM Base Function Base		Fa	vorite PGM DECT Attrib X		
Q PGM Search					
System ID & Numbering Plans		Order		Value	Remark
Obstice Date	4	1	Auto Call Release	OFF T	
Station Data	-	2	Base Fault Alarm	Disable •	
Board Based Data		3	Chain Fault Alarm	Disable •	
CO Line Data		4	Handover Sensitivity (GDC-500H only)	Normal •	If this value is changed, all WTIMs will restart.
System Data					
Station Group Data					
ISDN Line Data					
SIP Data					
Tables Data					
Networking Data					
T-NET Data					
Zone Data					
Device Login					
UCS Standard					
DECT Data ~					
DECT Registration(0#)					
DECT Attributes(491)					
DECT Multizone Support					

Figure 6.16.2-1 DECT ATTRIBUTES

DECT Attributes define functions associated with the DECT equipment and operation as shown in Table 6.16.2-1.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Call Release	If enabled, when the other party of an active internal call disconnects, DECT terminal returns to idle.	OFF ON	OFF
Base Fault Alarm	If enabled, DECT Base station alarms are sent to the Attendant.	Disable Enable	Disable
Chain Fault Alarm	If enabled, alarms are sent to the Attendant indicating a fault in the link between WTIM modules.	Disable Enable	Disable
Handover Sensitivity (GDC- 500H only)	The user can control the handover sensitivity of GDC- 500H. (Normal or Strong). If this value is changed, all WTIMs will restart.	Normal Strong	Normal

Table 6.16.2-1 DECT Attributes

6.16.3 DECT Multizone Support

Selecting the DECT Multizone support will display the DECT Multizone support input page.

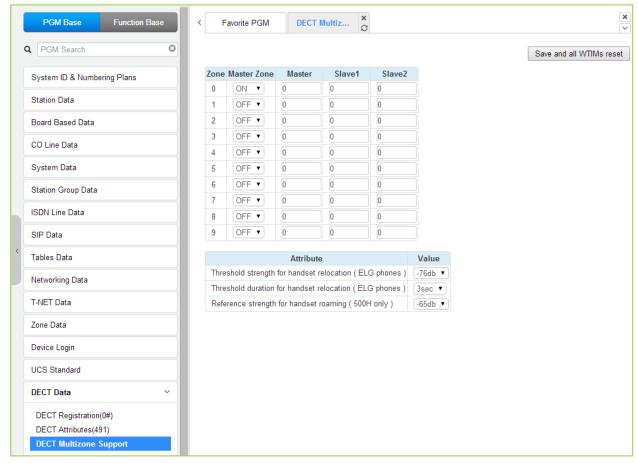


Figure 6.16.3-1 DECT Multizone Support

It is for roaming of DECT phones in large sites with more than 3 WTIMs.

6.17 Hotel Data

Selecting the hotel data returns the sub-menu displayed in the left frame as shown in the following figure.

	SIP Data	Favorite PGM			X
	Tables Data	< Favorite PGM			Y
-	Networking Data				Edit
	H.323 Routing Table	System IP Plan(102) System ID & Numberin	Device IP Plan(103) System ID & Numberin	Common Attributes(1 Station Data	Flexible Buttons(115/ Station Data
	T-NET Data			Otation Data	Gaton Data
	Zone Data	Common Attributes(1 CO Line Data	CO/IP Ring Assignm CO Line Data	CID/CPN Attributes(1 CO Line Data	System Attributes(16 System Data
	Device Login				
	UCS Standard	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attribu Station Group Data	Station Authorization Tables Data
	DECT Data				
	Hotel Data 🗸	System Authorizatio Tables Data	Flexible DID Convers Tables Data		
<	HOTEL Attributes(300) HOTEL Room Attributes(301) Room Type(302) Room Class(303) Room Class Rate(304) Call Charge Rate(305) MiniBar List(306) Tax Rate(307) Part Time(308) Room Charge Preview ICM Call Of Room Call Group of Room Overview Call Group of Room One-Time CO Call Check-In/Out Overview Check-In Check-Out Hotel Info Move Room				

Figure 6.17-1 Hotel Data main page

With Hotel Data, we describe the function on another Hotel Feature and Programming manual. Refer to "Hotel Feature and Programming manual'.

6.18 Redundancy Data for UCP600 & 2400

Selecting the redundancy data returns the sub-menu displayed in the left frame as shown in the following figure.

	PGM Base Function Base	< Favorite PGM				×
	Q PGM Search				Edit	t
	System ID & Numbering Plans	System IP Plan(102) System ID & Numberi	Device IP Plan(103) System ID & Numberi	Common Attributes(Station Data	Flexible Buttons(115 Station Data	
	Station Data					
	Board Based Data	Common Attributes(CO Line Data	CO/IP Ring Assignm CO Line Data	CID/CPN Attributes(1 CO Line Data	System Attributes(16 System Data	
	CO Line Data					
	System Data	System Password(162) System Data	Station Group Assig Station Group Data	Station Group Attrib Station Group Data	Station Authorizatio Tables Data	
	Station Group Data					
	ISDN Line Data	System Authorizatio Tables Data	Flexible DID Conver Tables Data			
	SIP Data					
<	Tables Data					
	Networking Data					
	T-NET Data					
	Zone Data					
	Device Login					
	UCS Standard					
	DECT Data					
	Hotel Data					
	Redundancy Data ~					
	Redundancy Attributes(502) Redundancy IP Address(503)					

Figure 6.18-1 Redundancy Data main page

6.18.1 Redundancy Attributes – PGM 502

Selecting Redundancy attributes will display the page shown. Click **[Save]** button after changing Value.

PGM Base Function Base	< Favorite PGM Redundance	y ×	
PGM Search			
System ID & Numbering Plans	Attribute	Value Remark	
	CPU Redundancy Usage	OFF V	
Station Data	Change Active UCP By Power Fail	OFF V	
Board Based Data	Geographic Redundancy	OFF V	
CO Line Data			
System Data			
Station Group Data			
SDN Line Data			
SIP Data			
Fables Data			
Networking Data			
I-NET Data			
Zone Data			
Device Login			
JCS Standard			
DECT Data			
Hotel Data			
Redundancy Data 🗸 🗸			
Redundancy Attributes(502) Redundancy IP Address(503)			

Figure 6.18.1-1 Redundancy Attributes

The Redundancy attributes enable redundancy and activate "Geographical" redundancy.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CPU Redundancy	When redundancy is employed, this field informs the master	OFF	OFF
usage	UCP that a redundant UCP is available.	ON	OFF
Change Active UCP By	When power fails, the active UCP is changed to the standby	OFF	
Power Fail	mode and the standby UCP becomes active.	ON	OFF
Geographical	Geographical redundancy permits remote location of the	OFF	OFF
Redundancy	redundant UCP modules.	ON	OFF

Table 6.18.1-1 Redundancy Attributes

6.18.2 Redundancy IP Address - PGM 503

Selecting the redundancy IP Address will display the page shown. Click **[Save]** button after changing Value.

	PGM Base Function Base	< Favorite PGM	Re	edundancy <mark>×</mark> O		
¢	PGM Search					
	System ID & Numbering Plans		Attribut	te	Value	
	,			IP Address	10.10.10.2	
	Station Data	My system	LAN1	Net Mask	255.255.0.0	
	Board Based Data	, -,		Gateway IP Address		
	Board Babod Bata			Firewall IP Address	0.0.0.0	
	CO Line Data			IP Address	10.20.10.2	
	a	Maria and an	1.4.10	Net Mask	255.255.255.0	
	System Data	My system	LAN2	Gateway IP Address	10.20.10.1	
	Station Group Data			Firewall IP Address	0.0.0.0	
	ISDN Line Data			IP Address	0.0.0.0	
	ISDN Line Data			Net Mask	0.0.0.0	
	SIP Data	Associate System	LAN1	Gateway IP Address	0.0.0.0	
<	Tables Data			Firewall IP Address	0.0.0.0	
				IP Address	10.20.10.3	
1	Networking Data			Net Mask	255.255.255.0	
	T-NET Data	Associate System	LAN2	Gateway IP Address	10.20.10.1	
	Zone Data			Firewall IP Address	0.0.0.0	
	Device Login					
	UCS Standard					
	DECT Data					
	Hotel Data					
	Redundancy Data V					
	Redundancy Attributes(502)					
	Redundancy IP Address(503)					

Figure 6.18.2-1 Redundancy IP address

For proper operation, the IP addressing parameters of the LAN1 ports of the redundant UCP modules must be defined for Redundancy.

6.19 Initialization - PGM 450

Selecting Initialization returns the sub-menu displayed in the left frame in as shown in the following figure.

	PGM Base Function Base	Favorite PGM				×
۹	PGM Search O					Edit
-	System ID & Numbering Plans	System Overview System ID & Numb	System IP Plan(102) System ID & Numb	Device IP Plan(103) System ID & Numb	Common Attribute Station Data	
-	Station Data					
	Board Based Data	Flexible Buttons(11 Station Data	Common Attribute CO Line Data	CO/IP Ring Assign CO Line Data	CID/CPN Attributes CO Line Data	
	CO Line Data					
:	System Data	System Attributes(System Data	System Password(System Data	Station Group Assi Station Group Data	Station Group Attri Station Group Data	
	Station Group Data					
	ISDN Line Data	Station Authorizati Tables Data	System Authorizati Tables Data	Flexible DID Conve Tables Data		
	SIP Data					
< .	Tables Data					
	Networking Data					
	H.323 Routing Table					
	T-NET Data					
1	Zone Data					
	Device Login					
	UCS Standard					
	DECT Data					
	Hotel Data					
	Initialization ~					
	Initialization(450)					

Figure 6.18-1 Initialization

6.19.1 Initialization Table - PGM 450

Selecting Initialization will display the Initialization Table data entry page. Use the check boxes to indicate the segment of the Database to initialize then click **[Initialize]** to reset the database to initial values. A range must be entered to initialize certain data such as Station Data. Click **[Reset System]** to restart the system.

PGM Search O						alize
System ID & Numbering Plans	Order	Select	Attribute	Value	Reset Sys	stem Resu
Station Data	1		All Database			
	2		Flexible Number Plan		PGM106~109	
Board Based Data	3		Station Data	-	PGM111~114,115/129,116~127,Station Name Display,Station Speed Dial	
CO Line Data	4		CO Line Data		PGM140~147,150~153,133,Name	
System Data	5		System Data		PGM100, 105, 106, 238, 160~177, 179, 183, 197, 250, 251, 253, 255, 436~444, 491, Custom Msg, PPTP Attr	
ystem Data	6		Station Group Data		PGM190~192	
Station Group Data	7		ISDN Table		PGM201~203,206,231	
SDN Line Data	8		System Timer		PGM180~182,186	
	9		Toll Table		PGM224	
IP Data	10		LCR Data		PGM220~223	
Tables Data	11		Other Tables		PGM227~229,232~233,236,239,240	
letworking Data	12		Flexible Button		PGM115,129	
vetworking Data	13		Networking Data		PGM320~325	
1.323 Routing Table	14		SIP Data		PGM126,133,210~212,215,216	
I-NET Data	15		T-NET Data		PGM330~336	
	16		Zone Data		PGM436~441,444	
Zone Data	17		Remote Device Registration	-	PGM442	
Device Login	18		Station User Login	-	PGM443	
ICS Standard	19		Personal Group Data		PGM260,261	
Seo Standard	20		UCS Standard Data		PGM445~449	
ECT Data	21		Hotel Data		PGM300~308	
Hotel Data	22		Remove default password(*)		PGM227(Authorization Code Only)	

Figure 6.19.1-1 Initialization Menu

The system has been pre-programmed with certain features using "default data". The default data are loaded into memory when the system is initialized. The system should always be initialized when first installed or the database appears corrupted. In addition, the system can be restarted from this page and, if redundant processors are equipped, the active and standby UCP modules can be modified.

The system can be initialized manually during installation. If the system is reset with the UCP module Mode switch pole 4 in the ON position, the entire database, including the System Id and Numbering Plan, will initialize.

7. MAINTENANCE

The Maintenance tab main screen displays information on the system software versions as well as information on modules and terminals connected to the system. From this page, the database upload/download, software upgrade, access control, license install and other management functions shown in Figure 7-1 are accessed. In addition, at the top of the central screen, detailed software version information is provided. Also, you can monitor the device in real time by clicking **[Real-time Device Monitoring]**.

Real time monitoring for Device

You can monitor the current status about Device in real time. The new information is highlighted in red.

S/W Upgrade	Real-time Device Monitorin											
Database	Appl Version : S	-UCP-RI	s1512-2.	0.8-App								
Multi Language	Kernel Version	Boot Version : 1.0Ca SEP/15 Kernel Version : R1.1.3 H/W Issue : 1 System bootup time : 15-12-14 19:21:36										
SMDR												
File System	Classification	Туре	Logical Num	IP Address	Version	Connection	State					
MOH Management	со	BRIM4	1 - 8	10.10.10.11		Connected	[1:Idle][2:Idle][3:Idle][4:Idle][5:Idle][6:Idle][7:Idle][8:Idle]					
License Management	со	GW MATM GW	9 - 24	10.10.10.12			[9:Idle][10:Idle][11:Idle][12:Idle][13:Idle][14:Idle][15:Idle] [16:Idle][17:Idle][18:Idle][19:Idle][20:Idle][21:Idle][22:Idle]					
VSF Prompt Message	STA	LIP- 9020	1000	10.10.10.10	1.0Df	Connected	[23:Idle][24:Idle] [1000:Use]					
VSF System Greeting	STA	LIP- 8040L	1001	10.10.10.13		Connected	[1001:N/A]					
Voice Mail Management			1 - 32	10.10.10.14		Connected	[1:Idle][2:Idle][3:Idle][4:Idle][5:Idle][6:Idle][7:Idle][8:Idle] [9:Idle][10:Idle][11:Idle][12:Idle][13:Idle][14:Idle][15:Idle]					
Function Program	MCIM	MCIM GW					[15:dde][15:dde][15:dde][25:dd					
User Management Trace	WTIM	WTIM4 GW	1	10.10.10.15	/()	Connected	[30.1019][31.1019][32.1019]					
TDM Gain Control												
IP Gain Control												
Tone/Ring Gain&Cadence Control												
Appliances Control												

Figure 7-1 Maintenance Main Page

Among Menus on Maintenance, the following functions are not available at UCP2400.

- 1. VSF Prompt message
- 2. VSF System greeting
- 3. Voice Mail USB Backup on VSF Mail Management

7.1 S/W Upgrade

The iPECS UCP employs a NAND based memory file system thus, html, UCP upgrade and iPECS appliance image files can be uploaded without impact to the current database. All of the iPECS series modules can be upgraded by remote access through the system. Selecting S/W Upgrade from the Maintenance page displays the Appliance Version page and sub-menus display in the left frame as shown in Figure 7.1-1.

S/W Upgrade							Real-time Device Monitorin					
Database	Appl Version : S-UCP-RIs1512-2.0.8-App											
Multi Language	Kernel Version	Boot Version : 1.0Ca SEP/15 Kernel Version : R1.1.3 H/W Issue : 1 System bootup time : 15-12-14 19:21:36										
SMDR												
File System	Classification	Туре	Logical Num	IP Address	Version	Connection	State					
MOH Management	со	BRIM4 GW	1 - 8	10.10.10.11		Connected	[1:Idle][2:Idle][3:Idle][4:Idle][5:Idle][6:Idle][7:Idle][8:Idle]					
License Management DECT Statistics Feature	со	MATM GW	9 - 24	10.10.10.12		Connected	[9:Idle][10:Idle][11:Idle][12:Idle][13:Idle][14:Idle][15:Idle] [16:Idle][17:Idle][18:Idle][19:Idle][20:Idle][21:Idle][22:Idle [23:Idle][24:Idle]					
VSF Prompt Message	STA	LIP- 9020	1000	10.10.10.10	1.0Df	Connected	[1000:Use]					
VSF System Greeting	STA	LIP- 8040L	1001	10.10.10.13		Connected	[1001:N/A]					
Voice Mail Management				10.10.10.14		Connected	[1:Idle][2:Idle][3:Idle][4:Idle][5:Idle][6:Idle][7:Idle][8:Idle] [9:Idle][10:Idle][11:Idle][12:Idle][13:Idle][14:Idle][15:Idle]					
Function Program	MCIM	MCIM GW	1 - 32				[16:Idle][17:Idle][18:Idle][19:Idle][20:Idle][21:Idle][22:Idle [23:Idle][24:Idle][25:Idle][26:Idle][27:Idle][28:Idle][29:Idle][20					
User Management		WTIM4					[30:Idle][31:Idle][32:Idle]					
Trace	WTIM	GW	1	10.10.10.15	/()	Connected						
TDM Gain Control												
IP Gain Control												
Tone/Ring Gain&Cadence Control												
Appliances Control												

Figure 7.1-1 S/W Upgrade

There are two types of upgrade images, the application and kernel image. If both are required, upgrade the Kernel image first and then the Application.

The version may be different according to upgrading SW. The web page for Maintenance is an example about how to show the page on each subject.

7.1.1 File Upload

From the File Upload page, Figure 7.1.1-1, click **[Select file]** button and then open the pop-up folder. Select the desired file to upload to the UCP system memory and click the **[Start]** button. The file is sent to the system's memory, saved, and automatically loaded upon a system reset or restart.

Prior to upload, verify sufficient memory is available in the UCP File System for the files to be uploaded. Refer to section 7.5.1 to view the free disk space and delete any unused files. Note names of files required for normal system operation will be grey out and cannot be deleted.

Html image files are extracted and previous HTML files are deleted at completion of the upload process.

Q	PGM Search	<	System Information F	ile Upload	×			
	S/W Upgrade V		Select Upload File and Wait for	Uploading to	end!!			
	File Upload Upgrade Process			24.28 Mbit/s 11.33 MB	00:00:00 100.00 % 11.33 MB /			
	Database							
	Multi Language		S-UCP-RIs1512-2.0.8-App.rom	11.33 MB 📘		Start	O Cancel	
	SMDR							
	File System							
	MOH Management							
	License Management							
	DECT Statistics Feature							
	VSF Prompt Message							
	VSF System Greeting							
	Voice Mail Management							
	Function Program							
	User Management							
	Trace							
	TDM Gain Control							
	IP Gain Control							
	Tone/Ring Gain&Cadence Control							
	Appliances Control							

Figure 7.1.1-1 File Upload

* If file upload succeeds, a success page will be displayed.

7.1.2 Upgrade Process

When an iPECS Appliance image is uploaded, appliances of the same type as the uploaded image display and can be selected for upgrade, as shown in Figure 7.1.2-1. Select the desired appliance and click the **[Upgrade]** button, the upgrade process starts and a progress screen displays.

S/W Upgrade	~ <	Syste	m Inforr	n	Upgrade Pro	oc ×	
File Upload Upgrade Process		ploaded S/M	: LIP9070)Phane (Versio	an 8 14d)		Upgrade
Database	[Check All	Number	IP Address	Current Version	Status	
Multi Language		8	123	10.123.187.11	B14d		
SMDR							

Figure 7.1.2-1 Upgrade Process

7.1.2.1 Upgrade Process View

The Upgrade Process View provides a status window; refer to Figure 7.1.2.1-1 Upgrade Process View, for Module and terminal upgrade activity in process.

S/W Upgrade	~	< System	n Inform		Upgrade Proc	×	×
File Upload Upgrade Process							Upgrade
Database				O Phone (Versi		Det	
Multi Language		Check As J		10.123.187.11	Current Version	Status 33%	
SMDR						32.8	
File System							

Figure 7.1.2.1-1 Upgrade Process View

7.1.2.2 iPECS UCP Upgrade Process

iPECS Software Full Upgrade Sequence

The following shows the order in which the upgrade process proceeds and firmware files for iPECS UCP and modules. Note the xxxx in the ROM file names indicates the version number of the file.

UCP Upgrade Process

1. Upload UCP application image.

iPECS UCP	UCP application image
	(Example, S-UCP-RIs1601-2.0.12-app.rom

2. Restart UCP.

Note:

If the new system database is not compatible with existing system database, it will be necessary to initialize the system database. This can be done manually using the Initialize Dip Switch located on the UCP module or via the Initialization Web page.

Upgrade of the UCP includes HTML files; a separate upload of the HTML files is not required. HTML files can be separately upgraded under the File System

Appliances Upgrade Process

- LIP 8012/8024/8040E application image:
 GS98Pxxxx.rom (xxxx indicates the version)

 LIP 8002E application image:
 GS99Pxxxx.rom (xxxx indicates the version)
- 2. Select the target appliances and click [Upgrade].
- 3. Wait until upgrade process completes.
- 4. The device will restart automatically when upgraded successfully.

7.1.3 Upgrade HTML Files

The "File View" Menu is used to upload file and reload the system's html files. Upload time of the html files will take 5 ~ 10 minutes.

7.1.3.1 Appliances Upgrade (Device and iPECS Phone)

Upload appliance image, and click **[Upgrade process]** button to select upgrade appliances. If appliances are selected, click **[Upgrade]** button. The page shown in Figure 7.1.2.1-1 will be displayed indicating the Upload command has been sent and upgrade process is working. This page will display the Upload status. When the appliance upgrade process is successful, the status is updated to "Success". If the upgrade process fails, the process is attempted an additional three (3) times before abandoned.

7.1.3.2 Direct Appliances Upgrade

Should the above UCP system managed upgrade process fail, appliances (Devices and iPECS Phones) can be upgraded directly using the appliance IP address as the upgrade destination address. Note the later may require local access.

Downl	pad
	OBD The download process will yeast the unit into the download mode. They will terminate all network connections and reset your browser connections.
TVT	Indead method (Delet Fernote TFTP' server IP' address and Rename) Denesr IP Denesr IP Denesration Determined D
a contraction of the	anibad method (Select Researce on local browser machine) arms Enconse

Figure 7.1.3.2-1 iPECS Phone Direct Connect Upgrade

7.2 Database

7.2.1 Database Upload

The Database Upload selection will display the Database Upload page as shown in Figure 7.2.1-1. Select **[Add Files]** then select the database file desired from the local PC and click **[Start]** to upload the database to the system.

S/W Upgrade	System Inform Database UpI X
Database ~	Select Database File and Wait for Uploading to end!!
Database Upload Database Management	♣ Select File
Multi Language	abc database.rom 10.43 MB
SMDR	
File System	

Figure 7.2.1-1 Database Upload

7.2.2 Database Management

Selecting Database Management will display the Database Download page Figure 7.2.2-1. Select the structure to determine the portion or structure of the download. Click **[Download]** then select the directory and file name in the pop-ups that follow to save the file to the PC. After building a database file, the download function will be available. A maximum of five downloadable files for various types of data and structure can be built; building additional files deletes the oldest.

A Maint Search	0	< System In	formation	Database Management					
S/W Upgrade								Delet	
Database	✓ Select structure to build : All Database ▼ Build								
Database Upload The database files can be saved up to 5. If you build a DB file when a system has already 5 DB files, the oldest file will be deleted.									
Database Management	- 1	Check All	location	File Name	File Size	Add/Modify comment to file name(Max. 30 Characters)			
Multi Language				DB_ALLUCP100_140101.admgzu	730792 Bytes	Save	Apply	Downlo	
SMDR				DB_ALLUCP100_050527.admgzu	699115 Bytes	Save	Apply	Downloa	
File System									
MOH Management									

Figure 7.2.2-1 Database Download Management

You can add or modify the file name by entering the characters including special character (#, \$, %, &, ', (), -, ., @, _). The comment will be created as [XXXXX] before '.admgzu'. It is useful to search DB after downloading. A user can apply DB file from USB memory. The DB file name is composed of system type, DB type, date & time and version information.

7.3 Multi Language

The system can employ either English or a "Local Language" for the Web page displays. The multi-language file, which is a csv (comma separated variable) formatted file, is downloaded to a PC and the English terms are translated to the local language. The modified file can then be uploaded to the iPECS UCP. Once uploaded, the user can select the "Change Language" button and select either English or the Local Language translation for Web page displays.

7.3.1 Multi Language File Upload

The Multi Language File Upload selection will display the Multi Language File Upload page as shown in Figure 7.3.1-1. By selecting the Multi Language File desired from the local PC, the desired Multi Language File can be uploaded to the iPECS UCP.

S/W Upgrade	< System Inform X
Database	Select Multi Language File and Wait for Uploading to end!!
Multi Language 🗸 🗸 🗸	
Multi Language File Upload	+ Select File
Multi Language File Download	common Lan 7 csv 10.43 MB
SMDR	
File System	

Figure 7.3.1-1 Multi Language File Upload

7.3.2 Multi Language File Download

Selecting Multi Language File Download will display the Multi Language File Download page Figure 7.3.2-1. Selecting this option will download the iPECS UCP Multi Language file to the local PC. The file can be stored in the PC, modified and uploaded to an iPECS UCP using the file upload procedures in section 7.3.1.

S/W Upgrade	System Infor X	×
Database		Delete
Multi Language 🗸 🗸	Press [Download] button for download / Check messages and press [Delete] button	
Multi Language File Upload	Check All File Name	
Multi Language File Download	Common.lang.csv Download	
SMDR		
File System		

Figure 7.3.2-1 Multi Language File Download

7.4 SMDR

The iPECS UCP can download SMDR data in a SYLK format file (.slk). The file is compressed using the "gz" file format. After unzipping, the file can be opened under any common spreadsheet application. The system will provide a view of SMDR data for the station range entered in the Web page Figure 7.4-1. This page may also be employed to delete SMDR records for the station range entered.

S/W Upgrade		< System Infor SMDR ×
Database		SMDR All Data Download
Multi Language		Station Range View Delete
SMDR	~	SMDR Interface Data Download
SMDR		SMDR Interface Data View View
File System		SMDR Interface Data Delete Delete

Figure 7.4-1 SMDR Access

7.5 File System

7.5.1 File View & Delete

The File View & Delete page displays a list of the various files stored in the UCP file system memory. To delete a file, check the box for the file and click **[Delete]**. Files can also be downloaded to the PC using the **[Download]** button to the right of the file name.

Note the system requires the files displayed in grey and the system will not allow deletion of these files.

Q PGM Search	< System Infor.	File View & ×				
S/W Upgrade						
Database	Check All	File Name	File Size			
Multi Language		Upload Directory	ist			
01100		S-UCP-RIs1505-1.0.8-Ker.rom	22758764 Bytes	Download		
SMDR		HTTP Directory list				
File System 🗸		S-UCP-RIs1512-2.0.8-Htm.rom	5097495 Bytes	Download		
		_main_app2.rom	35134507 Bytes	Download		
File View & Delete						
File System Information						

Figure 7.5.1-1 File View and Delete

7.5.2 File System Information

The File System Information page displays the disk status including the total and free disk space as shown in Figure 7.5.2-1. Use this page to determine if the free space on the disk is sufficient for uploading Upgrade files, section 7.1.1.

S/W Upgrade	<	System Infor Fil	le System I ×
Database		Attribute	Value
Multi Language		Total Disk Space	245760 KBytes
SMDR		Free Disk Space	164320 KBytes
File System ~			
File View & Delete			
File System Information			

Figure 7.5.2-1 File System Information

7.6 MOH (Music On-Hold) Management

7.6.1 MOH Delete & Download

The MOH Delete & Download page displays a list of the thirteen files stored in the file system memory. To delete a file, check the box for the file and click **[Delete]**. Files can also be downloaded to the PC using the **[Download]** button to the right of the file name.

Maint Search	0	< System Infor.	MO	H Delete/D	×Q	
W Upgrade						
atabase		Check All	File Name	File Size		
ulti Language			1.moh	226.5K	Download	
IDR			2.moh	180.6K	Download	
le System			3.moh	172.4K	Download	
OH Management	~		4.moh	281.4K	Download	
			5.moh	265.9K	Download	
NOH Delete/Download			6.moh	234.9K	Download	
non opidad			7.moh	172.2K	Download	
cense Management			8.moh 9.moh	289.4K 172.4K	Download	
ECT Statistics Feature			9.mon 10.moh	281.0K	Download	
SF Prompt Message			10.mon 11.moh	281.0K	Download	
			12.moh	250.4K	Download	
SF System Greeting			13.moh	250.4K	Download	
pice Mail Management				200.41	Domicad	

Figure 7.6-1 MOH Delete & Download

7.6.2 MOH Upload

Selecting "MOH Upload" will display the page shown in Figure 4.5.6.2-1. Here MOH can be uploaded to the system for each of up to thirteen (13) MOH. MOH files format must be followed as shown in the page 'G.711 a/u-Law wav (8000Hz, 16bit, mono)'.

Q Maint Search	< System Infor MOH Upload ★ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥
S/W Upgrade	Select Location and then Wav File (Wait for Uploading to End)
Database	File Format: G.711 a/u-law wav (8000Hz, 16bit, mono)
Multi Language	First + Select File
SMDR	
File System	
MOH Management v	
MOH Delete/Download	
MOH Upload	

Figure 7.6-1 MOH Upload

7.7 License Install

Various licenses can be installed to expand capacity of the system and Auto Attendant/Voice Mail services available in the UCP system as well as soft clients and feature applications. After obtaining a license, the code is entered in the Value column as shown in Figure 7.7-1.

PGM Base Function Base	< Favorite PGM System Overview X						
PGM Search O	Susta	System License Overview					
	System License Overview Serial No. : 000E56F40D137213						
ystem ID & Numbering Plans 🛛 🗸 🗸	License	Status Currently used		Purchased			
Custom ID(100)	Software Permissions	Activated		Not activated			
System ID(100)	Total System Port Expansion	199 copy(s)	50 (STN 1 + CO 49)	50 copy(s)			
System Overview	Total IP Extension	199 copy(s)	1 (LIP 1 + SIP1st 0)	30 copy(s)			
Device Port Num Change(101)	Third Party SIP Extension	199 copy(s)	0	0 copy(s)			
system IP Plan(102)	VOIP Virtual Switching Channel(8ch/copy)		0 ch	0 copy(s)			
evice IP Plan(103)	VMU Recording Time Add 10-Hour	2 copy(s) 0 ch Not activated		Not activated			
O Device Sequence Number(104)	Mobile Extension	199 copy(s)	0	30 copy(s)			
exible Station Number(105)	IP Networking or QSIG	Activated		Not activated			
exible Numbering Plan(106~109)	Transparent Network(T-NET) or Local Survivability	Activated		Not activated			
8 Digit Extension Table(238)	Hotel Feature	Activated		Not activated			
on Data	FIDELIO Interface	Activated		Not activated			
on Data	Third Party TAPI Interface	Activated	Disconnected	Not activated			
Based Data	Third Party SIP Application Server Interface	10 copy(s)	0	0 copy(s)			
	Third Party SIP Application Channel Interface	199 copy(s)	0	0 copy(s)			
O Line Data MS LYNC EV Channel		199 copy(s)	0	0 copy(s)			
System Data	MS LYNC RCC Gateway	Activated		Not activated			
	MS LYNC RCC Client(2010)	199 copy(s)	RCC(max:398, set:0, using:0)	0 copy(s)			
n Group Data	MS LYNC RCC Client(2013)	199 copy(s)	RCC(max:398, set:0, using:0)	0 copy(s)			
MS LYNC RCC or Voice Client(2010)		199 copy(s)	Voice(0)	0 copy(s)			
SDN Line Data MS LYNC RCC or Voice Client(2013)		199 copy(s)	Voice(0)	0 copy(s)			
SIP Data	ClickCall Application	199 copy(s)	(set:0, using:0)	2 copy(s)			
	UCS Client Desk Standard with Non Voice	100 copy(s)	0	0 copy(s)			
s Data	UCS Client Desk Standard with Voice	100 copy(s)	0	2 copy(s)			
	UCS Client Desk Premium with Non Voice	199 copy(s)	0	0 copy(s)			
orking Data	UCS Client Desk Premium with Voice	199 copy(s)	0	0 copy(s)			
Routing Table	UCS Client Mobile	199 copy(s)	0	2 copy(s)			
	IP Attendant for Office	50 copy(s)	0	0 copy(s)			
T Data	IP Attendant for Hotel	50 copy(s)	0	0 copy(s)			
Dete	IP Call Recording Server	10 copy(s)	0	0 copy(s)			
e Data	IP Call Recording Agent	199 copy(s)	0	0 copy(s)			
	IP Call Recording Trunk	199 conv(s)	0	$0 \operatorname{conv}(s)$			

Figure 7.7-1 License Install

7.7.1 License upload

Before License upload, make sure that the date of system is set correctly. Click the Add files button and then open the pop-up folder. Select a valid license file to upload to the UCP system and click the **[Start]** button. If the file which is sent to the system is "System License File", it will be saved and automatically applied without restart. The enabled features by uploading license file can be shown in "System Overview" page.

Q Maint Search	System Information License Upload X	x ~
S/W Upgrade	Select a License File and Wait for Uploading to end!!	
Database	Some boards may be restarted after uploading license file.	
Multi Language	+ Select File	
SMDR		
File System	XXX_2015101400000_UCP.dat 11.05 MB	
MOH Management		
License Management ~		
License Upload		
Gateway License		
Temp License Activation		

Figure 7.7.1-1 License Upload

7.7.2 Gateway License

All gateways which can have gateway license type are displayed in this web page. If a valid gateway license file was uploaded by "7.7.1 License Upload" and a gateway with matched serial number is registered in system, **[Apply]** button will be activated. This button is used to send the license file to the gateway. After the license file is sent, it will be deleted and the gateway will be restarted to apply features of the license file.

1) The following figure is before uploading the license.

S/W Upgrade	<	System I	nforma	Gateway Li	icense X			
Database		Туре	IP Address	MAC Address	Serial Number	Status	Result	
Multi Language		UVM GW	10.10.10.12	ffff0002ffff		0 ch / 0 hour		Apply
SMDR								
File System								
License Management ~								
License Upload								
Gateway License								
Temp License Activation								

2) After re fresh, the following figure is displayed and click the apply button to activate.

S/W Upgrade	<	System Inf	System Information		Gateway License Upload				
Database		Туре	IP Address	MAC Address	Serial Number	Status	Result		
Multi Language		21			000F1A1411000036				
SMDR									
File System									
License Management ~									
License Upload									
Gateway License Temp License Activation	Е								
Temp License Activation									

3) The final step is to reset the gateway license and then refresh. You can see the following figure for Gateway license.

S/W Upgrade	^ <	System In	formation	Gateway Lice	ense X Ø License	e Upload 🛛 🗙		
Database		Туре	IP Address	MAC Address	Serial Number	Status	Result	
Multi Language		UVM GW	10.10.168.10	b40edc281bda	000F1A1411000036	16 ch / 200 hou	Apply	
SMDR								
File System								
License Management V								
License Upload								
Gateway License								
< Temp License Activation	E							

Issue 1.3

7.7.3 Temp License Activation

Before Temp License Activation, make sure that the date of system is set correctly. In this page, Temp License can be activated by clicking [**Activation**] button. Remaining days and activation times are displayed in State column. The Temp License can be activated totally 6 times. It is valid for 60 days at first activation and is valid 30 days from second activation. Therefore the license file which has correct port number and features must be uploaded. Otherwise, system may enter "Limited Service Mode" due to the mismatched license.

S/W Upgrade	<	System Inform	a	Temp License	<mark>x</mark> O
Database			К	ey:000E56F40D	137213
Multi Language		Index			State
SMDR		Temp License	Activation	Deactivation	50 days left, Possible times[1/6]
File System					
License Management	~				
License Upload					
Gateway License					
Temp License Activation					

Figure 7.7.3-1 Temp License Activation

Notification

- 1) Please backup your DB before you activate a temporary license.
- 2) Must verify the present license before the temporary license expires.
- 3) If a temp license expires, upload a new license file or use within the scope of current license file. Otherwise, the system may go to [Limited Service Mode].

7.8 DECT Statistics Feature

Selecting DECT Statistics Feature displays the page shown in Figure 7.8-1. Select the desired radial button and, where needed, enter the WTIM sequence number then click **[Send]** to view the statistics.

Maint Search	h O	< Sy	stem Informat	ion DECT	Statistics ×
S/W Upgrade					
Database			Attribute	WTIM NO	Description
Multi Language		0	drop		Statistics data on UCP
		0	dclear		Clear statistics data on UCP
SMDR		0	upload		Upload data
ile System		0	Call		Total number of call & direction of the call
OH Managem	ant	0	subs		Information per subscripted device
OH Managem	ent	0	eoc		End of call
cense Manage	ement	0	cell		Usage of freq and slot
ECT Statistics	Feature V	0	traf		Show holding time
201 01000		0	acce		Access info.(basic/handover)
DECT Statisti	ics	0	clea		Clear statistics data
		0	linestart		start line test between WTIM and BASE
SF Prompt Me	essage	0	linestop		stop line test between WTIM and BASE
SF System Gr	reeting	0	stateupload		Upload WTIM's state
		0	stateview		View WTIM's state
bice Mail Mana	agement	0	stateclear		Clear WTIM's state
inction Progra	m				
ser Manageme	ent				
ice					
Gain Contr	rol				
Gain Control					
one/Ring Gain	&Cadence Control				
Appliances Cont	trol				

Figure 7.8-1 DECT Statistics Feature

7.9 VSF Prompt Upload

iPECS UCP delivers system prompts in up to six (6) languages. The prompts for each language are stored in a separate file. Files for each of the languages supported are available from the local Ericsson-LG Enterprise representative. The entire prompt file or individual prompts may be uploaded to the system. Once uploaded to the system the file is employed to play prompts to the iPECS UCP user.

UCP2400 doesn't support VSF prompt message.

7.9.1 Prompt Selection

Selecting Prompt Selection displays the page shown in Figure 7.9.1-1. The System Voice Prompt language files are stored in the VSF memory and are enabled with the Prompt Selection page. A reference "Position" is assigned a language selected from the drop-down menu. Once the language for each position is selected, saving the page enables all the languages selected.

2	Maint Search	Θ	< System Int	formation	Pro	mpt Selection	2
s	/W Upgrade						
D	atabase		Select Langu	age of each	n positio	n and press [SA	VE] button
N	lulti Language		Position			Language	
		_	First	Unkno	own	۲	
S	MDR		Second	Unkno	own	•	
F	ile System		Third	Unkno	own	•	
Ľ	The System	_	Fourth	Unkno	own	•	
N	IOH Management		Fifth	Unkno	own	•	
L	icense Management		Sixth	Unkno	own	¥	
D	ECT Statistics Feature						
V	SF Prompt Message	~					
	Prompt Selection						
	Prompt Upload / Delete						
	Individual Upload						

Figure 7.9.1-1 Prompt Selection

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7.9.2 Prompt Upload/Delete

Selecting Prompt Upload/Delete displays the page shown in Figure 7.9.2-1. From this page, the entire prompt file for selected languages can be deleted and updated prompt files uploaded to the system. The Add file button is used to upload files. The check box and Delete button are used to delete old or unused language files.

Maint Search	<	System Informatio	on	Prompt Upload / Del 🗙	
S/W Upgrade	[Pro	ompt Upload]			
Database	Sel	ect Voice Prompt	File and	Wait for Uploading to En	d
Multi Language	Dor	't Use Space Cha	racter in	File Name !!	
SMDR		Select File			
File System					
MOH Management					
License Management	[Pro	ompt Delete]			
DECT Statistics Feature	Sel	ect Voice Prompt	To Delete	9	
VSF Prompt Message		Select All		Language	Version
			Eng	lish(North America)	
Prompt Selection			Rus	sian(Russia,CIS)	
Prompt Upload / Delete			Heb	rew(Israel)	
Individual Upload			Gree	ek(Greece)	
individual opioad			Fren	nch(France)	
VSF System Greeting			Spa	nish(Spain)	
for oyatem orecard			Italia	an(Italy)	
Voice Mail Management			Dan	ish(Denmark)	
			Swe	dish(Sweden)	
Function Program			Norv	wegian(Norway)	
User Management			Poli	sh(Poland)	
user management			Ger	man(Germany)	
Trace			Eng	lish(Australia)	
			Kore	ean(Korea)	
TDM Gain Control			Chir	nese(China(P.R.C))	
IP Gain Control			Turk	kish(Turkey)	
in Gain Collubri				anese(Japan)	
Tone/Ring Gain&Cadence Control			Tha	i(Thailand)	
				Delete	

Figure 7.9.2-1 System Prompt Upload/Delete

7.9.3 Individual Upload

Selecting "Individual Upload" will display the page shown in Figure 7.9.3-1. Here individual system prompts can be uploaded to the system for each of up to six (6) languages. Prompt files must be appropriately named and must be in a G.711 a/u-Law format.

Q Maint Search	< System Information Individual Upload
S/W Upgrade	Select Prompt Message File and Wait for Uploading to End
Database	Valid File Name : 1.wav~999.wav
Multi Language	File Format: G.711 a/u-law wav (8000Hz, 16bit, mono) Don't Use Space Character in File Name !!
SMDR	English(North America) 🔻
File System	+ Select File
MOH Management	
License Management	
DECT Statistics Feature	
VSF Prompt Message ~	
Prompt Selection	
Prompt Upload / Delete	
Individual Upload	

Figure 7.9.3-1 Individual Prompt Upload

7.10 VSF System Greetings

The System Greetings (Announcements) can be downloaded from the system or Uploaded to the system. Individual announcements can be recorded externally and then uploaded to the system. Like prompts, the individual announcement files must be in a .wav format using the g.711 codec. Individual greetings for each Language position, see section 7.8.1, can be uploaded as well as downloaded. Clicking on the message will download the message to the browser, which will play the message. To save the message, right click and select save as. Locate a directory and change the file name, if desired and click save.

All announcements can be downloaded from the system as a back-up file and uploaded to the VSF memory as required.

UCP2400 doesn't support VSF system greeting.

7.10.1 Individual Upload

Selecting Individual Upload displays the page shown in Figure 7.10.1-1. From this page, individual pre-recorded announcements for each language position, see section 7.9.1, can be uploaded from the PC to the VSF gateway. Select the language position and assure the file name matches the appropriate System Announcement number. The file name must be in the format as shown on the page.

Q Maint Search	< System Information Individual Upload C
S/W Upgrade	Select System Greeting Message and Wait for Uploading to End
Database	Valid File Name : 1.wav~202.wav
Multi Language	File Format: G.711 a/u-law wav (8000Hz, 16bit, mono) Don't Use Space Character in File Name !!
SMDR	First •
File System	+ Select File
MOH Management	
License Management	
DECT Statistics Feature	
VSF Prompt Message	
VSF System Greeting ~	
Individual Upload	
Individual Download	
SysGreeting Upload	
SysGreeting Download	



7.10.2 Individual Download

Selecting Individual Download displays the page shown in Figure 7.10.2-1. The page will display a list of System announcement in the VSF memory. Individual files may be downloaded with the Download button next to the announcement file name or using the checkbox and the delete button the announcement can be deleted from the VSF memory.

Q Maint Search	< System Information	Individual Do	wn×		×
S/W Upgrade					Delete
Database	Press [Download] buttor	n for download / Cl	heck messages and pr	ess [Delete] button	
Multi Language	Check All	File Name			
01400		Type #1			
SMDR		1.wav	Download		
File System		2.wav	Download		
MOH Management					
License Management					
DECT Statistics Feature					
VSF Prompt Message					
VSF System Greeting ~					
Individual Upload					
Individual Download					
SysGreeting Upload					
SysGreeting Download					

Figure 7.10.2-1 Individual System Announcement Download

7.10.3 System Greeting Upload

Selecting System Greeting Upload displays the page shown in Figure 7.10.3-1. From this page, announcements for each language "Position", see section 7.9.1, can be uploaded to the VSF memory. First, select the language position then click the Add Files button to select the file to upload from the PC.

Q Maint Search	< System Information SysGreeting UpL×
S/W Upgrade	Select System Greeting File and Wait for Uploading to End
Database	Don't Use Space Character in File Name !!
Multi Language	First Fiss Select File
SMDR	
File System	
MOH Management	
License Management	
DECT Statistics Feature	
VSF Prompt Message	
VSF System Greeting ~	
Individual Upload	
Individual Download	
SysGreeting Upload SysGreeting Download	



7.10.4 System Greeting Download

Selecting System Greeting Download displays the page shown in Figure 7.10.4-1. From this page, announcements for each language "Position", see section 7.9.1, can be downloaded from the VSF memory as a back-up file. First, select the language position, click the Download button then follow the normal save file process to store the file to the PC.

Q Maint Search	System Information SysGreeting Do X V V
S/W Upgrade	Select Type of SystemGreetings to Download
Database	First Type of S/G •
Multi Language	Don't Use Space Character in File Name !!
SMDR	Download
File System	
MOH Management	
License Management	
DECT Statistics Feature	
VSF Prompt Message	
VSF System Greeting ~	
Individual Upload	
Individual Download	
SysGreeting Upload	
SysGreeting Download	

Figure 7.10.4-1 System Announcement Download

7.11 Voice Mail Management

The Voice Mail Management permits the administrator to view the status of the built-in Voice Mail boxes and delete the all messages, delete messages for specific stations, or back-up all the messages to the PC.

7.11.1 Voice Mail Delete

Selecting Voice Mail Delete displays the page as shown in Figure 7.11.1. From this page, messages stored in the VSF gateways can be deleted for all stations or a station range. In addition, using the "Display Station Voice Mail Status" button, the number of messages for each station is displayed.

Q Maint Search	< System Information	Voice Mail Delete	×			×
S/W Upgrade						Display Station Voice Mail Status
Database	In the following cases will r - Voice Mail Device is not o					
Multi Language	- Voice Mail Device is not i					
SMDR		Voice Mail D	elete			
	Delete by Station Numbe	r 🗌 🗌	Including us	ser greeting	Delete	
File System	Delete All Voice Mail			[Delete	
MOH Management	Result					
License Management	Туре	Sequence Number	Free Memory	Total Memor	у	
DECT Statistics Feature	UVM GW(Disconnected)	3001	- MB	- MB	Disconnecte	ed
VSF Prompt Message						
VSF System Greeting						
Voice Mail Management V						
Voice Mail Delete Voice Mail USB Backup						

Figure 7.11-1 Voice Mail Delete

A user can delete user greeting if you set "Including user greeting" option when a user delete voice mail.

7.11.2 Voice Mail USB Backup

Selecting Voice Mail Backup displays the page shown in Figure 7.11.2-1. This page permits the Administrator to send all Voice messages in the VSF gateway memory to the USB port of the UCP module. Note the VSF gateway must be idle and a USB memory device installed in the UCP module.

UCP2400 doesn't support Voice mail USB Backup.

Q Maint Search	< System Information Voice Mail USB X	×
S/W Upgrade		Backup Voice Mail to USB
Database	The voice mail will not be stored to USB memory in the following cases. - VSF is not idle state.	
Multi Language		
SMDR	Status : Number of files : 0 Total File Size :	
File System	Progress :	
MOH Management	FIQUESS .	
License Management		
DECT Statistics Feature		
VSF Prompt Message		
VSF System Greeting		
Voice Mail Management V		
Voice Mail Delete Voice Mail USB Backup		

Figure 7.11.2-1 Voice Mail USB Backup

To back up Voice Mail, click the backup Voice Mail to USB button. User can find all information about the status, Number of files, Total file size, and the percentage of Progress by text.

7.12 Function program

The Function Program allows the administrator to build a set of programs with attributes in a structure customized to the administrator. The Function programs can then be accessed under the Administration pages using the "Function Base" button at the top of the left navigation page. Single level and multi-level programs can be structured. The User Function Management permits functions to be deleted or, with the "Add Function" button, new program functions can be added.

7.12.1 User Function Management Page

Selecting User Function Management displays the page shown in Figure 7.12.1-1. Using the check box and Delete button Function programs previously saved can be deleted.

٩	Maint Search	Θ	<	System Information	User Function M	× ×
5	S/W Upgrade					Add Function
1	Database					Delete
N	/lulti Language			Check All	Function Name	
5	SMDR					
F	ile System					
N	IOH Management					
L	icense Management					
(DECT Statistics Feature					
N	/SF Prompt Message					
1	/SF System Greeting					
N	/oice Mail Management					
F	unction Program	~				
	User Function Management					

Figure 7.12-1 User Function Management

Adding Function

This step is divided into 5 steps and you can make the desired function each step. The following is the guide to make Name and add the function on each step:

- 1) To enter the function name, English, Numbering, Underscore (_) and Parentheses are available. Function name has to be filled out.
- 2) To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
- 3) The step name doesn't need to be filled out, but the function has to be configured each step.
- 4) To cancel or close this tab, click the close button (X) and pop up the blow;

Notification		
All Tabs will be c	losed. Are you OK?	
Close all	without current tab	Cancel

- 1. Click the Add Function button.
- 2. On the below window, click the desired PGM in the left frame. First fill out the function name and step name. To configure the step 1, click the Make table to check the desired function and then click the Save button.
 - ✓ Check All: check all functions
 - ✓ Save: Save the checked functions
 - ✓ Initialize: Initialize the checked functions

PGM Search	O <	
System ID & Numbering Plans	Check All Save – Function Name: 2 Save Function	
Station Data ~	/ Initialize	
Station Type(110)	Make Table Step 1 Step 2 Step 3 Step 4 Step 5	٦
Common Attributes(111)	Keyset Admin Access CO PGM	
Terminal Attributes(112)	Automatic Hold	
	Individual CO Access	
CLI Attributes(113)	CO/IP Line Queuing	
Flexible Buttons(115/129)	Ringing Line Preference	
Station COS(116)	Speed Dial Access	
CO/IP Group Access(117)	Alarm / Door Bell	
Internal Page Zone Overview	Station Account	
Internal Page Zone(118)	Forced SMDR Account Code	
PTT Group Access(119)	Loop LCR Account	
	Door Open	
Preset Call Forward(120)	Elex Button PGM	
Idle Line Selection(121)	Prefer CO or Group	
Station IP Attributes(122)	Emergency CO or Group	
Station Timers(123)	ICM Tenancy Group Number	
Linked Station(124)	Call Time Restriction	
Station ICM Group(125)	PROCTOR MONITORING Power-Failure	
Station VM Attributes (127)	Power-Failure	
Station Personal CCR(128)	Active PTT Group Number	
	Hot Desk Station	
Station Name Display	SMDR Hidden Dialed Digits	
Station Data Copy	Left Message to Executive	
Station CTI IP Address	Station Web Level	
Station Recording Infomation	Headset page mode	
	Progress Indication	
Board Based Data	3.1KHz Audio	
	Pick-Up by Flex Button	
CO Line Data	Prepaid Call	

3. The selected functions are displayed and click the Save button after checking each functions. The rest steps are the same as the step 1.

PGM Search	2 <	System Information Us	er Func	tion Manag	×	Add Function	×			
System ID & Numbering Plans		Check All Save	F	Function Nam	ne: Stati	on 1	2 Save	Function		
Station Data 🗸 🗸		Initialize							, (
Station Type(110)		Make Table Keyset Admin Access		Step 1 Station 1 A	vttr	Step 2	Step	3	Step 4	Step 5
Common Attributes(111)		CO PGM	1.15							
Terminal Attributes(112)	1	Automatic Hold								Save
CLI Attributes(113)		Individual CO Access								Save
Flexible Buttons(115/129)		CO/IP Line Queuing	Er	iter Station R	Range :				Load	
Station COS(116)		Ringing Line Preference								
CO/IP Group Access(117)		Speed Dial Access Alarm / Door Bell	St	ation Range						
		Station Account	0	rder Check	All	Attribute	Value	Range		
Internal Page Zone Overview		Forced SMDR Account Code		1		dividual CO Access	Disable •			
Internal Page Zone(118)		Loop LCR Account								
PTT Group Access(119)		Door Open		2	C	O/IP Line Queuing	Disable 🔻			
Preset Call Forward(120)		Flex Button PGM	1	3	R	inging Line Preference	Disable 🔻			
Idle Line Selection(121)		Prefer CO or Group	4	4	A	larm / Door Bell	Disable 🔻			
Station IP Attributes(122)		Emergency CO or Group	1	5	L	oop LCR Account	OFF V			
Station Timers(123)		ICM Tenancy Group Number				,				
Linked Station(124)		Call Time Restriction								
Station ICM Group(125)		PROCTOR MONITORING								

4. Finally, click the Save Function to save and then click the OK button.

	Notification	
	This function is closed.	s saved. This tab will be
		Ok
S/W Upgrade	< System Information	User Function Man X
Database		
Multi Language		
SMDR	Check All	Function Name
File System		System 1 Station 1
License Management		erenten 1
DECT Statistics Feature		
Voice Mail Management		
Function Program V		
User Function Management		

5. To check the function, click Function Base button in the left frame and User Function List and you will see the following figure.

You can enable or disable the function by checking each function and then click the save after setting Value. Also move to each step by clicking the next button or Previous button.

PGM Base Function Base	< Favorite Function	Station 1	×		×
Q Function Search	Step 1 (S	Step 2 (Station 2 Attr)	Step 3 (S	Step 4 (S	Prev Next
Common Function List	Enter Station Range :			Load	Save
User Function List V	Station Range 1000				
Station 1	Order La Check All	Attribute <u>↓</u> a	Value	Range	
System 1	1	Line Release Cost Display	OFF V		
	2	Active PTT Group Number		0-9	

Deleting Function

To delete the user function, click Maintenance at the top of window and then click the Function Program -> User Function Management. Check the desired function to delete and click the delete button.

CAN Upperede	< System Information	User Function Man
S/W Upgrade	System Information	User Function Man X
Database		
Multi Language		
SMDR	Check All	Function Name
		System 1
File System		Station 1
License Management		
DECT Statistics Feature		
Voice Mail Management		
Function Program V		
User Function Management		

7.13 User Management

iPECS UCP supports up to 50 system accounts and up to ten (10) users may simultaneously access system Web services. The default ID is 'admin' and the password is '1234'. The Access privilege is determined based on the entered system account (ID/Password) and the privilege assigned for the user.

Note that access to the Station Web portal employs the Station number and Authorization code managed in PGM 227.

Please follow up the below instructions to make User ID:

- 1) Maximum 16 characters & digits
- 2) In English only
- 3) First letter must be Alphabet. The rest are available: Alphabet, number, underscore (_)
- 4) Don't use 'blank'.

It is strongly recommended that a unique User ID and strong password be entered to minimize the risk of admin and maintenance access by unauthorized personnel. User should register more than a maintenance ID.

Q Maint Search	< System Inf	ormation User Managen	nen: X	×
S/W Upgrade				Save
Database			Add U	ser
Multi Language	User ID			Max 16 Characters & Digits English Only / First letter must be Alphabet / _ is allowed
SMDR	Password		Show Password	Max 16 Characters & Digits
File System		Maint O		
MOH Management	Privilege	User O		
License Management		ReadOnly		
DECT Statistics Feature		User List		
VSF Prompt Message	User ID	Privilege		
VSF System Greeting	а	Maintenance	Delete	
Voice Mail Management				
Function Program				
User Management V				
User Management				
Trace				
TDM Gain Control				
IP Gain Control				
Tone/Ring Gain&Cadence Control				
Appliances Control				



7.14 Trace

The UCP system software incorporates routines to monitor and output detailed call and feature processing information, and event logs. Information is provided on a system or device level as requested. User can find the information on this page.

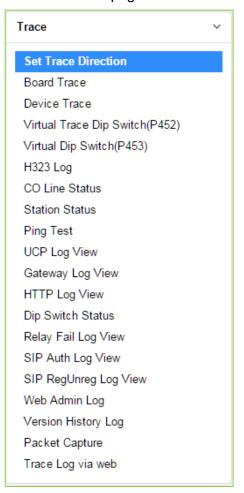


Figure 7.14-1 Trace Main Page

We explain [Packet Capture] and [Trace Log via web] among them because it is very useful to use Web admin.

Packet Capture

A user can start and stop capturing packets and download packet capture result. The dump file will be replaced when new capturing is started.

Default option is included. The file name is packetdump.cap. -i eth0 -w packetdump.cap -c 10000

- Option explanation

protocol filter: tcp or udp or icmp

port filter: both source and destination port -> port #number, source port -> src port #number, destination port -> dst port #number

IP filter: both source and destination host IP -> host #IP_ADDR, source host IP -> src host #IP_ADDR, destination host IP -> dst host #IP_ADDR

Example

UDP and Port 5588 and Source IP address 10.1.1.100: udp and port 5588 and src host 10.1.1.100

Trace Log via web

A user can start and stop logging and download trace log result. The log file will be replaced when new logging is started.

- 1. Set 'Trace Attribute' to 'COM1(UART1)' from 'Set Trace Direction' menu.
- 2. Set 'Board Trace', 'Device Trace' and 'Virtual Trace Dip Switch(P452)' menu.
- 3. Click 'Start' button.

7.15 TDM Gain Control

Control voice gain of TDM device for each direction.



Figure 7.15-1 TDM Gain Control Main Page

7.16 IP Gain Control

Audio gain for signals from and to each type of device is adjustable through the IP Gain Control page. The default gain values for the system are set to match the Nation Code. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

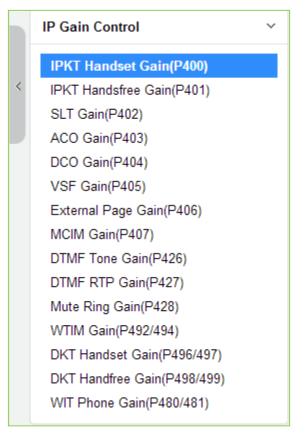


Figure 7.16-1 IP Gain Control Main Page

7.17 Tone/Ring Gain & Cadence Control

Selecting Tone Table will display the page. Here the tones, cadence and gain used with features can be managed. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

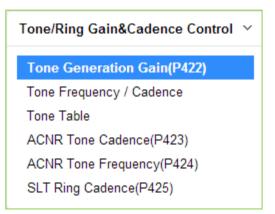


Figure 7.17-1 Tone/Ring Gain & Cadence Control Main Page

7.18 Appliances Control

The Appliances Control page permits control of several characteristics of IP phones and analog CO lines such as Comfort Noise level and side tone. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.



Figure 7.18-1 Appliances Control Main Page

8. STATION PROGRAM (USER PORTAL)

This Station Program helps our customer program each station so that each station can be easily set the value and find which features are used. For information, refer to the above section.

To access Station program:

First, set the station authorization code table (PGM 227) for each station as shown in the following figure and then click **[Log Out]**.

PGM Base Function Base	< Favorite PGM	Station Author										
Q PGM Search	Enter Station Range	:		C Load Sa								
System ID & Numbering Plans	Station Range 1000-1045											
Station Data			de / COS valu	e to change								
	Enter Station F	Range :		Authorization Code :								
Board Based Data	Enter Station F	Range :		Day 1 Vight 1 Vimed Ring 1 V								
CO Line Data			Range Sav	e								
System Data	Station Number <u>↓</u> ª	Authorization Code		COS								
Station Group Data	1000	*****	Day 1 🔻	Night 1 V Timed Ring 1 V								
	1001		Day 1 🔻	Night 1 V Timed Ring 1 V								
ISDN Line Data	1002		Day 1 🔻	Night 1 V Timed Ring 1 V								
SIP Data	1003		Day 1 🔻	Night 1 V Timed Ring 1 V								
	1004		Day 1 🔻	Night 1 V Timed Ring 1 V								
Tables Data V	1005		Day 1 🔻	Night 1 ▼ Timed Ring 1 ▼								
LCR Control Attribute(220)	1006		Day 1 🔻	Night 1 V Timed Ring 1 V								
LCR LDT(221)	1007		Day 1 🔻	Night 1 V Timed Ring 1 V								
LCR DMT(222)	1008		Day 1 🔻	Night 1 V Timed Ring 1 V								
LCR Table Initialization(223)	1009		Day 1 🔻	Night 1 V Timed Ring 1 V								
Digit Conversion Table(270)	1010		Day 1 🔻	Night 1 • Timed Ring 1 •								
Toll Exception Table(224)	1011		Day 1 🔻	Night 1 V Timed Ring 1 V								
Emergency Code Table(226) COS Table	1012		Day 1 🔻	Night 1 V Timed Ring 1 V								
COS Table Station Authorization Code	1013		Day 1 🔻	Night 1 V Timed Ring 1 V								
Table(227)	1014		Day 1 🔻	Night 1 V Timed Ring 1 V								
System Authorization Code	1015		Day 1 🔻	Night 1 V Timed Ring 1 V								
Table(227)	1016		Day 1 🔻	Night 1 V Timed Ring 1 V								
CCR Table(228)	1017		Day 1 🔻	Night 1 V Timed Ring 1 V								
Executive/Secretary(229) Flexible DID Conversion(231)	1018		Day 1 🔻	Night 1 V Timed Ring 1 V								
System Speed Zone(232)	1019		Day 1 🔻	Night 1 V Timed Ring 1 V								
	1020		Day 1 🔻	Night 1 V Timed Ring 1 V								

Figure 8.1 Station Authorization Code Table – PGM 227

Second, enter the desired station number in the user ID and enter the authorization code in the password as shown in Figure 8.2.



Figure 8.2 Login Page

You will see the below Web page and find Station program sub-menu in the left frame.

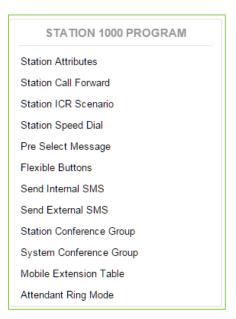


Figure 8.3 Station Portal Main Page

In the portal, users can modify various station attributes, set-up call forwarding, create Station ICR scenarios, assign Flexible buttons, program Station Speed dial numbers, send Short Messages and create conference groups. The following sections provide details on each of the available Station Program Web pages.

The above Admin. feature may be different according to 'Station Web Level' (Station Data > Common Attribute (111)).

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The Portal main page has three sections,

- Station selected Upper left frame
- Web site directory & navigation section Left frame
- Info and Entry section Central frame

8.1 Station Attributes

STATION 1000 PROGRAM	< Sta	ation Information Station Attrib	utes ×	
ation Attributes				Sav
ation Call Forward	0.1.10		Value	
ation ICR Scenario	Order <u>J</u> a	Attribute L ^a	OFF T	Range
ation Speed Dial		ICM Signaling Mode		
Select Message		Call Coverage Mode	OFF •	
xible Buttons		Delay Ring Cycle	0	0-15
nd Internal SMS		Headset Usage	OFF •	0.10
nd External SMS	6	Authorization Code	1234	Max 12 Digits (Include *)
tion Conference Group	7	Call Wait	For External/Internal V	
stem Conference Group		Choice Executive/Secretary Message		
bile Extension Table		Wake up Time	Repeat	hhmm (Must be 4 digits) Available Only System Att-New 5 Wake Up Usage is OFF
endant Ring Mode	10	Attendant Wake up Time	Attendant Wake up Time	hhmm (Must be 4 digits) Available Only System Att-New 5 Wake Up Usage is OFF
	11	Headset or Speaker Mode	Speaker 🔻	
	12	Headset Ring Mode	Headset •	
	13	User Name Registration		Max 20 byte
	14	BGM	No BGM	
	15	Station Ring Type	1	1 - 8
	16	CO Ring Type	1	1 - 8
	17	SMTP Server Address(IP or Domain Name)		
	18	VSF MSG - User Mail Address		
	19	Station Forward No Answer Timer	0	000-600 (sec)
	20	CLIR Service	OFF V	
	21	Log in/out Agent from Station Group	No Action Agent OFF duty reason	
	22	LCD Back Light Usage	BUSY ONLY V	
	23	VM Message No	000 (New: 000 , Saved: 000 , Urgent: 000)	
	24	Company Directory - First Name		

Selecting Station Attributes will display the input entry page.

Figure 8.1-1 Station Portal Station Attributes

Station Attributes define features and functions available to the station. Refer to Table 8.1-1 for a description of the features and the input required.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DND	DND (Do-Not-Disturb) can be activated from the User Portal.	OFF ON	OFF
ICM Signaling Mode	The user may select Hands-free (H), Privacy (P) or Tone Ring (T) for the ICM Signaling mode.	H, T, P	т
Call Coverage Mode	The Call Coverage feature permits an iPECS Phone user to receive ring and answer calls for other stations.	OFF ON	OFF
Delay Ring Cycle	When a covered station rings, the {CALL COVERAGE} button LED will flash at the covering station and the station will receive ring (immediate or delayed, 0 to 15 ring cycles).	0~15	0
Headset Usage	The user may enable the iPECS IP or LDP-7000 series phone for use with a Headset.	OFF ON	OFF
Authorization Code	Authorization codes are employed to control access to the system resources and facilities. Walking COS, CO/IP Group access DISA callers and certain Call Forward types may require the input of a valid Authorization code. Codes up to 12 digits may be entered.	Max. 12 digit (Include *)	N/A

Table 8.1-1 STATION ATTRIBUTES

Table 8.1-1 STATION ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call Wait	When a busy station receives a call, the call may queue to the station instead of receiving busy tone. With Call Wait, the caller hears Ring-back and the user sees the CO line button LED flash.	OFF, For External/Internal, For External, For Internal	For External/I nternal
Choice Exec/Sec Message	When a call forwards to the Secretary of an Executive/Secretary pair, messages can be left for the Executive (ON) or Secretary (OFF).	OFF ON	ON
Wake up Time	The user can register a Wake-up time and set the Wake- up alarm to repeat on a daily basis. Available only system Attendant New 5 Wake up usage is Off.	hhmm (Must be 4 digits)	
Attendant Wake up time	The user can register Attendant Wake-up time and set the Wake-up alarm to repeat on a daily basis. Available only system Attendant New 5 Wake up usage is Off.	hhmm (Must be 4 digits)	
Headset or Speaker Mode	The device, Speakerphone or Headset, to receive audio for a call can be selected.	Speaker Headset	Speaker
Headset Ring Mode	Ring for an incoming call can be delivered to the Headset, Speaker or both the Headset and Speaker.	Speaker Headset	Headset
User Name Registration	A name can be entered to display in the LCD of iPECS IP and LDP Phones calling the station.	Max. 20 characters	
BGM	From the portal, the user can select the source for Background Music that is played over the iPECS IP or LDP phone speaker while the station is idle.	No BGM, Internal/External Music 1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	No BGM
Station Ring Type	The user may select one of eight ring signals for Intercom calls.	1-8	1
CO Ring Type	The user may select one of eight ring signals for incoming outside calls.	1-8	1
SMTP Server Address	This field defines the address or url of the SMTP mail server for the notification.	IP v4 addressor Mail server name	
VSF MSG – User Mail Address	The system can send an E-mail to the user as notification of a new Voice message in the user built-in Voice Mailbox. This field defines the E-mail address to notify when a new message is received.	E-mail address	
Station Forward No Answer Timer	This timer determines the duration the station will ring prior to Ring-No-Answer Forward. This setting affects both manual and Preset Call Forward and overrides the System No-answer timer.	000-600 seconds	0
CLIR Service	CLIR (Calling Line Identification Restriction), an ISDN service, removes calling party Id sent from the ISDN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction to the PSTN when an outgoing ISDN call is placed.	OFF ON	OFF
Log in/out Agent	An Agent may change their Station group duty status	No Action,	No Action

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
from Station Group	(ON or OFF duty) through the User Portal.	Log in Agent-ON	
		Duty,	
		Log out Agent-OFF	
		Duty	
LCD Book Light	The backlight of iPECS IP and LDP Phones is assigned	ALWAYS OFF,	BUSY
LCD Back Light	to stay off, light only when the station is busy, or light	BUSY ONLY,	ONLY
Usage	constantly.	ALWAYS ON	UNLT
	This field displays the message status of the built-in		
VM Message No	Voice Mail. The number of New, Saved and Urgent		
	messages is shown.		
Company Directory	The user's First Name for the Company Directory is		
- First Name	assigned.		
Company Directory	The user's Last Name for the Company Directory is		
- Last Name	assigned.		
Message	When the user selects to Rewind or Fast-forward while		
Rewind/Fast-	listening to a message in the built-in Voice Mailbox, the	3 ~ 99 seconds	4
Forward Time	message will rewind or Fast-forward by the time entered.		

Table 8.1-1 STATION ATTRIBUTES

8.2 Station Call Forward

STATION 1000 PROGRAM	< Station Informa Station (Call F <mark>×</mark>	
Station Attributes			Si
Station Call Forward			
Station ICR Scenario	Call Forward Type	Destination	
Station Speed Dial	Cancel Call Forward		
re Select Message	Unconditional Call Forward	(N/A ▼):	
lexible Buttons	Busy Call Forward	N/A • :	
	No Answer Call Forward	N/A • :	
end Internal SMS	Busy/No Answer Call Forward	N/A • :	
end External SMS			
tation Conference Group			
ystem Conference Group			
lobile Extension Table			

Figure 8.2-1 Station Portal Call Forward

Stations can be programmed so that incoming calls re-route to another station (local or networked), a station group, the built-in Voice Mailbox, or over a system CO/IP line (Off Net). Call Forward can be separately assigned to forward calls unconditionally, or when the call encounters a Busy, No-Answer or Busy/No Answer condition.

8.3 Station ICR Scenario

Selecting Station ICR Scenario displays the input entry page.

Station Attributes Station Call Forward				s	Sav
Station ICR Scenario	Index	Attribute	Value	Range	D
Station Speed Dial		Call Profile Table Usage	0	0~3 (0:Deactive CP)	
		Caller ID	N/A • :	Max 23 Digits	
Pre Select Message			Start Date - End Date	YYYY-MM-DD format	
lexible Buttons		Time Condition	MON TUE WED THU FRI SAT SUN ALL Holiday		
Send Internal SMS			Start Time End Time	hhmm (Must be 4 digits) 0000-2359	÷
end External SMS	0	Destination	N/A	Max 23 Digits	1
Station Conference Group		Scenario Priority		0~9 (0:highest priority)	
ystem Conference Group		Forwarding from NET Call	Yes 🔻		
lobile Extension Table		Call Profile Table Idx	0	0~3 (0:Deactive CP)	
ttendant Ring Mode		Call Profile Timer	10	10~60 sec	
		Caller ID	N/A • :	Max 23 Digits	
			Start Date - End Date	YYYY-MM-DD format	
		Time Condition	MON TUE WED THU FRI SAT SUN ALL Holiday		
			Start Time - End Time	hhmm (Must be 4 digits) 0000-2359	÷
	1	Destination	N/A • : CO Value Dial Digit	Max 23 Digits	(
		Scenario Priority		0~9 (0:highest priority)	
		Forwarding from NET Call	Yes •		
		Call Profile Table Idx	0	0~3 (0:Deactive CP)	
		Call Profile Timer	10	10~60 sec	
		Caller ID	N/A • :	Max 23 Digits	
			Start Date - End Date	YYYY-MM-DD format	
		Time Condition	MON TUE WED THU FRI SAT SUN ALL Holiday		
			Start Time - End Time	hhmm (Must be 4 digits) 0000-2359	÷
	2	Destination	N/A	Max 23 Digits	(
		Scenario Priority		0~9 (0:highest priority)	
		Forwarding from NET Call	Yes T		
		Call Profile Table Idx	0	0~3 (0:Deactive CP)	

Figure 8.3-1 Station Portal ICR Scenario

Station ICR is an extension of call forward where the user enters scenarios to define the call forward feature. Each station has ten (10) routing scenarios that define conditions for routing a user's incoming calls. Each scenario may define time of day, day of week, date, caller ID and destination for incoming calls. In addition, the scenarios may be prioritized; calls are routed to the destination with the highest priority-matching scenario.

8.4 Station Speed Dial

Selecting Station Speed Dial will display the input entry page. Enter the Speed Dial Bin range then click **[Load]** to enter Speed Dial information.

STATION 1000 PROGRAM	< Stati	on Information	Station Speed			
ation Attributes ation Call Forward		dex Range (0 - 99 ange 1-20):		C Load	
ation ICR Scenario ation Speed Dial	Index	CO Type	CO Value	Dial Digit	Name	
e Select Message	1	N/A •				
xible Buttons	2	N/A •				
	3	N/A •				
nd Internal SMS nd External SMS	4	N/A •				
	5	N/A •				
tion Conference Group	6	N/A •				
em Conference Group	7	N/A •				
bile Extension Table	8	N/A •				
endant Ring Mode	9	N/A •				
	10	N/A •				
	11	N/A •				
	12	N/A •				
	13	N/A •				
	14	N/A •				
	15	N/A •				
	16	N/A •				
	17	N/A •				
	18	N/A •				
	19	N/A •				
	20	N/A •				

Figure 8.4-1 Station Speed Dial Portal

Each station can store commonly dialed numbers for easy access using Station Speed Dial bins. Each Speed Dial number can be up to 25 digits in length and may include special instruction codes for analog and ISDN lines. The CO Line used with the Speed Dial number must be entered and a name can be assigned for use with Dial-by-Name dialing.

8.5 Pre-selected Message

Selecting Pre-selected Message will display the input entry page.

STATION 1000 PROGRAM	< Statio	on Information Pre Select Message		
Station Attributes				
Station Call Forward				
Station ICR Scenario	Index	Messages	Attribute	Range
Station Speed Dial	• #	MESSAGE DEACTIVATED		
Pre Select Message	0	STATION CUSTOM MESSAGE		Max 24 Characters
- Flexible Buttons	0 1	LUNCH RETURN TIME		hhmm (Must be 4 digits)
Send Internal SMS	0 2	ON VACATION RETURN AT DATE		MMDD (Must be 4 Digits)
Send External SMS	03	OUT OF OFFICE RETURN TIME		hhmm (Must be 4 digits)
Station Conference Group	0 4	OUT OF OFFICE RETURN DATE		MMDD (Must be 4 Digits)
•	05	OUT OF OFFICE RETURN UNKNOWN		
System Conference Group	0 6	CALL TO STATION		Phone Number
Mobile Extension Table	0 7	IN OFFICE STATION		Station Number
Attendant Ring Mode	0 8	IN A MEETING TIME		hhmm (Must be 4 digits)
	0 9	AT HOME		
	0 10	AT BRANCH OFFICE		
	0 11	SYSTEM CUSTOM MESSAGE		
	0 12	SYSTEM CUSTOM MESSAGE		
	0 13	SYSTEM CUSTOM MESSAGE		
	0 14	SYSTEM CUSTOM MESSAGE		
	0 15	SYSTEM CUSTOM MESSAGE		
	0 16	SYSTEM CUSTOM MESSAGE		
	0 17	SYSTEM CUSTOM MESSAGE		
	0 18	SYSTEM CUSTOM MESSAGE		
	0 19	SYSTEM CUSTOM MESSAGE		
	0 20	SYSTEM CUSTOM MESSAGE		
		ESSAGE PLAY TO CO INCOMING CALLER	OFF V	

Figure 8.5-1 Pre-selected Message Portal

Users can select a message to be displayed in the LCD of a calling iPECS IP or LDP Phones. There are ten pre-defined messages (index 1-10) and several messages allow for auxiliary information such as a time, date or number.

A user may activate Custom Display Messaging to send a custom text message to the LCD of a calling iPECS IP and LDP Phones. Up to 11 Custom Messages (ten system level and one for each user) may be entered in the system database. System level Custom Messages (index 11-20) may be entered from the Attendant or Administrator phone or via the Web Admin & Maintenance page. The Station Custom Message (index 0) may also be assigned from the station or via the Station portal Web page.

8.6 Flexible Buttons

Selecting Flexible Buttons will display the input entry page. Select the Station Type from the dropdown menu then select **[Load]** to modify the Flexible Button data.

STATION 1000 PROGRAM	< Station Inform	The second secon		
Station Attributes Station Call Forward	Select Station Ty	pe : Master Station V Load		
Station ICR Scenario	Station Type : Ma	aster Station		
Station Speed Dial	Button	Туре	Value	Label
Pre Select Message	Flex Button 1	CO Line 🔻	1	
Elexible Buttons	Flex Button 2	CO Line 🔻	2	
Send Internal SMS	Flex Button 3	CO Line 🔻	3	
Send External SMS	Flex Button 4	CO Line 🔻	4	
Station Conference Group	Flex Button 5	CO Line 🔻	5	
	Flex Button 6	CO Line 🔻	6	
System Conference Group	Flex Button 7	CO Line 🔻	7	
Iobile Extension Table	Flex Button 8	CO Line 🔹	8	
Attendant Ring Mode	Flex Button 9	CO Line 🔻	9	
	Flex Button 10	CO Line 🔻	10	
	Flex Button 11	Loop		
	Flex Button 12	Loop		
	Flex Button 13	Station Number 🔹	1000	
	Flex Button 14	Station Number 🔹	1001	
	Flex Button 15	Station Number	1002	
	Flex Button 16	Station Number 🔹	1003	
	Flex Button 17	Station Number 🔹	1004	
	Flex Button 18	Station Number 🔹	1005	
	Flex Button 19	Station Number 🔹	1006	
	Flex Button 20	Station Number 🔻	1007	
	Flex Button 21	Station Number	1008	
	Flex Button 22	Station Number	1009	
	Flex Button 23	Station Number 🔹	1010	
	Flex Button 24	Station Number 🔹	1011	

Figure 8.6-1 Flexible Buttons

Each Flex button for each iPECS IP and LDP Phone, and DSS Console can be assigned a function (Type) from the drop-down menu. After selecting the Type for a button, enter the value, if required.

If the station employs the LCD to display the button function, the LSS Label field can be used to assign a label that displays in the LCD.

8.7 Send Internal and External SMS

Selecting Send Internal SMS displays the input entry page.

STATION 1000 PROGRAM	< Station Information	n Send Internal SMS
Station Attributes	Attribute	Value
Station Call Forward	Station Range	
Station ICR Scenario		
Station Speed Dial	Message(Max 80 cl	har)
Pre Select Message	message(max ou ci	nar)
Flexible Buttons		
Send Internal SMS		Send
Send External SMS		Result
Station Conference Group		

STATION 1000 PROGRAM	< Station Information	Send External SMS
Station Attributes	Attribute	Value
Station Call Forward	Destination Number	
Station ICR Scenario	Return Number	
Station Speed Dial		
Pre Select Message	Message(Max 80 char)	
Flexible Buttons	message(max oo char)	
Send Internal SMS		
Send External SMS		Send
Station Conference Group		
System Conference Group		
Mobile Extension Table		
Attendant Ring Mode		

Figure 8.7-1 Send Internal and External SMS

A short message can be sent to the LCD of other iPECS IP and LDP Phones; enter the station range to receive the message and the message body then click **[Send]**.

8.8 Station Conference Group

Selecting Station Conference Group displays the input entry page. Enter the Conference Group Number then click **[Load]** to enter the group attributes and identify members of the group as shown in Figure 8.8-2.

STATION 1000 PROGRAM	< Station Information Station Conferen ×
Station Attributes	Enter Station Conference Group Number (0 - 99) : Load Overview
Station Call Forward	
Station ICR Scenario	
Station Speed Dial	
Pre Select Message	
Flexible Buttons	
Send Internal SMS	
Send External SMS	
Station Conference Group	
System Conference Group	-
Mobile Extension Table	
Attendant Ring Mode	

Figure 8.8-1 Station Conference Group Portal

STATION 1000 PROGRAM	< Stat	ion Information	Station Co	nferen	ð			
Station Attributes	Enter S	tation Conference G	roup Number	(0 - 99) :		Lo	oad O	erv
Station Call Forward	Station	Conference Group 1						
Station ICR Scenario		Attribute		/alue		Range	9	
Station Speed Dial	Group	Name				0 - 12 chars		
Pre Select Message	Pass	word				5 digits		
Flexible Buttons	Anno	uncement	0			0 - 200 (0 : 0	Unused)	
Send Internal SMS	Abse	nt Supervisor Timer	0			sec, 000 - 2	55	
Send External SMS	No Ar	nswer Timer	0			sec, 000 - 2	55	
Station Conference Group	Retry	Count	0			00 - 10		
System Conference Group	Interv	al Timer	0			sec, 000 - 2	55	
Mobile Extension Table								
Attendant Ring Mode	Index	Туре	CO Val			l Digit	Statu	s
	0	Station Number	•	10	00		Idle	
	1	N/A	•				N/A	
	2	N/A	•				N/A	
	3	N/A	• <u> </u>				N/A	
	4	N/A	• <u> </u>				N/A	
	5	N/A	• <u> </u>				N/A	
	6	N/A	·				N/A	
	7	N/A	• <u> </u>				N/A	
	8	N/A	• <u> </u>				N/A	
	9	N/A	• <u> </u>				N/A	
	10	N/A	·				N/A	
	11	N/A	<u> </u>				N/A	
	12	N/A	•				N/A	
	13	N/A	• <u> </u>				N/A	
	14	N/A	• <u> </u>				N/A	
	15	N/A	• <u> </u>				N/A	
	16	N/A	•				N/A	

Figure 8.8-2 Station Conference Group Attributes & Members

Enter a Group Name and Group members, which can be internal and external parties. In addition, the various attributes such as password for group entry can be modified.

8.9 System Conference Group

Selecting System Conference Group displays the input entry page. Enter the Conference Group Number then click [Load] to enter the Conference Group attributes and members as shown in Figure 8.9-2.

STATION 1000 PROGRAM	< Station Information System Conferen X
Station Attributes Station Call Forward	Enter System Conference Group Number (100 - 259) : Load Overview
Station ICR Scenario	
Station Speed Dial	
Pre Select Message	
Flexible Buttons	
Send Internal SMS	
Send External SMS	
Station Conference Group	
System Conference Group	
Mobile Extension Table	
Attendant Ring Mode	

Figure 8.9-1 System Conference Group

STATION 1000 PROGRAM	< Statio	n Information	System Confe	ren×				
Station Attributes	Enter System Conference Group Number (100 - 259) : Load Overview							Γ
Station Call Forward								
Station ICR Scenario		Conference Group						1
Station Speed Dial		Attribute	Va	ue	Rang			
Pre Select Message	Group				0 - 12 char	S		
Flexible Buttons	Passwo				5 digits			
Send Internal SMS		cement	0		0 - 200 (0 :			
Send External SMS		Supervisor Timer			sec, 000 -			
Station Conference Group		wer Timer	0		sec, 000 - 2	255		
System Conference Group	Retry C		0		00 - 10	255		
Mobile Extension Table	Interval	Imer	0		sec, 000 -	255		
Attendant Ring Mode	Index	Туре	CO Value	[Dial Digit	Status		
-	1 (•			N/A		
	2	N/A	•			N/A		
	3	N/A	•			N/A		
	4	N/A	•			N/A		
	5	N/A	•			N/A		
	6	N/A	•			N/A		
	7	N/A	•			N/A		
	8	N/A	•			N/A		
	9	N/A	•			N/A		
	10	N/A	•			N/A		
	11 (N/A	•			N/A		
	12	N/A	•			N/A		
	13	N/A	•			N/A		
	14	N/A	▼			N/A		
	15	N/A	▼			N/A		
	16	N/A	•			N/A		
	17	N/A	•			N/A		

Figure 8.9-2 System Conference Group Attributes & Members

Enter a Group Name and Group members, which can be internal and external parties. In addition, the various attributes such as password for Group access can be modified.

8.10 Mobile extension Table

Selecting Mobile Extension displays the attributes entry page.

STATION 1000 PROGRAM	< Stat	ion Information Mobile	Extension <mark>×</mark>		
Station Attributes					
Station Call Forward				-	
Station ICR Scenario	Order	Attribute	Value	Range	
Station Speed Dial	1	Usage	Disable •		
	2	Station Group Call Through	Disable •		
Pre Select Message	3	VSF Notify	Unused 🔻		
Flexible Buttons	4	Notify Retry	3	1-9	
Send Internal SMS	5	Retry Interval	3	1-3 (min)	
Send External SMS	6	Notify CLI	Caller 🔻		
Station Conference Group	7	Call Back	OFF •		
System Conference Group	8	Delay Timer	0	0-255 (sec)	
Mobile Extension Table	9	Announcement	0	0 - 200 (0 : Unused)	
Attendant Ring Mode	10	CO Group	1		
	11	Telephone Number		Max 24 Digits	
	12	CLI Number		Max 16 Digits	
	13	Suffix DID Tbl To CLI	OFF V		

Figure 8.10-1 Mobile extension

Mobile Extension attributes enable Mobile Extension and control the feature use. The user can activate Mobile Extension to receive business calls on their mobile and request Mobile notification of new Voice messages.

8.11 Attendant Ring Mode

Selecting Attendant Ring Mode displays the input page.

STATION 1000 PROGRAM	< Station Informatio	Attendant Ring MX
Station Attributes		
Station Call Forward	A 44 11 4	
Station ICR Scenario	Attribute	Value
Station Speed Dial	Select Ring Mode	Day Ring Mode •
Pre Select Message	SCENARIO	
-		
Flexible Buttons		
Send Internal SMS		
Send External SMS		
Station Conference Group		
System Conference Group		
Mobile Extension Table		
Attendant Ring Mode		

Figure 8.11-1 Attendant Ring Mode

An Attendant can change the active system Ring mode from the Auto mode and select a specific mode including a specified scenario group for incoming call routing.

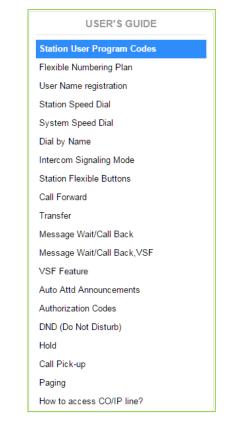
9. ON-LINE WEB USER GUIDE

We provide On-line web user guide about the frequent use of features to a user.

You can access it in the login page as below without entering ID and Password.

We didn't explain the user guide because you can easily get the information on the following features on the web.





Appendix A User Program Codes

User Program Codes, refer to Table A-1 and A-2, are digit sequences users and the Attendant may dial while in the User Program Mode to assign Flex buttons and affect the status of a feature or setting. For more information on the User Program Mode, refer to the **iPECS UCP Features** and **Operation Manual**.

Many of these codes may be assigned to a button of an iPECS IP or LDP Phone by pressing the **[PGM]** button as the first entry of a Flexible button assignment, see Flex button Programming in the **iPECS UCP Features and Operation Manual**.

ode	Description	Code	Description			
1X	Intercom Differential Ring	82	{COLR} Button Assignment			
12X	CO Line Differential Ring	83	{ATD DND} button assignment			
3	Intercom Answer Mode (1: HF/2: TONE/3: PV)	84	{Account Code} Button Assignment			
14X	Call Coverage Attribute Setting	85	{LOOP} Button Assignment			
15X	Station Ring Download	86	{ATD Intrusion} Button Assignment			
21	Knock Down Station COS	87	{INTERCOM} Button Assignment			
22	Restore Station COS	88	{Camp-on} Button Assignment			
23	Walking COS	89	{Send Keypad Facility IE} Button Assignment			
24	ICR Scenario	8#	{OHVO} Button Assignment			
25	LIP Keyset Stat	8*1	DID Restiction Button Assignment			
26	Call Profile	8*2	DISA Restiction Button Assignment			
30	VM Mobile Notify	8*3	Bomb Threat History Button Assignment			
31	Message Retrieve Method	8*5	Headset Button Assignment			
32	Message Retrieve Example	8*6XYZA	Toggle Ring Mode Button Assignment X,Y,Z,A : 1(Day), 2(Night), 3(Timed), 4(Auto)			
33	User Authorization Code Registration	90	{SPEED} Button Assignment			
34	DID Call Wait	91	{CONFERENCE} button assignment			
35	Message Wait in Executive/Secretary pair	92	{CALLBACK} button assignment			
36	Send SMS Message	93	{DND} button assignment			
37	Register Mobile Extension	94	{FLASH} button assignment			
38	Make Mobile Extension active	95	{MUTE} button assignment			
39	Register Mobile Extension CLI	96	{MONITOR} button assignment			
11	Set Wake-Up Time	97	{REDIAL} button assignment			
12	Wake-Up Time Disable	98	{CALL FORWARD} button assignment			
51XX	Custom/Pre-select Message Display (XX = 00-20)	99	{PTT} button assignment			
52	Register Custom Message (Message 00)	9*XX	{In-Room Indication} button assignment (XX = 01-10)			
53	Active Conference Room	*6XXX	Set Forced Fwd Dest (XXX : hunt group no.)			
54	Deactive Conference Room	*7XXX	Forced FWD To Dest (XXX : hunt group no.)			
55	Monitor Conference Group	*8	Register Bluetooth			
57	{Call Log Display} Button Assignment	*9	Bluetooth Usage			
61	Headset/Speakerphone Mode	*0	Hotdesk Login			
62	Change Ring Mode	**	Hotdesk Logout			
71	LCD Display Mode					
72	Version Display		[1] STA RING TYPE [2] CO RING TYPE			
73	Background Music					
74	Station User Name Registration		[3] ANSWER MODE [4] CALL COVER ATTR			
75	Display Phone IP Address		LAJ CALL COVER ATTR			
76	Change Phone IP Address		[5] STA RING DOWNLOAD			
7	Display Phone MAC Address	Tal Pillo	/NEWKEYSET			
78	Network Config	[2] COS	INETREISET			
79	Display Phone Version	121 005	[1] COS DOWN			
7#	Forced Release Button Assignment		[2] COS RESTORE			
7*	Display Serial number/Package for SMEMU					
30	{Record} Button Assignment - With Voice Mail		[3] WALKING COS			
31	{CLIR} Button Assignment					

Table A-1 Station User Program codes

CODE	FUNCTION
0111	Print SMDR, by Station
0112	Delete SMDR, by Station
0113	Display Call Charge
0114	Abort Print
0115	Print Lost Call Report
0116	Delete Lost Call Report
0121	Print Traffic Analysis (All summary)
0122	Print Traffic Analysis (All summary periodically)
0123	Abort "Print Traffic Analysis (All summary periodically)"
0124	Print Traffic Analysis (Attendant)
0125	Print Traffic Analysis (Call summary)
0126	Print Traffic Analysis (Call Hourly)
0127	Print Traffic Analysis (H/W Usage)
0128	Print Traffic Analysis (CO summary)
0129	Print Traffic Analysis (CO Hourly)
021	Knock Down Station COS
022	Restore Station COS
031	Authorization Code Registration
032	Erase Authorization
041	System Date/Time Mode
042	LCD Date Mode
043	LCD Time Mode
044	Set Wake Up Time from Attendant
045	Wake Up Disable from Attendant
046	PX Clock Set through ISDN message
051	Custom/Pre-select Message
052	DND/Call Forward/Pre-selected MSG Cancel
053	Custom Display Message (11-20)
054	Delete Conference Room
055	Monitor Conference Room
06	VSF – Record System Greeting
071	Dial By Name
072	Isolate Fault CO Line
073	Automatic Day/Night/Timed Ring Table
074	External Page Music -1 Assignment/Cancel
075	External Page Music -2 Assignment/Cancel
076	LCD Display Language
077	PTT Login with station range
078	Display cpu redundancy state
08	Emergency Log
*#	Admin Programming Code

Table A-2 ATTENDANT USER PROGRAM FIXED FUNCTION CODES

Appendix B *FLEXIBLE NUMBERING PLAN*

The System Numbering Plan can be selected from 1 of 9 basic Numbering Plans. Table B-1 provides a brief description of the plans and Table B-2 and Table B-3 provide the Numbering Plan codes for each of the eight basic plans. The Number Plan is selected in Program 100 and individual codes in the plan can be changed using the Flexible Numbering Plan Programs 106 to 109.

Plan Number	Description	Range					
1	Basic Numbering Plan	1000 – 3399					
2	Korea Default	1000 – 3399					
3	Australia Default	1000 – 3399					
4	New Zealand Default	1000 – 3399					
5	Italy Default	2000– 4399					
6	Finland Default	2100 –4499					
7	Sweden Default	1000 – 3399					
8	Norway Default	1000 – 3399					
9	Israel Default	1000 – 3399					

Table B-1 Numbering Plan Description

		Bas	ic Numbering	Plan	
Feature	1	2	3	4	Remark
Intercom Call	1000 ~3399	1000 ~3399	1000 ~3399	1000 ~3399	
Internal Page Zone	*301~*400	*301~*400	*101~*200	*301~*400	
Internal All Call Page	543	*543	#3	#43	
Meet Me Page	544	*544	##	##	
External Page Zone 1-2	545-546	*545-*546	#41-#42	#41-#42	
External All Call Page	548	*548	#5	#5	
All Call Page	549	*549	#00	#00	
SMDR Account Code Enter	550	*550	550	#9	SLT
Flash Command to CO Line	551	*551	551	551	SLT
SLT Last Number Redial	552	*552	552	552	SLT
DND (Toggle On/Off)	553	*553	553	553	SLT
Call Forward	554	*554	554	554	
Speed Dial Programming	555	*555	555	555	SLT
Activate Message Wait/Callback	556	*556	556	*66	SLT
Message Wait/Callback Answer	557	* 557	557	*67	SLT
SLT Speed Dial Access	558	* 558	558	#8	SLT
DND/FWD cancel	559	* 559	559	559	SLT
SLT CO System Hold	560	* 560	560	560	SLT
SLT Program Mode Access	561	* 561	561	561	SLT
Attendant Unavailable	562	* 562	562	562	
AME Feature	564	* 564	564	564	
Alarm Reset	565	* 565	565	* 565	

Table B-2 Basic Numbering Plan 1-4, Default Values

		Bas	ic Numbering	l Plan	
Feature	1	2	3	4	Remark
Group Call Pickup	566	* 566	**	*1	
Universal Night Answer	567	* 567	567	2	
Account Code with bin	568	* 568	568	568	
Walking COS	569	* 569	569	569	
ACD Agent On/Off Duty	571	* 571	571	571	
ACD Supervisor Login	572	* 572	572	572	
ACD Supervisor Logout	573	* 573	573	573	
ACD Help Code	574	* 574	574	574	
ACD Calls In Queue Display	575	* 575	575	575	
ACD Supervisor Status	576	* 576	576	576	
ACD Supervisor Monitor	577	* 577	577	577	
ACD Reroute Queued Call Answer	578	* 578	578	578	
ACD Reroute Queued Call No Answer	579	* 579	579	579	
Camp-On Answer	621	* 621	621	621	SLT
Call Parking Locations	#601~#800	#601~#800	#601~#800	#101~#300	
Station Group Pilot Number	401 - 500	*401 - *500	*401 - *500	#620 - #719	
Station User VSF Features Access	66x	66x	*66x	69x	x: 1 ~ 3
Call Coverage Ring	76	*76	*76	67	
Direct Call Pickup	77	*77	*77	*77	
Access CO Group	89xx	89xx	89xx	89xx	xxx: 000~201,
Access Individual CO/IP Line	88xxx	88xxx	88xxx	48xxx	xxx: 001~999
Access Held CO/IP	8*	8*	8*	4*	
Access Held Individual CO/IP	8#xx	8#xx	8#xx	4#xx	xx: 01~74
Access CO in First CO Group	9	9	9	1	
Attendant Call	0	0	0	0	
VM Message Wait Enabled	*8	*8	*8	*8	
VM Message Wait Cancel	*9	*9	*9	*9	
Door Open (1st Door)	#*1	#*1	#*1	#*1	
Door Open (2nd Door)	#*2	#*2	#*2	#*2	
Door Open (3rd Door)	#*3	#*3	#*3	#*3	
Door Open (4th Door)	#*4	#*4	#*4	#*4	
MCID Request	*0	*0	*0	*0	
Unsupervised conference time	щц	щц	* шш	*00	
Extension code	##	##	* ##	*22	
PTT Group Login/Logout	#0	#0	#*0	*21	
ACD Agent primary login	581	* 581	581	581	
ACD Agent primary logout	582	* 582	582	582	
ACD Agent secondary login	583	* 583	583	583	
ACD Agent secondary logout	584	* 584	584	584	
Wrap-up end	585	* 585	585	585	
T-NET CM Login/out	586	* 586	586	586	
Enter Into Conf-Room	59	* 59	* 59	59	
Enter Into Conf-Group	68	* 68	* 68	68	
Station ICR	587	* 587	587	587	
Pick up Group Pick-Up	588	* 588	588	588	
Emergency Page	589	* 589	589	589	

Table B-2 Basic Numbering Plan 1-4, Default Values

		Bas	ic Numbering	Plan	
Feature	1	2	3	4	Remark
Remote Mobile Extension Control	580	* 580	580	580	
ACD Agent ON/OFF Duty-All group	58*	* 58*	58*	58*	
SLT ACNR	58#	* 58#	58#	58#	
ACD Supervisor Ring Mode	570	* 570	570	570	
Company Directory Name	563	* 563	563	563	
ISDN Supplementary Hold	57*	*57*	57*	57*	
ISDN Supplementary Conf	57#	*57#	57#	57#	
Forced Channel Seize	56*	*56*	56*	56*	
Override DND/Forward	56#	*56#	56#	56#	
Cancel Call Back					
Transfer to VSF Number	55*	*55*	55*	55*	
CCR	#2	#2	#2	#2	
Room type Conf Group join	5*0	5*0	5*0	5*0	
Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
Save Number Redial	[Save]	[Save]	[Save]	[Save]	Keyset
Station Speed Dial Access	[SPEED] +	[SPEED] +	[SPEED] +	[SPEED] +	XXX:
Station Speed Dial Access	XXX	XXX	XXX	XXX	000~099
System Speed Dial Access	[SPEED] +	[SPEED] +	[SPEED] +	[SPEED] +	XXXXX:
System Speed Dial Access	XXXXX	XXXXX	XXXXX	XXXXX	20000~31999

Table B-2 Basic Numberin	g Plan 1-4. Default Values

Table B-3 Basic Numbering Plan 5-8, Default Values

Feature	Basic Numbering Plan						
	5	6	7	8	9	Remark	
Intercom Call	2000-4399	2100-4439	1000-3339	1000-3339	1000-3339		
Internal Page Zone	*101-*200	*301-*400	301- 400	*301- *400	*301- *400		
Internal All Call Page	#3	*543	43	*543	543		
Meet Me Page	##	*544	44	*544	544		
External Page Zone 1-2	#41- #42	*545 - *546	45- 46	*545 - *546	545-546		
External All Call Page	#5	*548	48	548	548		
All Call Page	#00	*549	49	*549	549		
SMDR Account Code Enter	50	*550	0	*550	550	SLT	
Flash Command to CO Line	51	*551	51	*551	551	SLT	
SLT Last Number Redial	52	*552	52	*552	552	SLT	
DND (Toggle On/Off)	53	*553	53	*553	553	SLT	
Call Forward	54	*554	54	*554	554		
Speed Dial Programming	55	*555	55	*555	555	SLT	
Activate Message Wait/Callback	56	*556	56	*556	556	SLT	
Message Wait/Callback Answer	57	*557	57	*557	557	SLT	
SLT Speed Dial Access	58	*558	58	*558	558	SLT	
DND/FWD cancel	59	*559	59	*559	559	SLT	
SLT CO System Hold	690	*560	*10	*560	560	SLT	
SLT Program Mode Access	691	*561	50	*561	561	SLT	
Attendant Unavailable	692	*562	*12	*562	562		

	Basic Numbering Plan					
Feature	5	6	7	8	9	Remark
AME Feature	694	*564	*36	*564	564	
Alarm Reset	695	*565	*13	*565	565	
Group Call Pickup	**	*566	*14	*566	**	
Universal Night Answer	697	*567	*15	*567	567	
Account Code with bin	698	*568	*16	*568	568	
Walking COS	699	*569	*17	*569	569	
ACD Agent On/Off Duty	671	*571	*20	*571	571	
ACD Supervisor Login	672	*572	*21	*572	572	
ACD Supervisor Logout	673	*573	*22	*573	573	
ACD Help Code	674	*574	*23	*574	574	
ACD Calls In Queue Display	675	*575	*24	*575	575	
ACD Supervisor Status	676	*576	*25	*576	576	
ACD Supervisor Monitor	677	*577	*26	*577	577	
ACD Reroute Queued Call	678	*578	*27	*578	578	
Answer						
ACD Reroute Queued Call	679	*579	*28	*579	579	
No Answer						
Camp-On Answer	621	*621	*629	*621	*621	SLT
Call Parking Locations	#601 - #800		#601 – #800	#601 – #800	#601 – #800	
Station Group Pilot Number	720 – 819	*401 - *500	#401 - #500	*401 - *500	620-719	
Station User VSF Features Access	*66x	66x	67x	66x	*66	x: 1 ~ 3
Call Coverage Ring	*76	*76	*76	*76	76	
Direct Call Pickup	*77	*77	*77	*77	*77	
Access CO Group	89xxx	89xxx	89xxx	#89xxx	89	xxx: 000- 201
Access Individual CO/IP Line	88xxx	88xxx	88xxx	#88xxx	88	xxx: 001~999
Access Held CO/IP	8*	8*	8*	#8*	8*	
Access Held Individual CO/IP	8#xxx	8#xxx	8#xxx	#8#xxx	8#	xxx: 001~999
Access CO in First CO	0	9	9	0	9	001~333
Group	0	0	0	#0	0	
Attendant Call	9	0	0	#9	0	
VM Message Wait Enabled	*8	*8	*8	*8	*8	
VM Message Wait Cancel	*9	*9	*9	*9	*9 #*4	
Door Open (1st Door)	#*1	#*1	*31	#*1	#*1	
Door Open (2nd Door)	#*2	#*2	*32	#*2	#*2	
Door Open (3rd Door)	#*3	#*3	*33	#*3		
Door Open (4th Door)	#*4	#*4	*34	#*4		(-)
MCID Request	*0	*0	*35	*0	*0	(Except USA version)
Unsupervised conference time Extension code	*##	##	*37	##	##	
PTT Group Login/Logout	#*0	#0	*38	#0	#0	
ACD Agent primary login	681	*581	*40	*581	581	

Feature	Basic Numbering Plan						
	5	6	7	8	9	Remark	
ACD Agent primary logout	682	*582	*41	*582	582		
ACD Agent secondary login	683	*583	*42	*583	583		
ACD Agent secondary logout	684	*584	*43	*584	584		
Wrap-up end	685	*585	*44	*585	585		
T-NET CM Login/out	686	*586	*45	*586	586		
Enter Into Conf-Room	*59	*59	*46	*59	59		
Enter Into Conf-Group	*68	*68	*47	*68	*68		
Station ICR	687	*587	*48	*587	587		
Pick up Group Pick-Up	688	588	*49	*588	588		
Emergency Page	689	*589	*50	*589	589		
Remote Mobile Extension Control	680	*580	**	#1	580		
ACD Agent ON/OFF Duty- All group	68*	*58*	*5#	*58*	58*		
SLT ACNR	68#	*58#	*51	*58#	58#		
ACD Supervisor Ring Mode	67*	*570	*52	*570	570		
Company Directory Name	*21	*563	*53	*563	563		
ISDN Supplementary Hold	*22	*57*	*54	*57*	57*		
ISDN Supplementary Conf	*23	*57#	*55	*57#	57#		
Forced Channel Seize	*24	*56*	*56	*56*	56*		
Override DND/Forward	*25	*56#	*57	*56#	56#		
Cancel Call Back							
Transfer to VSF Number	55*	*55*	*59	*55*	55*		
CCR	#2	#2*	#2	#2	#2		
Room type Conf Group join	5*0	5*0	5*0	5*0			
Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset	
Save Number Redial	[Save]	[Save]	[Save]	[Save]	[Save]	Keyset	
Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	XXX: 000~099	
System Speed Dial Access	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	XXXXX: 20000~3 1999	

Table B-3 Basic Numbering Plan 5-8, Default Values

Thanks for purchasing iPECS UCP

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