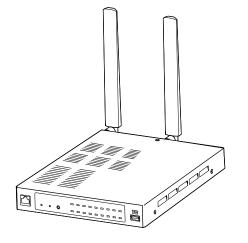
o ICOM

OPERATING GUIDE





Icom Inc.

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INTRODUCTION

Thank you for choosing this Icom product. The VE-PG4 RoIP GATEWAY is designed and built with Icom's IP network technology.

With proper care, this product should provide you with years of trouble-free operation.

① This document is described based on the VE-PG4 firmware version 1.60.

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• Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.

• The use of Icom transceivers with any equipment that is not manufactured or approved by Icom.

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The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form. U.S. Patent Nos.

#8,359,197, #7,970,606, and #6,912,495 B2.

ABOUT THE CONSTRUCTION OF THE MANUAL

You can use the following manuals to understand and operate this RoIP Gateway.

Precautions (Comes with the RoIP Gateway)

Instructions for the connections, initialization, and precautions.

Installation guide (PDF type)

Instructions for the system requirements, the system setup basics, maintenance, and the specifications. It can be downloaded from the Icom website.

Operating guide (This manual, PDF type)

The detailed references for the settings in the RoIP Gateway setting screen. It can be downloaded from the Icom website.

Also refer to the manual for each device, that is connected to your system.

TOP screen 1-2 System Status 1-2 MAC Address 1-2 WAN Status 1-3 LTE Status 1-3

TOP screen

TOP

System Status

Displays the firmware version, Date and Time, uptime, and memory usage.

Host Name	VE-PG4	
Version	presentation in the second sec	
P100H Firmware Version		
P110H Firmware Version		
Current Time	11:26:25	
Uptime	0 day 04:25:02	

① See "Transceiver Management" screen in this manual for details on the firmware version of each WLAN transceiver that is registered to the RoIP server. (Transceiver Controller > Transceiver Settings > Transceiver Management)

```
TOP
```

MAC Address

Displays the MAC Address (LAN/WAN.)

M/	AC Address		
	LAN	00-90-C7-	
	WAN	00-90-C7-	

- ① The MAC address is the peculiar number that is assigned to a networking device. It is displayed in 12 hexadecimal (00-90-C7-XX-XX).
- ① The MAC address is also printed on the label on the bottom of the RoIP gateway.

TOP screen

TOP

WAN Status

Displays the WAN connection status that is set on the "WAN" screen setting in the Router Settings menu. (Router Settings > WAN)

N Status		
Connection Type	DHCP Client	
Nickname	eth0	
Connection Status	Instaged	
IP Address		
Default Gateway		
DNS Server		

TOP

■ LTE Status

Displays the LTE information, such as RSSI Level, if a nanoSIM card is installed.

LT	E Status	
1	Network Status	4G
2	RSSI Level	High
3	Connection Status	Connected
4	Last Access time to the Server	9:25:26
6	Check the Server Connection	Check

Network Status	Displays the type of the connected telephone line, "4G" or "3G."
2 RSSI Level	Displays the approximate RSSI (Received Signal Strength Indicator) level with "High," "Middle," "Low," or "Out of range."
3 Connection Status	Displays the status of the 4G/3G line connection, "Initializing," "Initialization failure," "Connecting," "Connected," or "Disconnected."
4 Last Access time to the Server	Displays the last accessed date and time to the transceiver controller.The date and time in the list displayed here are acquired from the transceiver module.
S Check the Server Connection	Click <check> to check the connection to the IP Transceiver controller.</check>

INFORMATION

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Network Status screen

Information > Network Status

Interface List

Displays the details of the Interface Setting.

(Network Settings > Static Routing > Routing Table > Interface)

terface List			
Interface	IP Address	Subnet Mask	
br-lan	192.168.0.1	255.255.255.0	

Information > Network Status

Ethernet Port Connection Status

Displays the transfer speed and the transfer type for the Ethernet Port. This is an example setting the WAN connection type as [LAN Port].

hernet Port Connection Status						
Interface	MAC Address	Link Status				
LAN	AA AA A7	1000BASE-T full-duplex				
WAN / LAN	00-90-C7-	Link down				

TIP:

- The RoIP Gateway's [LAN] ports are auto-negotiation enabled, and can automatically select the optimal speed and duplex mode if the peer devices are auto-negotiation enabled as well.
- We recommend that you always enable auto-negotiation on the peer devices.
 If a peer device is fixed to full-duplex mode, auto-negotiation enabled devices (including the RoIP Gateway) may generally take it for half-duplex mode, and cannot communicate properly.

Information > Network Status

DHCP Lease Status

Displays the IP Address and Lease Time assigned to the connected devices.

CP Lease Status			
Host Name	MAC Address	IP Address	Lease Time
1011001101-000446111	18170-011-00107-001	192.168.0.30	101000000000000000000000000000000000000

SYSLOG screen

Information > SYSLOG

SYSLOG

Displays the log of the RoIP Gateway.

SY	SLOG		
		rent Time : Severity : 1 Iay Filter : 2	(Uptime: 0 day 02:14:18) ✓ DEBUG ✓ INFO ✓ NOTICE Include ✓ 3 4 5 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
	Date (Month-Day) and Time	Severity	Refresh Save Clear Description
	11-26 10:00:03	INFO	telephoned: unable to snd pcm writei err : Broken pipe
1) Sever 2) Displ	rity ay Filter		 Select one or more log types that you want to list. ① Remove the check mark to hide the entries. ① The selection is not stored, and will reset when you leave this screen. Enter a keyword (for example: dhcp) and select "Include" or "Exclude" to narrow down the list.
3 <refr< th=""><th>esh></th><th></th><th>Click to reload the list. Up to the last 1000 logs are listed.</th></refr<>	esh>		Click to reload the list. Up to the last 1000 logs are listed.
4 <sav< th=""><th>e></th><th></th><th>Click to save a log to a text (.txt) file.</th></sav<>	e>		Click to save a log to a text (.txt) file.
5 <clea< th=""><th>ar></th><th></th><th>Click to clear all the logs.</th></clea<>	ar>		Click to clear all the logs.

Bridge Status screen

Information > Bridge Status

Bridge Status

Displays the bridge connection status list, if a bridge destination network address is set. (See also section 5 in this manual for the Bridge Connection.) ① The Transceiver Controller is set to each port by default.

Port Name	Bridge Destination	Transmission Mode	Destination Address	Port Numbe	er	Voice Protocol	AMBE+2 Vocoder Assignment	Connection Status
				Destination	My Station			
Digital Transceiver1 (D-TRX1)	Digital Transceiver4 (D-TRX4)	-	-	-	-	-	Not Assigned	-
Digital Transceiver2 (D-TRX2)	Custom Bridge Connection	Unicast	192.168.1.200	23002	23002	Bridge Protocol	Internal	Inactive
Digital Transceiver3 (D-TRX3)	Transceiver Controller	-	-	-	-	-	Internal	-
Digital Transceiver4 (D-TRX4)	Digital Transceiver1 (D-TRX1)	-	-	-	-	-	Not Assigned	-
EXT I/O1 (EXT1)	Transceiver Controller	-	-	-	-	-	Not Assigned	-
EXT I/O2 (EXT2)	Transceiver Controller	-	-	-	-	-	Not Assigned	-
EXT I/O3 (EXT3)	Transceiver Controller	-	-	-	-	-	Not Assigned	-
EXT Input4 (EXT4)	Transceiver Controller	-	-	-	-	-	Not Assigned	-
EXT Output4 (EXT4)	Transceiver Controller	-	-	-	-	-	Not Assigned	-
Emergency Notification	Transceiver Controller	-	-	-	-	-	Not Assigned	-
Microphone (MIC)	Custom Bridge Connection	Multicast	239.255.255.1	22510	22510	G.711u	Not Assigned	Inactive
RoIP Gateway1	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway2	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway3	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway4	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway5	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway6	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway7	Transceiver Controller	-	-	-	-	-	-	-
RoIP Gateway8	Transceiver Controller	-	-	-	-	-	-	-

(This is only an example.)

Bridge Status screen

Information > Bridge Status

Port Connection Status

Displays the connection status of each port.

Port Name	Transmission Mode	Destination Address	Port Number		Voice Protocol	AMBE+2 Vocoder Assignment	Connection Status
			Destination	My Station			
RoIP Gateway1	-	-	-	-	-	Not Assigned	-
RoIP Gateway2	-	-	-	-	-	Not Assigned	-
RoIP Gateway3	-	-	-	-	-	Not Assigned	-
RoIP Gateway4	-	-	-	-	-	Not Assigned	-
RoIP Gateway5	-	-	-	-	-	Not Assigned	-
RoIP Gateway6	-	-	-	-	-	Not Assigned	-
RoIP Gateway7	-	-	-	-	-	Not Assigned	-
RoIP Gateway8	-	-	-	-	-	Not Assigned	-
Converter Bridge1	-	-	-	-	-	Not Assigned	-
Converter Bridge2	-	-	-	-	-	Not Assigned	-
Converter Bridge3	-	-	-	-	-	Not Assigned	-
Converter Bridge4	-	-	-	-	-	Not Assigned	-
Converter Bridge5	· _	·			•	Not Assigned	·
Conner Dridge18		-	. ~			TNOT Assigned	
Converter Bridge19		-	-	-	-	Not Assigned	-
Converter Bridge20	-	-	-	-	-	Not Assigned	-

(This is only an example.)

- RoIP Gateway 1 ~ 8 displays the status of the RoIP Gateway Connection settings. (Connection Port Settings > RoIP Gateway > **RoIP Gateway Connection**)
- Converter Bridge 1 ~ 20 displays the status of the Connection settings. (PBX Extension > Converter Bridge > Connection)
- Voice Protocol and the AMBE+2 Vocoder Assignment display the status of the AMBE+2 Vocoder Assignment settings.

(Bridge Connection Setting > Bridge Connection > AMBE+2 Vocoder Assignment)

PBX Status screen

Information > PBX Status

Extension Group List

Displays the Extension Group List status.

Extensions not Belonging to a Group 1		41 42 43 44 45 3000	
200 2	Extensions 3	31 32	
(Sales)	First call	31	
	Second call -4	32	
	Third call	None	
210	Extensions	33 34	
(Planning)	Sequentially call	33 34	
99	Extensions		

 Extensions not Belonging to a Group 	Displays the Extension Numbers that do not belong to any Extension Group.
Extension Group Number	Displays the Extension Group Number and its Group Name.
3 Extensions	Displays the Extension Numbers that belongs to the Extension Group.
4 Setting for Extension Prioritization	Displays the prior extensions to receive a call from the Extension Group Number (2).

PBX Status screen

Information > PBX Status

List of Extensions

Displays the Extension settings.

31	Extension Group Number 2	200	
(Sales 01)	Port Type 3	SIP Phone (Automatic Detection)	
1	Dial-in number 4	None	
	Automatic Acquisition Line Number	IP Line	No use
	5	Peer to Peer	No use
	Connection from WAN 6	Deny	
	MAC Address 7	EC-6444	
	IP Address 8	100 100 1 17	

(This is only an example.)

Extension Number	Displays the Extension number and the name. (PBX > Extension > Extension)
Extension Group Number	 Displays the Extension Group number. ① Displays "No Extension Representative" when the Extension Numbers that do not belong to any Extension Group make a call.
3 Port Type	Displays the port type of the extension.
4 Dial-in number	Displays the dial-in number, if entered.
SAutomatic Acquisition Line Number	Displays whether or not to automatically acquire a specific telephone line.
6 Connection from WAN	Displays whether or not to allow connecting the Extension number from the WAN.
⑦ MAC Address	Displays the MAC address of the extension.
8 IP Address	 Displays IP Address used by the extension. Displays "Disconnected" when the extension does not connect to the RoIP Gateway. Displays "-" when you connect to the Transceiver Controller Telephone Connection or the Converter Bridge.

Call Log screen

Information > Call Log

■ Call Log

Lists the log of the Bridge connection to the RoIP gateway and the telephone communication.

	Call Log	Refresh Save Clear
	Date (Month-Day) and Time	Description
	12-20 11:20:05	Answering a call: [Transceiver Connect] (ID=2)
	12-20 11:19:52	Sequential incoming: [Transceiver Connect] (ID=2)
	12-20 11:19:50	Extension Outbound call: 31 [31] -> 5000*3 (ID=2)
] <	Refresh>	Click to reload the list. Up to the last 1000 logs are listed.
2<	Save>	Click to save a log to a text (.txt) file.
3<	Clear>	Click to delete all the logs.

Extension Status screen

Information > Extension Status

Extension Status

Displays the status of the Extension. (PBX > Extension > Extension)

0	2	3	4	5	6
Name	Extension Number	Port Type	Version	IP Address	Presence
Sales 01	31	SIP Phone (Automatic Detection KX-HDV Series)	11.000	192.168.0.	Online
Sales 02	32	SIP Phone (Automatic Detection KX-UT Series)	an 276	192.168.0.	Online
Sales 03	33	SIP Phone (Automatic Detection)			Offline
Sales 04	34	SIP Phone (Automatic Detection)			Offline
	3000	Transceiver Controller Telephone Connection			
	4001	Converter Bridge			

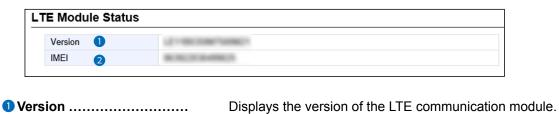
1 Name	Displays the Extension number and the name assigned to Extension settings. (PBX > Extension > Extension)	
2 Extension Number	Displays the extension number assigned to Extension. (PBX > Extension > Extension)	
S Port Type	Displays the port type of the extension assigned to Extension settings (PBX > Extension > Extension).	
4 Version	Displays the Firmware information for VoIP Expansion. (1) Displayed when a SIP phone is displayed to only the Port Type Setting (3).	
IP Address	Displays the IP Address used by VoIP Expansion. (1) Displayed when a SIP phone is displayed to only the Port Type Setting (3).	
6 Presence	 Displays the status of the VoIP Expansion. Offline: Not registered. Online*: Registered. On the phone*: Calling or holding. Step out*: Call forwarding except for the transceivers. *Online, On the phone, and Step out is displayed when successfully registered. Displayed when a SIP phone is displayed to only the Port Type Setting (3). 	

LTE Status screen

Information > LTE Status

LTE Module Status

Displays the information of the LTE communication module.



IMEI Displays the communication module's IMEI (International Mobile Equipment Identifier.)

Information > LTE Status

■ SIM Status

Displays the information of the SIM.

SIM Status			
0	Active SIM Slot	SIM1	
2	ICCID	-	
3	Phone Number	-	
	ve SIM Slot		Displays the SIM slot number in use. Displays the ICCID (IC Card IDentifier) of the installed SIM card. ① Displayed when information of Active SIM Slot Setting (1) can be acquired.
Phor	Phone Number		Displays the telephone number of the SIM card. ① Displayed when information of Active SIM Slot Setting (①) can be acquired.

LTE Status screen

Information > LTE Status

■ LTE Status

Displays the information of the LTE line if installed and valid.

LTE Status	
1 Network Status	4G
2 RSSI Level	High
3 Connection Status	Connected
4 Last Access time to the Server	18:25
Network Status	
Connection Status	Displays the status of the 4G/3G line connection, "Initializing," "Initialization failure," "Connecting," "Connected," or "Disconnected."
Last Access time to the Server	 Displays the last accessed date and time to the IP transceiver controller. The date and time in the list displayed here are acquired from the transceive module.

NETWORK SETTINGS

IP Address screen	
Host Name	
IP Address	
DHCP Server screen	
DHCP Server	
Static DHCP	
List of Static DHCP Settings	
Static Routing Screen	
Routing Table	
Static Routing	
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Policy Routing screen	
Source Address Routing	
List of Source Address Routing Entries	3-10

IP Address screen

Network Settings > IP Address

Host Name

Enter the host name.

Г

	Host Name		
	Host Name :	VE-PG4	
Host	Name	Enter a host name of up to 31 characters.	(Default: \

Enter a host name of up to 31 characters. (Default: VE-PG4) When the RoIP Gateway connects to Telnet/SSH, this host name is displayed.

The usable characters are: "a" ~ "z", "A" ~ "Z", "0" ~ "9", and "-."

The name must start with an alphanumeric character, and must NOT start or end with a "-."

IP Address screen

Network Settings > IP Address

■ IP Address

Enter the VE-PG4's IP Address.

IP Address	
IP Address : 👔	192.168.0.1
IP Address : 1 Subnet Mask : 2	255.255.255.0
Default Gateway : 3	
Primary DNS Server : 👝	
Secondary DNS Server : 5	_67_
9	Apply Reset

IP Address	Enter the LAN IP address according to your network environment. (Default: 192.168.0.1) (1) When using the DHCP Server function, the network part of the IP address must be the same as that set in the "IP Pool Start Address" item in the [DHCP Server] menu.
Subnet Mask	Enter the subnet mask according to your network environment. (Default: 255.255.255.0)
3 Default Gateway	If a default gateway device, such as a router, is connected to the LAN port, enter the device's IP address.
4 Primary DNS Server	Enter the DNS server address specified by your service provider. If you have two DNS server addresses, enter the primary address.
Secondary DNS Server	If you have two DNS server addresses, enter the secondary DNS server address.
6 <apply></apply>	Click to apply the entries.
♂ <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>

Network Settings > DHCP Server

■ DHCP Server

Configure the DHCP Server function.

DHCP Server		
DHCP Server : IP Pool Start Address :	 Disable	
Pool Size : Subnet Mask	3 30 4 255.255.255.0	
Lease Time : Domain Name :	5 72 hours	
Domain Name : Default Gateway :	0	

DHCP Server	Select "Enable" to use the DHCP Server function The DHCP Server is activated, depending on the (2) and Pool Size (3) items.	· · · · · · · · · · · · · · · · · · ·
2 IP Pool Start Address	Enter the IP Pool Start address. An IP address is automatically assigned to a tra Gateway connects to, from this IP Pool Start ad	
3 Pool Size	Entry the number of an IP address that can be	automatically assigned. (Default: 30)
	Up to 128 addresses can be automatically assi server function. Another 32 addresses can be r	gned by the DHCP
4 Subnet Mask	Enter the subnet mask for the IP Pool Start add Start Address" (2).	dress set in the "IP Pool (Default: 255.255.255.0)
5 Lease Time	Enter the lease time period. Range: 1 ~ 9999 (hours)	(Default: 72)
6 Domain Name	Enter a network address domain name of up to	253 characters.
7 Default Gateway	Enter the default gateway IP address. When the DHCP Server function is used, this II client. ① When this item is blank, the RoIP Gateway's IP a	

Network Settings > DHCP Server

DHCP Server

DHCP Server		
	: 8 Disable O Enable	
Primary DNS Server :	: 9	
Secondary DNS Server :		
Primary WINS Server :		
Secondary WINS Server :		
TFTP Server Distribution :	: 🚯 🔿 Disable 💿 Enable	
TFTP Server Address :	: 🛛 🚺 👘 🚺	
	Apply Reset	

The screen above shows when "DNS Proxy" (8) is set to "Disable."

8 DNS Proxy	Selects whether or not to use a DNS proxy. (Default: Enable) When this option is set to "Enable," the terminals can assign the RoIP Gateway as the DNS server.
Primary DNS Server	(Displayed only when the DNS Proxy (⑧) is disabled) Enter the DNS server address specified by your service provider. If you have two DNS server addresses, enter the primary address.
Secondary DNS Server	(Displayed only when the DNS Proxy (⑧) is disabled) If you have two DNS server addresses, enter the secondary DNS server address.
Primary WINS Server	Enter the WINS server's address. If you have two WINS server addresses, enter the primary address.
Secondary WINS Server	If you have two WINS server addresses, enter the WINS server's secondary address.

Network Settings > DHCP Server

DHCP Server

DHCP Server		
	Bo Disable C Enable	
Primary DNS Server	: 9	
Secondary DNS Server		
Primary WINS Server		
Secondary WINS Server		
	: 🚯 🔿 Disable 💿 Enable	
TFTP Server Address	: (4(5(6	
	Apply Reset	

The screen above shows when "DNS Proxy" (8) is set to "Disable."

B TFTP Server Distribution	Set to "Enable" to use a provisioning KX Series telephone. (Default: Enable)
	 When this option is enabled, the telephone automatically reads the setting from the RoIP Gateway and sets up by itself. The telephone's MAC address must be entered on the "Extension" screen. When using this system with static IP addresses, see also Section 4 in the Installation guide.
IFTP Server Address	Enter the IP address of the TFTP server for the KX series telephone. If this item is blank, the RoIP Gateway works as the TFTP server. (Default: Blank)
⑮ <apply></apply>	Click to apply the entries.
6 < Reset >	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>

Network Settings > DHCP Server

Static DHCP

Enter the MAC and static IP addresses of the DHCP server. ① You can enter up to 32 entries.

Static DHCP		
MAC Address	IP Address	
		Add

Static DHCP

Enter the MAC and IP addresses, and then click <Add>.

- ① This setting is useful when the DHCP Server function is used. See page 3-4 for details of the DHCP Server function.
- ③ Sets a different IP address from the IP address that the DHCP Server function automatically assigns.
- ① Make sure that the addresses of the devices on the network do not overlap or conflict.

If a DHCP server is already connected to the network, and there is an address conflict, a network problem will occur.

List of Static DHCP Settings

Displays the static DHCP entries.

t of Static DHCP Se	ettings		
MAC Address	IP Address		
00-90-C7-	192.168.0.150	Delete	

<Delete>

Click to delete the entry. (1) You cannot restore after clicking <Delete>.

Static Routing Screen

Network Settings > Static Routing

Routing Table

Displays the valid routing information for packet transmission.

R	outing Table				
	Destination 1	Subnet Mask 2	Gateway 3	Interface 4	
	192.168.0.0	255.255.255.0		br-lan	
	192.168.10.0	255.255.255.0	192.168.0.254	br-lan	
2 Sul 3 Gat	stination bnet Mask teway		The subnet mask	of the route's dest	destination network. tination network.
4 Inte	erface		The routing interf • br-lan: • eth0: • ppp0 ~ ppp7: • vti0 ~ vti 31:	LAN WAN PPPoE (WAN)	

Static Routing Screen

Network Settings > Static Routing

Static Routing

Enter the static routing destinations. ① You can enter up to 32 entries.

Static Routing				
Destination 1	Subnet Mask 2	Gateway 3	Interface 4	6
192.168.10.0	255.255.255.0	192.168.0.254	Set the gateway V	Add
Destination		The network a	ddress of the rout	e's destination network.
Subnet Mask		The subnet ma	ask of the route's o	destination network.
Gateway			e Interface (④) is s gateway address	set to "Set the gateway")
Interface		The routing int • Set the gatewa • ppp0 (WAN01 • vti0 ~ vti 31		
Second		Click to add th The entry that displayed.	•	e [List of Static Routing Entrie

List of Static Routing Entries

Displays the static routing destinations. ① You can enter up to 32 entries.

Li	List of Static Routing Entries					
	Destination	Subnet Mask	Gateway	Interface	1	2
	192.168.10.0	255.255.255.0	192.168.0.254		Edit	Delete
<ed< th=""><th>lit></th><th></th><th>Click</th><th>to edit the er</th><th>ntry.</th><th></th></ed<>	lit>		Click	to edit the er	ntry.	
<pre>> Collete></pre>		Click	to delete the	entry.		

Click to delete the entry. ① You cannot restore after clicking <Delete>.

Policy Routing screen

Network Settings > Policy Routing

Source Address Routing

Enter the packet source routing from the specified network address of the source terminal (such as a PC.) ① You can enter up to 32 entries.

ource Address Routing			
Source Address 1	Subnet Mask 2	Gateway 3	Interface 4
192.168.0.20	255.255.255.255		ppp1 (WAN02) V Add

Source Address	Set the network address of the source terminal.
2 Subnet Mask	Set the subnet mask of the source network address.
3 Gateway	(Only when the Interface (④) is set to "Set the gateway") Set the route's gateway address.
4 Interface	The routing target interface from: • Set the gateway • ppp0 (WAN01) ~ ppp7 (WAN08) • vti0 ~ vti31
⑤ <add></add>	Click to add the entry. The entry that is registered in the [List of Source Address Routing Entries] is displayed.

■ List of Source Address Routing Entries

Displays the entered packet source routing settings.

Source Address	Subnet Mask	Gateway	Interface	0 2
192 168 0 20	255,255,255,255		ppp1 (WAN02)	Edit Delete

1<Edit>

Click to edit the entry.

2 <Delete>

Click to delete the entry. ① You cannot restore after clicking <Delete>.

WAN screen	4-2
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WAN screen

Router Settings > WAN

Connection Status

(When "Connection Type" is set to "LAN port") The WAN connection status is displayed.

Connection Status		
Connection Type	LAN Port	
IP Address		
Peer IP Address		
DNS Server		

Connection Status	Nothing is displayed.
2 Connection Type	The WAN connection type is displayed.
3 IP Address	Nothing is displayed.
Peer IP Address	Nothing is displayed.
5 DNS Server	Nothing is displayed.

WAN screen

Router Settings > WAN

Connection Status

(When "Connection Type" is set to "DHCP Client") The WAN connection status is displayed.

Connection Status	Connected	
Connection Type	DHCP Client	
IP Address	1955-1958-188-1935	
Peer IP Address	NG: 1681(8) 1	
DNS Server	1272 - 4910 - 2010	

Connection Status	The connection status to the Internet line is displayed as "Unplugged," "Connecting," or "Connected."
2 Connection Type	The WAN connection type is displayed.
3 IP Address	The RoIP Gateway's IP address is displayed.
Peer IP Address	The default Gateway IP address specified by your service provider is displayed.
5 DNS Server	The DNS server's IP address is displayed.

WAN screen

Router Settings > WAN

Connection Status

(When "Connection Type" is set to "Static IP") The WAN connection status is displayed.

Connection Status	Connected	
Connection Type	Static IP	
IP Address	1952 1958 1951 1932	
Peer IP Address	98.000.001	
DNS Server	1712 Mail: 200	

Connection Status	The connection status to the Internet line is displayed as "Unplugged," or "Connected."
2 Connection Type	The WAN connection type is displayed.
3 IP Address	The RoIP Gateway's IP address is displayed.
Peer IP Address	The default Gateway IP address specified by your service provider is displayed.
5 DNS Server	The DNS server's IP address is displayed.

WAN screen

Router Settings > WAN

Connection Status

(When "Connection Type" is set to "PPPoE")

The WAN connection status is displayed.

① Up to 2 PPPoE sessions can be connected from the registered PPPoE destination.

① The first session is set to the default gateway.

To use a second session, set the Static Routing and the Policy Routing.

PPPoE Session	Session 1	Session 2
Destination	WAN01 (ppp0) Disconnect	None Connect
Connection Status	Connected	
Connection Type	PPPoE	PPPoE
IP Address	B-4775-98	
Peer IP Address	40 DO 200 TO 2	
DNS Server	201 201 248 5 201 201 248 1	
Uptime	1.00.00010	

PPPoE Session	The first session and the second session are displayed respectively.
2 Destination	 Select the destination from the WAN connection set in the [Connection Settings] setting (Router Settings > WAN > Connection Settings). ① You cannot select while connecting the line. <connect>/<disconnect></disconnect></connect> Click to manually connect or disconnect the selected WAN. ① <disconnect> is displayed when the line is connected.</disconnect> ① If "Connecting" is not displayed in [Connection Status] when the line is connected, check the cable connection and network configuration.
3 Connection Status	The connection status to the Internet line is displayed as "Unplugged," "Disconnect," "Connecting," or "Connected."
Connection Type	The WAN connection type is displayed.
5 IP Address	The RoIP Gateway's IP address is displayed.
6 Peer IP Address	The default Gateway IP address specified by your service provider is displayed.
ONS Server	The DNS server's IP address is displayed.
8 Uptime	The elapsed time the RoIP Gateway has been connected to the network is displayed.

WAN screen

Router Settings > WAN

■ Connection Type

WAN/LAN port settings.

tion Type		
Connection Type :	LAN Port	~
		Apply Reset

Connection Type	Select the WA	e WAN connection type as specified by your service provider. (Default: LAN Port)	
		LAN Port:	Switching the [LAN] port to connect to other devices.
		DHCP Client:	The WAN IP address is automatically obtained by a DHCP server.
		Static IP:	The WAN IP address is specified by your service provider.
		• PPPoE:	The WAN IP address is specified by your service provider using the PPPoE method.

WAN screen

Router Settings > WAN

Connection Settings

(When "Connection Type" is set to "DHCP Client") Set the WAN.

onnection Settings	
Nickname : 1	
Primary DNS Server : 2	
Secondary DNS Server : 3	

1 Nickname	Enter your service provider's name of up to 31 characters.
2 Primary DNS Server	Enter the DNS server address specified by your service provider. If you have two DNS server addresses, enter the primary address.
3 Secondary DNS Server	If you have two DNS server addresses, enter the secondary DNS server address.
<pre>4<apply></apply></pre>	Click to apply the entries.
5 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

WAN screen

Router Settings > WAN

Connection Settings

(When "Connection Type" is set to "Static IP") Set the WAN.

Nickname : 🕕	
IP Address : 2	
Subnet Mask : 3	
Default Gateway : 4	
Primary DNS Server : 5	
Secondary DNS Server : 6	

1 Nickname	Enter your service provider's name of up to 31 characters.	
2 IP Address	Enter the WAN IP address.	
Subnet Mask	Enter the WAN Subnet Mask.	
Default Gateway	Enter the WAN Default Gateway.	
Server	Enter the DNS server address specified by your service provider. If you have two DNS server addresses, enter the primary address.	
Secondary DNS Server	If you have two DNS server addresses, enter the secondary DNS server address.	
⑦ <apply></apply>	Click to apply the entries.	
8 <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>	

WAN screen

Router Settings > WAN

■ Connection Settings

(When "Connection Type" is set to "PPPoE") Set the WAN.

•
۲
~
~

Select Connection	Select the W	/AN connection. (Up to 8 settings car (n be set.) Default: WAN01(ppp0))
2 Nickname		your service provider's name of up t me set in [Select Connection] is displaye	
3 Username	Enter the login user name or the account name.		
4 Password	Enter a login password. The entered characters are displayed as * (asterisk) or ● (black circle.) ① You can check the entered characters by clicking the eye icon to the right.		
6 Reconnect Mode	 Select the PPPoE connection method. (Default: Always-ON Manual: The PPPoE line can be manually connected, by clicking <connect>/<disconnect></disconnect></connect> The network is disconnected, when the RoIP Gateway is booted. Always-ON:The PPPoE line is always connected to the destination set in the [Select Connection]. The network is already connected when the RoIP Gateway is booted. You can manually connect or disconnect by clicking <connect> or <disconnect> in the "Connection Status" setting (Router Settings > WAN > Connection Status).</disconnect></connect> 		(Default: Always-ON)
			vay is booted. the destination set in the Gateway is booted. g <connect> or</connect>
			outer Settings > WAN >

WAN screen

Router Settings > WAN

■ Connection Settings

(When "Connection Type" is set to "PPPoE")

Select Connection : 🤇		~
Nickname : 🤇	WAN01	
Username : 🤇		
Password :		•
Reconnect Mode : 🤇	Always-ON	~
IP Address :		
Primary DNS Server : 🥊		
Secondary DNS Server :		
Authentication Protocol :	Automatic	~

6 IP Address	Enter the WA	N IP address only if it is specified by y	our service provider.
Primary DNS Server		S server address specified by your server address specified by your server addresses, enter the pr	•
8 Secondary DNS Server	If you have to server addre	wo DNS server addresses, enter the se ss.	econdary DNS
9 Authentication Protocol		hentication protocol specified by your s matic" if not specified.	service provider. (Default: Automatic)
	Automatic:	: Change PAP/CHAP automatically acc destination's request.	cording to the
	• PAP:	Use a password for the authentication Note that the password is not encrypt	
	• CHAP:	The authentication information is enclosecure than PAP.	rypted. It is more

WAN screen

Router Settings > WAN

■ Connection Settings

(When "Connection Type" is set to "PPPoE")

Select Connection :		~
Nickname :	WAN01	
Username :	3	
Password :		•
Reconnect Mode :	Always-ON	~
IP Address :	<u> </u>	
Primary DNS Server :		
Secondary DNS Server :		
Authentication Protocol :	Automatic	~

MSS Limit	Enter the MSS Limit, if specified by your service provide	er. (Default: 1322)
	• Range: 536 ~ 1452 (byte)	
<pre>①<apply></apply></pre>	Click to apply the entries.	
健 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

WAN screen

Router Settings > WAN

List of Connection Settings

(When "Connection Type" is set to "PPPoE")

Lists the connection destinations registered in "Connecting Settings". (Router Settings > WAN > Connection Settings)

t of Connection	Settings		
Nickname	Username	Reconnect Mode	
WAN01(ppp0)	1011000	Always-ON	Delete

<Delete>

Click to delete an entry. ① You cannot restore after clicking <Delete>.

NAT screen

Router Settings > NAT

Set the NAT.

① This function cannot be used when "LAN port" is selected in "Connection Type."

NAT		
NAT :	○ Disable	

NAT	
-----	--

Select "Enable" to use the NAT function. (Default: Enable) The NAT function converts the WAN global address into a private address.

Router Settings > NAT

DMZ Host

Set the DMZ Host function.

This function cannot be used when "LAN port" is selected in "Connection Type."

DMZ Host	
DMZ Host IP Address : 1	23
	Apply Reset

DMZ Host IP Address	 Enter the DMZ Host IP address. The DMZ Host function (DeMilitarized Zone) transfers an unknown IP frame from the WAN (Internet) to the specified IP address on the LAN. But you need to pay attention because it also decreases the security of the IP address, which is specified as the transfer destination. When the DMZ Host function and Port Forwarding are used at the same time, Port Forwarding is prioritized. Icom is not responsible for any results caused by a decline in security.
2 <apply></apply>	Click to apply the entries.
3 <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>

NAT screen

Router Settings > NAT

Port Forwarding

The Port Forwarding function forwards the packets from a masquerade IP (Router Global IP) address to a private IP address.

rt Forwarding				
WAN Port 1	LAN IP Address 2	LAN Port 3	Protocol 4	6
Custom 🗸		Custom V		Add

1 WAN Port	Select "Custom" if you select the WAN port by its number. If you don't select the port by number, select the port by the mnemonic (DNS, Finger, FTP, Gopher, NEWS, POP3, SMTP, Telnet, Web, or Whois).
2 LAN IP Address	Enter the private IP address.
3 LAN Port	Select "Custom" if you select the LAN port by its number. If you don't select the port by number, select the port by the mnemonic (DNS, Finger, FTP, Gopher, NEWS, POP3, SMTP, Telnet, Web, or Whois).
4 Protocol	Select the protocol from "TCP," "UDP," "TCP/UDP," "GRE," and "ESP."
5 <add></add>	Click to add the entry. ① Up to 32 masquerade IP addresses can be registered.

NAT screen

Router Settings > NAT

List of Port Forwarding Entries

Lists the Port Forwarding Entries.

at of Port Forv	varding Entries				
WAN Port	LAN IP Address	LAN Port	Protocol	1	2
Web	192.168.0.100	Web	TCP/UDP	Edit	Delete
FTP	192.168.0.200	FTP	TCP/UDP	Edit	Delete



4-15

IP Filter screen

Router Settings > IP Filter

General Settings

The settings to pass or block the packets that match the registered filtering settings.
When [LAN Port] is set in Connection type, this setting cannot be changed.
Icom is not responsible for any results caused by a decline in security due to changing the IP filter.

General Settings	
Block Action : 1	
Block Action	Select the operation when blocking the packet.(Default: Drop)• Drop:Dropping the packet without any response.
Syslogging Unmatched Packets	Select whether or not to log the packets started from the WAN and
3 <apply></apply>	 blocked due to not matching any IP filter. (Default: Disable) Processing a large number of logs may decrease the processing speed. Click to apply the settings.
<pre>4<reset></reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

IP Filter screen

Router Settings > IP Filter

IP Filter

The settings to pass or block the packets that match the registered filtering settings.
When [LAN Port] is set in Connection type, this setting cannot be changed.
Icom is not responsible for any results caused by a decline in security due to changing the IP filter.

IP Filter			
No. : 1 _1 Entry : 2 ○ Disable			~
Action : 3 O Block Pass Direction : 4 In O Out			
Source IP Address : 5	Mask :	32	~
Destination IP Address : 6 Protocol : 7 TCP	Mask : Custom Value :	32	~
Source Port : 8 Custom Value :			
Destination Port : ● _Any Custom Value : TCP Flags : 10 □URG □ACK □PSH □RST □SYN □FIN			
SYSLOG : 1 Sisable O Enable		(2) App	ly Reset

① This is an example of setting "TCP" as the protocol.

1 No	 Range: The network The filte 	umber reg r functior	istered in [L checks th	ist of IP Filter Entri e packets in the s Filter Entries].	-		,
2 Entry	Select "I If the filt of IP Filt	Disable" er is regi ter Entrie	in the unus stered in "[s].	e filter setting. ed filter entry. Disable," (OFF) is umber "1" is disable		(Default: Ena d in [No.] of [Li	,
	No.	Action	Protocol (TCP Flags)	Source IP Address (Source Port)	SYSLOG		
		Direction		Destination IP Address (Destination Port)			
	1 (off)	Pass	TCP (Any Flag)	* (*)	Disable	Edit Delete	
		In		* (*)		Edit Delete	
3 Action	Select th		g method. all packets t	that match the filter	ing setting	(Default: Pa	ass)

• **Pass:** Passes all packets that match the filtering settings.

IP Filter screen

Router Settings > IP Filter

IP Filter

No. : 1					~
Entry : 🤰 🔿 Disable 💿 Enable					
Action : 3 🔿 Block 💿 Pass					
Direction : 4 In Out					
Source IP Address : 5			Mask :	32	<u> </u>
estination IP Address : 6			Mask :	32	
Protocol : 7 TCP		~	Custom Value :		
Source Port : 8 Any	 Custom Value : 				
Destination Port : 9 Any	Custom Value :		-		
TCP Flags : 10 URG ACK PSH	□rst □syn □fin				
SYSLOG : 11 SYSLOG : 1				Ű	1 3

① This is an example of setting "TCP" as the protocol.

4 Direction	Set the filtering direction.	(Default: In)
	• In: Filters the incoming packets from the WAN interfaces.	
	• Out: Filters the outgoing packets to the WAN interfaces.	
Source IP Address	Enter the source IP address (and mask) to filter. All the packets sent from the entered IP address are filtered passed.) • Mask range: 1 ~ 32	l (blocked or
6 Destination IP Address	Enter the destination IP address (and mask) to filter. All the packets sent to the entered IP address are filtered (to passed). • Mask range: 1 ~ 32	blocked or
7 Protocol	Select the transport layer protocol of the packet targeted to (be filtered. Default: Any)
	• Any: All protocols.	
	• TCP: Only TCP. Enter [Source Port], [Destination Port], and [TCP Flags].	
	UDP: Only UDP. Enter [Source Port] and [Destination Port].	

IP Filter screen

Router Settings > IP Filter

IP Filter

v
~
~
`
12 13

① This is an example of setting "TCP" as the protocol.

7 Protocol (Continued)

• **TCP/UDP:** TCP and UDP. Enter [Source Port] and [Destination Port].

• ICMP: Only ICMP. Enter [Type] and [Code].

Protocol :	ICMP	~	Custom Value :	
Type :				
Code :				



Enter the type of ICMP header to filter between 0 and 255. ① When the type is not specified, all header types are filtered.

[Code]

Enter the type of ICMP code to filter between 0 and 255. ① When the type is not specified, all code types are filtered.

- IGMP: Only IGMP.
- Custom: Specified by the protocol number. Enter the upper IP layer protocol number into the [Custom Value]. Range: 0 ~255

IP Filter screen

Router Settings > IP Filter

IP Filter

No. : 1				~
Entry : 🤰 🔿 Disable 💿 Enable				
Action : 3 🔿 Block 💿 Pass				
Direction : 🗿 🖲 In 🛛 Out				
Source IP Address : 5		Mask :	32	~
estination IP Address : 6		Mask :	32	~
Protocol : 7 TCP	~	Custom Value :		
Source Port : 8 Any Y Cus	om Value :	_		
	om Value :	-		
	n 🗆 Fin			
SYSLOG : 🕕 🖲 Disable 🔿 Enable			12	B

① This is an example of setting "TCP" as the protocol.

8 Source Port	Specify the source port, or enter the TCP/UDP source port number. (Default: Any)
	 There are 2 ways to specify the port number. Specifying by number Select "Custom." Enter the custom port number in "Custom Value:[(Start)] - [(End)]." When you use a specific port, enter only the "[(Start)]", or enter the same number in both the "[(Start)]" and the "[(End)]." Port number range: 1 ~ 65535
	 Specifying by mnemonic Select a source port other than "Any" or "Custom." "DNS," "Finger," "FTP," "Gopher," "NEWS," "POP3," "SMTP," "Telnet," "Web," "Whois" are selectable. When "Any" is selected, all of the port number types are filtered.
Destination Port	Select the destination port, or enter the TCP/UDP destination port number. (Default: Any)
	 There are 2 ways to specify the port number. Specifying by number Select "Custom." Enter the custom port number in "Custom Value:[(Start)] - [(End)]." When you use a specific port, enter only the "[(Start)]", or enter the same number in both the "[(Start)]" and the "[(End)]." Port number range: 1 ~ 65535
	 Specifying by mnemonic Select a source port other than "Any" or "Custom." "DNS," "Finger," "FTP," "Gopher," "NEWS," "POP3," "SMTP," "Telnet," "Web," "Whois" are selectable. When "Any" is selected, all of the port number types are filtered.

IP Filter screen

Router Settings > IP Filter

IP Filter

No.	: 1					~
Entry	: 2 O Disable 🔘 Ena	able				
Action	: 3 OBlock Pass					
Direction	: 4 🖲 In 🔾 Out					
Source IP Address	5			Mask :	32	~
Destination IP Address	6			Mask :	32	~
Protocol	TCP		*	Custom Value :		
Source Port	Any Any	✓ Cust	om Value :	_		
Destination Port	Any Any		om Value :	-		
TCP Flags		PSH 🗆 RST 🗆 SY	'N 🗆 FIN			
	: 🚺 🖲 Disable 🔿 Ena				1	2 13

10 TCP Flags	You can and "FIN ① The se	l." elected flag	TCP flag	s from "URG," ' racter is displaye		(Default: None) ," "RST," "SYN," Filter Entries].
	2	Pass	TCP (R)	* (*)	Disable	Edit Delete
		In	((x)	*		
				(*)		
<pre> SYSLOG </pre>	Select "E (i) The log (Inform (i) Proces Do not	Enable" to g informatio nation > SY ssing a larg use this fu	output the on is displa ′SLOG) je number	e SYSLOG. ayed on the SYSL of logs may decre ept for the opera	(l ∟OG screen. ease the proce	• •
<pre>0<apply></apply></pre>	Click to a	apply the	entries.			
<pre>B<reset></reset></pre>		reset the s innot reset	•	ng <apply>.</apply>		

IP Filter screen

Router Settings > IP Filter

List of IP Filter Entries

Lists the IP filter entries registered in [IP filter] setting.

No.	Action	Protocol (TCP Flags)	Source IP Address (Source Port)	SYSLOG	
	Direction		Destination IP Address (Destination Port)		0 2
59	Block	TCP/UDP	* (135)	Disable	Edit Delete
	Out		* (*)		
60	Block	TCP/UDP	* (*)	Disable	Edit Delete
	Out		* (135)		
61	Block	TCP/UDP	* (445)	Disable	Edit Delete
	Out		* (*)		
62	Block	TCP/UDP	* (*)	Disable	Edit Delete
	Out		* (445)		
63	Block	TCP (Any Flag)	* (*)	Disable	Edit Delete
	Out		* (137-139)		
64	Block	UDP	* (137-139)	Disable	Edit Delete
	Out		* (137-139)		

1 <edit></edit>	Click to edit the entry. ① The entry contents are loaded to the IP Filter Setting.			
2 <delete></delete>	Click to delete the entry. ① You cannot restore after clicking <delete>.</delete>			
	About the default IP filter packets • No. 59-64: These filtering conditions prevent the Wind			

No. 59-64:

These filtering conditions prevent the Windows applications from the remote access and leaking information caused by the File Sharing. ① The * mark matches all values.

Simple DNS screen

Router Settings > Simple DNS

Simple DNS Server Settings

The settings to use the RoIP Gateway as a simple DNS server.

Simple DNS Server	Settings		
A DNS Proxy must be enab	ed in the DHCP Server settings to use this	function.	
IP Address	DNS Host Name		
		Add	

Enter the combination of the terminal host name and the IP address corresponding to the host and click <Add>.

When the combination is registered, the RoIP Gateway can respond to both DNS forward lookup and DNS reverse lookup.

- ① Up to 32 combinations can be registered.
- ① This setting is effective when using the DNS proxy response function of the RoIP Gateway.
- ① We recommend that you use a static DHCP server to fix the combination of the MAC address and the IP address when registering the local IP address and its host name.
- ① If you register "Host Name.Domain Name" as the host name, the RoIP Gateway can respond to the request, even if only the host name matches.

Router Settings > Simple DNS

■ List of Simple DNS Server Settings

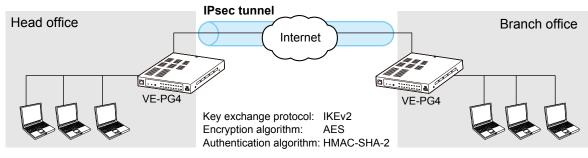
Lists the simple DNS Server entries. Click <Delete> to delete the entry.

t of Simple DNS S	Server Settings		
IP Address	DNS Host Name		
192.168.0.4	ONDERSON	Delete	

VPN (Virtual Private Network) enables a host computer to send and receive data over the shared or public networks like the Internet as if it were a private network. (Default: Disable)

The VPN function on the IP1100CV is compatible with the VE-PG4. (As of June 2023)

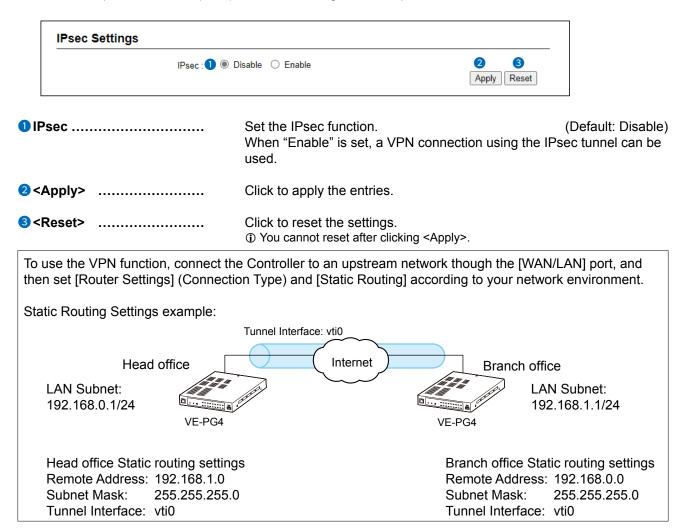
 To use the VPN function, connect the WAN line to the [WAN/LAN] port, and then configure the IPsec tunnel. (Router Settings > VPN IPsec Tunnel Settings)



Router Settings > VPN

IPsec Settings

Set the virtual private network (VPN) connection using the IPsec protocol.



```
Router Settings > VPN
```

■ IPsec Tunnel Settings

Set the virtual private network (VPN) connection using the IPsec tunnel.

Tunnel Interface : 1	vti1		~
Tunnel : 2	🔾 Disable 🔘 E	nable	
Tunnel Name : 🕄			
Interface : 4	eth0		~
Authentication Key (Pre-Shared Key) : 5			۲
Remote Address : 6			
Remote ID : 🕖		~	
Local ID : 🔞	IP Address	~	0
			Apply Reset

1 Tunnel Interface	Specifying the interface to register the IPsec tunnel. Range: vti0 ~ vti31
2 Tunnel	Select "Enable" to use the IPsec tunnel to register. (Default: Enable) Select "Disable" when it is registered but not used.
3 Tunnel Name	Enter the name to identify the IPsec tunnel of up to 31 characters.
4 Interface	Select the interface to connect with Remote Address. (Default: eth0)
	• eth0 Select this interface when "Static IP" or "DHCP client" is set in the "Connection Type" setting (Router Settings > WAN > Connection Type).
	 ppp0(WAN01) ~ ppp7(WAN08) Select this interface when "PPPoE (WAN01 ~ WAN08)" is set in the "Connection Type" setting (Router Settings > WAN > Connection Type). "WAN01 ~ WAN08" are the nicknames.
Suthentication Key (Pre-Shared Key)	To authenticate the VPN Remote peer, enter the same character strings as the connected device of up to 128 alphanumeric characters.
6 Remote Address	 Enter the IP address or the host name of the VPN connection destination. ① If this item is not set, the Controller only works as a responder that waits for a connection from a destination. ① If the WAN IP addresses assigned to both devices are dynamic, one of them must be registered with the dynamic DNS service to obtain a host name.

Router Settings > VPN

■ IPsec Tunnel Settings

Tunnel Interface : 1	~
Tunnel : 2 O Disable 💿 Enable	
Tunnel Name : 3	
Interface : 4 eth0	~
uthentication Key (Pre-Shared Key) : 5	۰
Remote Address : 6	
Remote ID : 🕜 IP Address 🛛 🗸	
Local ID : 🔕 IP Address 🛛 🗸	

Remote ID	Set the ID to identify the connected device. Select the IP type from "IP Address," "KEYID," "FQDN," or "USER-FQDN." (Default: IP Address)
	 IP Address: IP address format KEYID: Up to 256 alphanumeric characters FQDN: Domain name up to 253 characters USER-FQDN: Mail address format up to 254 characters Example: user@xxxx.yyyy.zzzz
	 Up to 64 characters Up to 63 characters for each part
3 Local ID	Set the ID to identify the local device. Select the IP type from "IP Address," "KEYID," "FQDN," or "USER-FQDN." (Default: IP Address) IP Address: IP address format KEYID: Up to 256 alphanumeric characters FQDN: Domain name up to 253 characters USER-FQDN: Mail address format up to 254 characters Example: user@xxxx.yyyy.zzzz 1. Up to 64 characters 2. Up to 63 characters for each part
	Click to apply the entries.
1 0 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Router Settings > VPN

■ List of IPsec Tunnel Settings

Lists the connections settings.

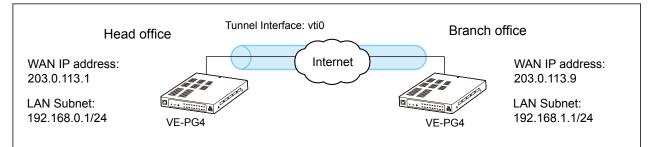
	2	3	4	. 5	6	
Tunnel Interface	Interface	Status	Remote Address	Remote ID	Local ID	7 8
vti0 (Sales)	ppp0 (WAN01)	IPsec is Disabled	100 100 10 10	IP Address	IP Address	Edit Dele

1 Tunnel Interface	The interface name (tunnel name) is displayed.			
2 Interface	The interface name of the tunnel source is displayed.			
3 Status	The IPsec tunnel status is displayed.			
	Connected:	Connected.		
	Waiting:	Connection ready.		
	Connecting:	Connection in progress.		
	Disable:	IPsec is enable but Tunnel Setting is disable.		
	 IPsec is Disabled 	: The RoIP Gateway's IPsec function is disabled.		
Remote Address	displayed. "-" is displayed wh The destination IP ① When a VPN con	t as the connection destination or the host name is en this item is not set in a Responder. address is displayed while connecting. nection is made while the Responder function is ON, the is displayed in parentheses, as in (172.16.***.***).		
Semote ID	The peer ID is displayed.			
6 Local ID	The local ID is dis	played.		
♂ <edit></edit>	Click to edit the er	ntry.		
S <delete></delete>	Click to delete the (i) You cannot restor	entry. re after clicking <delete>.</delete>		

Router Settings > VPN

The IPsec Tunnel setting example (1)

In case that [Connection Type] is "PPPoE" and connects between Static IP addresses:



① The Static routing to the IPsec Tunnel is also required. (P.3-9, P.4-25)

Settings at the Head office

IPsec Settings		
IPsec: O Disable Enable		
IPsec Tunnel Settings		
Tunnel Interface : vti0 Tunnel : O Disable Interface : Tunnel Name : Branch Interface : 1 Ppp0 (WAN01) Authentication Key (Pre-Shared Key) : 2 Remote Address : 3 203.0.113.9		 Select the PPPoE setting. Enter the same key to both the Head office and the Branch office. Enter the WAN IP address of the
Remote ID : 4 KEYID	A a la ca	branch office.4 Enter the Local ID of the Branch.

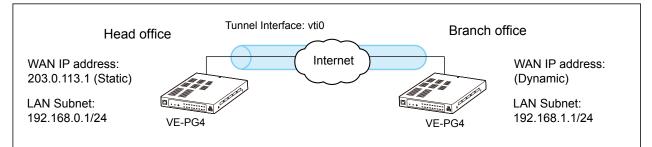
Settings at the Branch office

IPsec Settings				
IPsec :	IPsec: O Disable Enable			
IPsec Tunnel Settings				
Tunnel Interface :	vti0 O Disable En:			
Tunnel : Tunnel Name :	Head office	able		 Select the PPPoE setting.
Interface : 👤	ppp0 (WAN01)			2 Enter the same key to both the
Authentication Key (Pre-Shared Key) : 2				Head office and the Branch office.
Remote Address : 3	203.0.113.1			3 Enter the WAN IP address of the
Remote ID : 4	KEYID	~	tokyo	Head office.
Local ID :	KEYID	~	osaka	 4 Enter the Local ID of the Head office.

Router Settings > VPN

The IPsec Tunnel setting example (2)

In case that [Connection Type] is "PPPoE" and connects between Static IP address and Dynamic IP address:



① The Static routing to the IPsec Tunnel is also required. (P.3-9, P.4-25)

Settings at the Head office

IPsec: O Disable Enable	
IPsec Tunnel Settings	
Tunnel Interface : <u>vti0</u> Tunnel : O Disable Enable	
Tunnel Name : Branch Interface : 1 ppp0 (WAN01)	 Select the PPPoE setting. Enter the same key to both the
Authentication Key (Pre-Shared Key) : 2 Remote Address : 3	Head office and the Branch office.
Remote ID : 4 KEYID v osaka	 3 Blank 4 Enter the Local ID of the Branch
Local ID : KEYID 🗸 tokyo	office.



IPsec : O Disable Enable IPsec Tunnel Settings Tunnel Interface : vti0 Tunnel : O Disable Head office Head office	
Tunnel Interface : vti0 Tunnel : O Disable Enable Tunnel Name : Head office	
Tunnel : O Disable Enable Tunnel Name : Head office	
Interface : Ppp0 (WAN01) Authentication Key (Pre-Shared Key) : Remote Address : 203.0.113.1 Remote ID : KEYID KEYI	 Select the PPPoE setting. Enter the same key to both the Head office and the Branch office. Enter the WAN IP address of the Head office. Enter the Local ID of the Head

BRIDGE CONNECTION SETTINGS

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Bridge Connection Settings > Bridge Connection

Bridge Connection

Sets the transceiver port bridge connection combination.

- ① The transceiver port assigned as a bridge connection source or a destination is no longer usable as a call destination.
- The EXT 1 and MIC ports are not usable at the same time. The EXT 1 port is disabled while a microphone is connected to the MIC port on the front panel.

Unicast mode

Combination	
Bridge Connection Source : 1 Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2 Custom Bridge Connection	~
Transmission Mode : 3 Unicast	~
SelCall in Bridge Connection : 🕘 💿 Disable 🔿 Enable	
Destination Address : 5	
Destination Port Number : 6 _23000	
Source Port Number : 7 _23000	9 0
	Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

Multicast mode

Bridge Connection				
Combination	Bridge Connection Source : 1	Digital Transceiver1 (D-TRX1)		~
	Bridge Connection Destination : 2		9	10 🗸
	_		Apply	Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Digital Transceiver 2 (D-TRX2)."

1 Bridge Connection Source

Select the port for the bridge connection.

2 Bridge connection Destination
 Select the destination port for the bridge connection.
 ① Only the ports that can be connected to the source port (1) are listed in this setting.

NOTE: When you set a combination of a Digital Transceiver and an analog transceiver (EXT(I/O) Port,) enter [AMBE+2 Vocoder Assignment] settings below on the same screen.

Bridge Connection Settings > Bridge Connection

٦

Bridge Connection

^				ca						
		n	14	~ ~	-	•	m	5	~	^
	L			-0	3	L		U	u	E

Bridge Connection		
Combination		
Bridge Connection Source : 1 Digital Transceiver1 (D-TRX1)	~	
Bridge Connection Destination : 2 Custom Bridge Connection	~	
Transmission Mode : 3 Unicast	~	
SelCall in Bridge Connection : 🕘 💿 Disable 🛛 Enable		
Destination Address : 6		
Destination Port Number : 6 23000		
Source Port Number : 7 _23000	9 10	
	Apply Reset	

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

Multicast mode		
Bridge Connection		
Combination		
Bridge Connection Source : 1	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2		~
- Transmission Mode : 3		~
Source		
Multicast TTL : 8	1	9 10
		Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Digital Transceiver 2 (D-TRX2)."

3 Transmission Mode	Set the transmission mode for Bridge Connection with the RoIP Gateway by either Unicast or Multicast.
SelCall in Bridge Connection	Set whether or not you can make an Individual call to a device that is connected to the same network as this RoIP Gateway. (Default: Disable)
	 If this setting is enabled, The RoIP Gateway connects to the destination device according to the List of Rule Settings for SelCall in Bridge Connection. (Bridge Connection Settings > SelCall in Bridge Connection > List of Rule
	Settings for SelCall in Bridge Connection) ① This setting is displayed when the combination of Digital Transceiver (D-TRX1 ~ 4) and the Custom Bridge Connection are set.

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection	
Combination	
Bridge Connection Source : Digita	I Transceiver1 (D-TRX1)
Bridge Connection Destination : 2 Custo	m Bridge Connection 🗸 🗸
Transmission Mode : ³ Unica	st 🗸 🗸
SelCall in Bridge Connection : 4 💿 Dis	able 🔿 Enable
Destination Address : ⁵	
Destination Port Number : 6 _23000	
Source Port Number : 🧭 _23000	9 10
	Apply Rese

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

(Multicast mode)		
Bridge Connection		
Combination		
Bridge Connection Source : 0	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2	Digital Transceiver2 (D-TRX2)	~
- Transmission Mode : 3		~
Source		\sim
Multicast TTL : (8)	1	9 10
•		Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Digital Transceiver 2 (D-TRX2)."

5 Destination Address

Set the IP address as follows.

When "Enable" is selected in the SelCall in Bridge Connection (4), this item is not displayed.

- When the Transmission mode is "Unicast": Enter a Destination Address, or its domain name of up to 63 characters.
- When the Transmission mode is "Multicast": Enter the same multicast address as the setting in the Bridge Connection Destination.

The settable range: 224.0.0.0 ~ 239.255.255.255

(Default: 239.255.255.1)

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection		
Combination Bridae Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination :	2 Custom Bridge Connection	~
Transmission Mode :	3 Unicast	~
SelCall in Bridge Connection : Destination Address :	● ● Disable ○ Enable	
Destination Port Number :	<u>6</u> <u>23000</u>	
Source Port Number :	23000	9 10 Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

(Multicast mode)

Bridge Connection		
Combination		
Bridge Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination :	2 Custom Bridge Connection	~
Transmission Mode :	3 Multicast	~
Source , or roumber .		
Multicast TTL :	8 <u>1</u>	9 10
		Apply Reset

6 Destination Port Number...

Set the same port number as the Source Port Number (7).

- Range: An even number from 1024 to 65534.
- ① Do not duplicate other connection port settings.
- When "Enable" is selected in the SelCall in Bridge Connection (4), this item is not displayed.

O The Default port settings in the Unicast mode

Options	Default	Options	Default
Digital Transceiver 1 (D-TRX1)	23000	EXT Output 4(EXT4)	23114
Digital Transceiver 2 (D-TRX2)	23002	Emergency Notification	23116
Digital Transceiver 3 (D-TRX3)	23004	Microphone (MIC)	23150
Digital Transceiver 4 (D-TRX4)	23006	RoIP Gateway1	24300
EXT Input 1 (EXT1) / EXT I/O 1 (EXT1)	23100	RoIP Gateway2	24302
EXT Output 1 (EXT1)	23102	RoIP Gateway3	24304
EXT Input 2 (EXT2) / EXT I/O 2 (EXT2)	23104	RoIP Gateway4	24306
EXT Output 2 (EXT2)	23106	RoIP Gateway5	24308
EXT Input 3 (EXT3) / EXT I/O 3 (EXT3)	23108	RoIP Gateway6	24310
EXT Output 3 (EXT3)	23110	RoIP Gateway7	24312
EXT Input 4 (EXT4) / EXT I/O 4 (EXT4)	23112	RoIP Gateway8	24314

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection	
Combination	
Bridge Connection Source : Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2 Custom Bridge Connection	~
Transmission Mode : ³ Unicast	~
SelCall in Bridge Connection : 🍳 💿 Disable 🛛 Enable	
Destination Address : ⁵	
Destination Port Number : 6 _23000	
Source Port Number : 7 23000	
	Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

Multicast mode		
Bridge Connection		
Combination	_	
Bridge Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination :	2 Custom Bridge Connection	~
Transmission Mode :		~
South		
Multicast TTL :	8 1	9 10
		Apply Reset

6 Destination Port Number (Continued)**O** The Default port settings in the Multicast mode

Options	Default	Options	Default
Digital Transceiver 1 (D-TRX1)	22510	EXT Output 4(EXT4)	22510
Digital Transceiver 2 (D-TRX2)	22510	Emergency Notification	22520
Digital Transceiver 3 (D-TRX3)	22510	Microphone (MIC)	22510
Digital Transceiver 4 (D-TRX4)	22510	RoIP Gateway1	22530
EXT Input 1 (EXT1) / EXT I/O 1 (EXT1)	22510	RoIP Gateway2	22530
EXT Output 1 (EXT1)	22510	RoIP Gateway3	22530
EXT Input 2 (EXT2) / EXT I/O 2 (EXT2)	22510	RoIP Gateway4	22530
EXT Output 2 (EXT2)	22510	RoIP Gateway5	22530
EXT Input 3 (EXT3) / EXT I/O 3 (EXT3)	22510	RoIP Gateway6	22530
EXT Output 3 (EXT3)	22510	RoIP Gateway7	22530
EXT Input 4 (EXT4) / EXT I/O 4 (EXT4)	22510	RoIP Gateway8	22530

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection		
Combination Bridge Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination :	Custom Bridge Connection	~
Transmission Mode :	Unicast	~
SelCall in Bridge Connection : Destination Address :		
Destination Port Number :		
Source Port Number : 🤇		9 10
		Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

Multicast mode Bridge Connection Combination Bridge Connection Source : Bridge Connection Destination : Ocustom Bridge Connection Transmission Mode : Source - wrrtrumber: Multicast TTL : 3

7 Source Port Number

Set the port number to receive the audio signal.

- Range: An even number from 1024 to 65534.
- $\ensuremath{\textcircled{}}$ This setting is also used to the source port number to transmit the audio signal.
- ① For communication, the set port number (RTP) and the set port number +1 (RTCP) are used.
- ① Do not duplicate other connection port settings, when using in the Unicast mode.
- ① The default settings differ, depending on the EXT I/O Port Mode setting. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode)

O The Default port settings in the Unicast mode

Options	Default	Options	Default
Digital Transceiver 1 (D-TRX1)	23000	EXT Output 4(EXT4)	23114
Digital Transceiver 2 (D-TRX2)	23002	Emergency Notification	23116
Digital Transceiver 3 (D-TRX3)	23004	Microphone (MIC)	23150
Digital Transceiver 4 (D-TRX4)	23006	RoIP Gateway1	24300
EXT Input 1 (EXT1) / EXT I/O 1 (EXT1)	23100	RoIP Gateway2	24302
EXT Output 1 (EXT1)	23102	RoIP Gateway3	24304
EXT Input 2 (EXT2) / EXT I/O 2 (EXT2)	23104	RoIP Gateway4	24306
EXT Output 2 (EXT2)	23106	RoIP Gateway5	24308
EXT Input 3 (EXT3) / EXT I/O 3 (EXT3)	23108	RoIP Gateway6	24310
EXT Output 3 (EXT3)	23110	RoIP Gateway7	24312
EXT Input 4 (EXT4) / EXT I/O 4 (EXT4)	23112	RoIP Gateway8	24314

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection	
Combination	
Bridge Connection Source : 1 Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2 Custom Bridge Connection	~
Transmission Mode : 3 Unicast	~
SelCall in Bridge Connection : 🕘 💿 Disable ု 🔿 Enable	
Destination Address : 5	
Destination Port Number : 6 _23000	
Source Port Number : 🔽 _23000	9 10
	Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

Multicast mode		
Bridge Connection		
Combination	-	
Bridge Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination :	Custom Bridge Connection	~
Transmission Mode :	3 Multicast	~
Source - or rumber :		
Multicast TTL :	8 1	
		Apply Reset

7 Source Port Number (Continued)

O The Default port settings in the Multicast mode

Options	Default	Options	Default
Digital Transceiver 1 (D-TRX1)	22510	EXT Output 4(EXT4)	22510
Digital Transceiver 2 (D-TRX2)	22510	Emergency Notification	22520
Digital Transceiver 3 (D-TRX3)	22510	Microphone (MIC)	22510
Digital Transceiver 4 (D-TRX4)	22510	RoIP Gateway1	22530
EXT Input 1 (EXT1) / EXT I/O 1 (EXT1)	22510	RoIP Gateway2	22530
EXT Output 1 (EXT1)	22510	RoIP Gateway3	22530
EXT Input 2 (EXT2) / EXT I/O 2 (EXT2)	22510	RoIP Gateway4	22530
EXT Output 2 (EXT2)	22510	RoIP Gateway5	22530
EXT Input 3 (EXT3) / EXT I/O 3 (EXT3)	22510	RoIP Gateway6	22530
EXT Output 3 (EXT3)	22510	RoIP Gateway7	22530
EXT Input 4 (EXT4) / EXT I/O 4 (EXT4)	22510	RoIP Gateway8	22530

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection		
Combination		
Bridge Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2	Custom Bridge Connection	~
Transmission Mode : ³	Unicast	~
SelCall in Bridge Connection : 4	Disable Enable	
Destination Address : 5		
Destination Port Number : 6	23000	
Source Port Number : 7	23000	9 10
		Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

(Multicast mode)		
Bridge Connection		
Combination	Digital Transcolver1 (D TPX1)	~
Bridge Connection Source : Bridge Connection Destination :	Digital Transceiver1 (D-TRX1) Custom Bridge Connection	~
	3 Multicast	~
Source - on roumber :	TU	
Multicast TTL :	8 <u>1</u>	9 0 Apply Reset

8 Multicast TTL Displayed only when the Tran As the expiration date of the v until the voice packet reaches

Displayed only when the Transmission Mode (③) is set to "Multicast." As the expiration date of the voice packet, set the TTL (Time To Live) until the voice packet reaches the communication destination. The TTL value decreases every time it passes through a router, the voice packets transmission expires when the TTL value reaches zero. Therefore you can prevent a packet transmission loop. (Default: 1) • Range: 1~255

Bridge Connection Settings > Bridge Connection

Bridge Connection

(Unicast mode)

Bridge Connection		
Combination		
Bridge Connection Source : 🎴	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination : 2	Custom Bridge Connection	~
Transmission Mode : 3	Unicast	~
SelCall in Bridge Connection : 4	Disable Enable	
Destination Address : 5		
Destination Port Number : 6	23000	
Source Port Number : 🔽	23000	9 10
		Apply Reset

① The above example shows when the Bridge Connection Destination (2) is set to "Custom Bridge Connection."

Multicast mode		
Bridge Connection		
Combination Bridge Connection Source :	Digital Transceiver1 (D-TRX1)	~
Bridge Connection Destination :	2 Custom Bridge Connection	~
Transmission Mode :	3 Multicast	×
Multicast TTL :	8_1	Apply Reset

9 <apply></apply>	 Click to apply the entries. When you select other than Custom Bridge Connection for a combination, the connection is activated as soon as you click <apply>. The entries are displayed in [Bridge Connection Entry List (For Combination)] screen.</apply> When "Custom Bridge Connection" is selected in the Bridge Connection Destination, the entries are displayed in [Bridge Connection Entry List (For Custom Bridge Connection)] screen. Click <activate> in the list to activate the bridge connection.</activate>
10 <reset></reset>	 Click to reset the settings. ① You cannot restore after clicking <apply>.</apply>

Bridge Connection Settings > Bridge Connection

Bridge Connection Entry List (For Combination)

Lists the combination entries of the bridge connection. See the "Bridge Connection Entry List (For Custom Bridge Connection)" below when the Bridge Connection Destination is set to "Custom Bridge Connection."

Bridge Connection Source	Bridge Connection Destination	0	
Digital Transceiver1 (D-TRX1)	EXT I/O1 (EXT1)	Delete	

```
      1 < Delete>
      Click to delete the entry.

      ① You cannot restore after clicking <Delete>.

      2 < Delete All>
      Click to delete all the entries.

      ① You cannot restore after clicking <Delete All>.
```

Bridge Connection Settings > Bridge Connection

Bridge Connection Entry List (For Custom Bridge Connection)

Lists the combination entries of the bridge connection when the Bridge Connection Destination is set to "Custom Bridge Connection."

							R	Refresh
Bridge Connection Source	Transmission Mode	Destination Address	Port Number		Connection Status			
			Destination	Source		2	3	4
Digital Transceiver2 (D-TRX2)	Unicast	192.168.0.200	23002	23002	Inactive	Activate	Edit	Delet

<pre>1<refresh></refresh></pre>	Click to reload the list.
2 <activate></activate>	 Click to connect the set devices. After they are successfully connected, the button changes to "Deactivate." When this button is grayed out, you also need to enter the "AMBE+2 Vocoder Assignment" settings.
③ <edit></edit>	Click to edit the entry. ① You can edit the settings in "Bridge Connection" on the above screen. ① Disconnect the connection before editing an entry.
<pre>4<delete></delete></pre>	Click to delete the entry. You cannot restore after clicking <delete>.</delete>
S <delete all=""></delete>	Click to delete all the settings in the list.

Bridge Connection Settings > Bridge Connection

AMBE+2 Vocoder Assignment

Assigns the Voice Protocol and the AMBE+2 Vocoder to each port.

Dart Name	2 Route Setting Screen	3 Voice Protocol	4 Voice Protocol	AMBE+2 Vocoder A	
Port Name 1	Route Setting Screen	(For Custom Bridge Connection)		AMBE+2 Vocoder A	ssignment
Digital Transceiver1 (D-TRX1)	Bridge Connection	, J ,	-	Not Assigned	~
Digital Transceiver2 (D-TRX2)	Bridge Connection	G.711u 🗸	-	Not Assigned	~
Digital Transceiver3 (D-TRX3)	Destination Settings		-	Internal	~
Digital Transceiver4 (D-TRX4)	Destination Settings		-	Not Assigned	~
EXT I/O1 (EXT1)	Bridge Connection		-		
EXT I/O2 (EXT2)	Destination Settings		-		
EXT I/O3 (EXT3)	Destination Settings		-		
EXT Input4 (EXT4)	Destination Settings		-		
EXT Output4 (EXT4)	Destination Settings		-		
Emergency Notification	Destination Settings		-		
Microphone (MIC)	Destination Settings		-		
RoIP Gateway1	Destination Settings		G.711u 🗸		
RoIP Gateway2	Destination Settings		G.711u 🗸		
RoIP Gateway3	Destination Settings		G.711u 🗸		
RoIP Gateway4	Destination Settings		G.711u 🗸		
RoIP Gateway5	Destination Settings		G.711u 🗸		
RoIP Gateway6	Destination Settings		G.711u 🗸		
RoIP Gateway7	Destination Settings		G.711u 🗸		
RoIP Gateway8	Destination Settings		G.711u 🗸		
Converter Bridge1	-	-	G.711u 🗸		
Converter Bridge2	-	_	G.711u 🗸		

Port Name	 Lists the transceiver port of the RoIP gateway. Click to open to the Connection Port Settings screen of the port. The Converter Bridge setting screen (PBX extension > Converter Bridge) is displayed when a converter bridge's port name is clicked.
Route Setting Screen	The screen setting the route of the destination is displayed. When the entry is set as a combination by the bridge connection, "Bridge Connection" is displayed. Otherwise, "Destination Settings" is displayed.
3 Voice Protocol (For Custom	① Click the "Destination Settings" link to open the Destination Settings screen.
Bridge Connection)	Displayed only when the Bridge Connection Destination (see above on
	this setting screen) is set to "Custom Bridge Connection." Set the voice protocol for the custom bridge connection to "G.711u," "Bridge Protocol," or "AMBE+2."

Bridge Connection Settings > Bridge Connection

AMBE+2 Vocoder Assignment

Port Name 🚺	Route Setting Screen	Voice Protocol	Voice Protocol	AMBE+2 Vocoder Assign
_		(For Custom Bridge Connection)	(For Port Connection))
Digital Transceiver1 (D-TR	X1) Bridge Connection			Not Assigned
Bridge To			0.1110	
Converter Bridge19	-	-	G.711u 🗸	
Converter Bridge20	-	-	G.711u 🗸	

4 Voice Protocol	
(For Port Connection)	Set the voice protocol for the port connection to "G.711u," "Protocol
	for Transceiver and SIP Phone Connection," "Bridge Protocol," or "AMBE+2."
	(Default for RoIP Gateway 1 ~ 8: G.711u, for Converter Bridge 1 ~ 20: G.711u)
	 "Protocol for Transceiver and SIP Phone Connection" can be selected only with the Converter Bridge 1 ~ 20.
	① If you connect to the IP1000C or IP1100CV, set this item to "Protocol for Transceiver and SIP Phone Connection."
	① If you connect to the VE-PG4, set this item to "Bridge Protocol."
GAMBE+2 Vocoder	
Assignment	Settable only when the Voice Protocol (④) is set to AMBE+2. Select an AMBE+2 Vocoder from "Not Assigned," "Internal," or "CT-24." (Default for Digital Transceiver 1 ~ 4 (D-TRX1 ~ 4) : Internal)
	Internal: Assignable up to 4 ports.
	• CT-24 : Assignable up to 2 ports. (The optional CT-24 is required.)
	① The AMBE+2 Vocoder for the Digital Transceiver 1 ~ 4 (D-TRX1 ~ 4) is fixed to the internal vocoder.
	When the settings of Bridge Connection Source and Bridge Connection Destination are set as the digital transceiver in [Bridge Connection] setting (Bridge Connection Settings > Bridge Connection > Bridge Connection), this item is not displayed.
<mark>᠖</mark> ≺Apply>	Click to apply the entries.
	Click to reset the settings. ① You cannot restore after clicking <apply>.</apply>

SelCall in Bridge Connection screen

Bridge Connection Settings > SelCall in Bridge Connection

■ Save or Write the Rule Settings for SelCall in Bridge Connection

You can save or load the settings in "Rule Settings for SelCall in Bridge Connection" to or from a CSV format file.

ave or W	rite the Rule Settings for SelCall in Bridge Connection
	Load Settings from File : 1 Choose File No file chosen
	Write A CSV format file can be written to this product. When the file is written, the current settings will be overwritten.
	Save to File : 2 Save Save to bridge_route.csv file.

Load Settings from File	You can load the saved SelCall rule settings from a CSV format file. Click <choose file=""> and select the setting file (bridge_route.csv) from the displayed list, and then click <open>. Confirm the correct file is selected, and then click <write> to load the settings from the selected file. ① Note that the previous settings are deleted when the setting file is loaded.</write></open></choose>
2 Save to File	Saves the settings in the "Rule Settings for SelCall in Bridge Connection settings" to a CSV format file. Click <save> and select a folder to save the file into. You can edit the saved file on a spreadsheet.</save>

SelCall in Bridge Connection screen

Bridge Connection Settings > SelCall in Bridge Connection

Rule Settings for SelCall in Bridge Connection

Sets the rules to make a individual call from a Digital transceiver that is connected to the RoIP Gateway, through a Bridge Connection.

Index Na	me	Call Type	Prefix ID		Destination SelCa	II in Bridge Connection	
	2	3	4	5	Address 6	Port Number 🕜	8

1 Index	The index assigned for entry. Setting range: 1 ~ 1000
2 Name	Enter a name of up to 31 characters.
Scall Type	 Select the type of call. Individual : Call only a specified radio. Group : Call all transceivers that belong to the specified group. All : Call all transceivers.
4 Prefix ID	Enter the prefix ID of the SelCall destination. ID range: (Depending on the system mode)
5 Destination ID	Enter the ID of the SelCall destination. ID range: (Depending on the system mode)
Destination SelCall in Bridge Conr	Enter the RoIP Gateway's IP address which is connected to the transceiver that will communicate with the SelCall destination.
⑦ Port Number	Enter the RoIP Gateway's port number which is connected to the transceiver that will communicate with the SelCall destination.
8 <add></add>	Click to add a SelCall rule to the List of Rule Settings for SelCall in Bridge Connection.

SelCall in Bridge Connection screen

Bridge Connection Settings > SelCall in Bridge Connection

■ List of Rule Settings for SelCall in Bridge Connection

Index	Name	Call Type	Prefix ID	Destination ID	Destination SelCall in Bridge Connection		
					Address	Port Number	0 2
1	Sales	Individual	11	101	192.168.1.1	12122	Edit Delete
2	Planning	Individual	21	201	192.168.2.1	12122	Edit Delete

❶ <edit></edit>	Click to edit the entry. The registered contents are displayed on the Rule Settings for SelCall in Bridge Connection screen.
2 <delete></delete>	Click to delete the entry. ① You cannot restore after clicking <delete>.</delete>
3 <delete all=""></delete>	Click to delete all the settings. ① You cannot restore after clicking <delete all="">.</delete>

TRANSCEIVER CONTROLLER

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6 TRANSCEIVER CONTROLLER

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Transceiver Controller > RoIP Settings

Additional Controller Settings

Configure the Additional Controller Settings.

You can communicate with the WLAN transceivers and the IP100FS that are registered to additional controllers.

Additional Controller Settings			
	Controller Mode : 1) 💿 🤅	Sub 🔿 Master	
	Service Port Number : 2 320	00	

Controller Mode	Select "Master" for one Master Controller. Select "Sub" for the other Controllers (up to 10 Sub Controllers can be set up). (Default: Sub) When several Controllers are linked, and use All call or Group call between the controllers, set a controller as shown below.			
	 Sub: One Master Controller can be set up. Master: Up to 10 Sub Controllers can be set up. 			
Service Port Number	 Enter the port number for receiving audio signals. (Default: 32000) Range: "1024" ~ "65534" (only even numbers) The port number (RTP) and the port number +1 (RTCP) are used for communication. This number is also used for the caller port number. Do not set a port number that has already been used by another connection setting. 			

Transceiver Controller > RoIP Settings

Advanced Settings

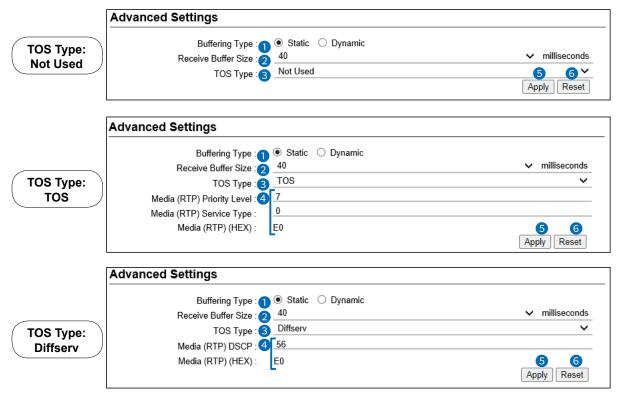
Set the V/RoIP details.

The items on the RoIP Settings screen differ, depending on the TOS type setting.

]	Advanced Setting	s					
TOS Type:		ering Type 1 Buffer Size 2		O Dynamic		✓ milli:	seconds
Not Used		TOS Type 3	Not Used			5 Apply	<mark>6</mark> ∽ Reset
	Advanced Setting	5					
		ering Type .1 3uffer Size .2	Static 40	⊖ Dynamic		✓ millis	seconds
TOS Type:		TOS Type 3	TOS				~
TOS	Media (RTP) Pri Media (RTP) Se		7 0				
			E0			5 Apply	6 Reset
[Advanced Setting	s					
		ering Type :		O Dynamic			
		Buffer Size : 2				✓ millis	seconds
TOS Type:		TOS Type : 3 TP) DSCP : 4					• •
Diffserv			<u>50</u> E0			5 Apply	6 Reset
(These are examp	les of whe	en the [E	Buffering Type	e] (1) is set to	"Static.")	
 Buffering Type 		Select the	e buffer	type to contro	ol any interrup		ault: Dynamic
		• Static:	The bu	iffer time is se	t in [Receive Bu		iuit. Dynamic
		• Dynamic	c : The bu	ıffer time chan	iges, depending	on the audio flu	ctuation.
Receive Buffer S	ize	Select the	e buffer	time to keep	the audio from	n breaking up.	(Default: 40
		A shorter audio sigi	value in nal.		nds) delay, but it ma suffering Type] ((reak the
			in is uisp	ayeu when [D			

Transceiver Controller > RoIP Settings

Advanced Settings



(These are examples of when the [Buffering Type] (1) is set to "Static.")

3 TOS Type

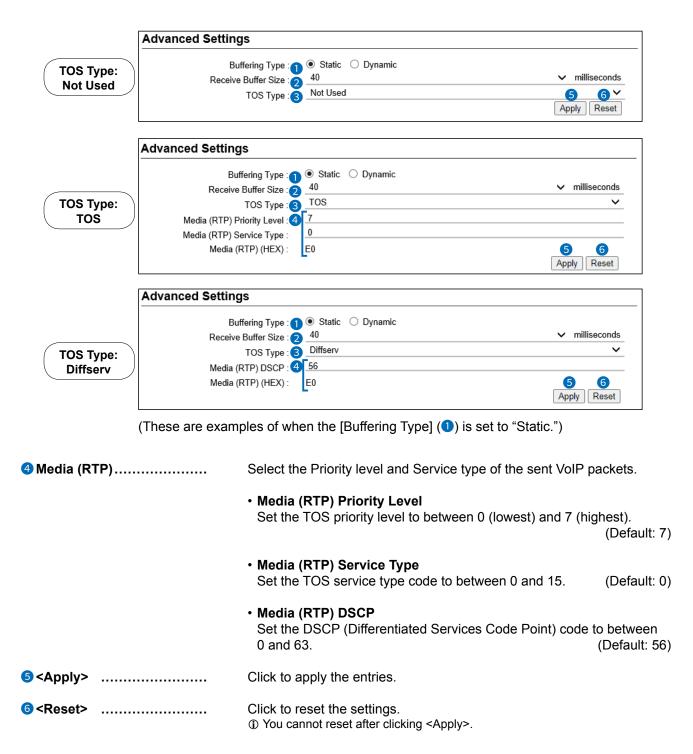
Select the TOS (Type-Of Service) format.

(Default: Not Used)

- Not Used: Does not use the TOS function.
- **TOS:** Sends the VoIP packets to the TOS field (8 bits) in the IP header using the TOS format. Sets to between 1 (lowest) and 3 bits (Priority level) or 4 and 7 (highest) bits (Type of Service) based on the RFC1349. The 1 bit remaining is not used and is fixed as 0.
- Diffserv: Sends the VoIP packets to the TOS field (8 bits) in the IP header using the Diffserv (Differentiated Service) format. Sets to between 1 and 6 bits (DSCP). The 2 bits remaining are not used and are fixed as 0.

Transceiver Controller > RoIP Settings

Advanced Settings



Tenant (Fleet) Settings screen

Transceiver Controller > Tenant (Fleet) Settings

■ Tenant (Fleet)

The tenant (fleet) divides the WLAN transceivers or IP100FSs that belong to the RoIP Gateway, for system management purposes. (Example: Security company/Management company)

 \oplus The terminals cannot communicate among different tenants (fleets).

③ Select the tenant (fleet) number between 1 to 10.

① All WLAN transceivers and IP100FSs that belong to the RoIP Gateway are activated in one tenant (fleet).

Tenant (Fleet)	
Tenant (Fleet) Number : 1	2 3 ~
	Apply Reset

1 Tenant (Fleet) Number	Select the tenant (fleet) number that is used.	(Default: 1)
	The tenant (fleet) number is displayed in the following men - RoIP Server Settings - Transceiver Settings - Common Settings (Except Wireless LAN menu) - Destination Settings RoIP Server (Tenant1)	us.
	(This is an example when [Tenant (Fleet) Number] (1) is set to	"1.")
2 <apply></apply>	Click to apply the entries.	
<pre>3<reset></reset></pre>	Click to reset the settings. (1) You cannot reset after clicking <apply>.</apply>	

RoIP Server screen

Transceiver Controller > RoIP Server Settings > RoIP Server

■ Call Type Priority

Select the priority level of the call types.

Call Type Priority					
Call type Priority (High to low) : 1	Telephone - All - Individual - Group	Apply Reset			

Call type Priority (High to low)	Select the priority level of the call types. (Default: Telephone – All – Individual – Group) ① The setting value are shown below. Call Type Priority			
	Call type Priority (High to low) : Telephone - All - Individual - Group Telephone - All - Group - Individual Telephone - Individual - All - Group Telephone - Individual - Group - All Telephone - Group - All - Individual Telephone - Group - Individual - All			
⊘ <apply></apply>	Click to apply the entries.			
3 <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>			

Additional Controller Link screen

Transceiver Controller > RoIP Server Settings > Additional Controller Link

Link Setting

This is a setting to link with other WLAN transceiver controllers, VE-PG3s (Bridge mode), or VE-PG4s.

Link Setting					
No. : 1	1	~			
Name : 2					
Destination Address : 3					
Destination Port Number : 4	32000	5 6			
		Apply Reset			

1 No	Select a number between 1 and 100 to register the other transceiver controllers. (Default: 1)
2 Name	Enter the group name of up to 31 characters.
3 Destination Address	Enter the destination device's IP address or domain name of up to 63 characters.
Destination Port Number	Enter the destination controller's service port number in [Additional Controller Link]. (Default: 32000) Range: "2" ~ "65534" (only even numbers) ① The set port number (RTP) and the port number +1 (RTCP) are used for communication.
⑤ <apply></apply>	Click to apply the entries. ① The entries are displayed in [Linked Controller List].
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Additional Controller Link screen

Transceiver Controller > RoIP Server Settings > Additional Controller Link

Linked Controller List

Display a list of the destination addresses and destination port numbers registered to the RoIP Gateway.

No.	Name	Destination Address	Destination Port Number	1 2
1	Sales1	192.168.0.100	32000	Edit Delete

● <edit></edit>	Click to edit the entry in [Link Setting].
2 <delete></delete>	Click to delete the selected entry. ① After clicking <delete>, the entry cannot be recalled.</delete>
S <delete all=""></delete>	Click to delete all the entries. ① After clicking <delete all="">, the entries cannot be recalled.</delete>

Transceiver Controller > RoIP Server Settings > Area Call

Area Setting

The Area call function limits communication with the devices in the specified area.

When a WLAN transceiver makes an All call or Group call using the Area call function, it calls other WLAN transceivers or IP100FSs in the same area.

① If you want to use the Area call from an IP100FS, specify the area by selecting the desired access points.

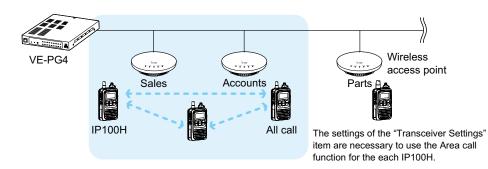
rea Setting		
	No. : 1	~
1	lame : 2	
3 BSSID		
00-90-C7-	00-90-C7-	
		4 5 Apply Reset

1 No	Select the number that is registered to the Area call. (Default: 1) (Default: 1) (Default: 1)
2 Name	Enter the area name of up to 31 characters.
3 BSSID	Enter the 12 digit BSSID of the wireless access point in the area. When several access points are added, they are recognized as one area. ① Up to 20 access points can be registered to the area.
	Click to add the entries. ① The entries are displayed in [Area Entry List].
5 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

The WLAN transceiver makes All calls in the area

Example: The wireless access points "Sales" and "Accounts" are registered in the same area. The access point "Parts" is registered in a different area.

In that case, two WLAN transceivers in the same area receive the call, but the WLAN transceiver in the different area will not receive it.



Transceiver Controller > RoIP Server Settings > Area Call

Access Point Search

1 IP Address Range

The RoIP Gateway can search for access points the network, and register access points for Area Calls. (1) Icom guarantees this function only for the AP-90M and AP-95M. (As of June, 2023)

earches a		pints that support this	function.			
	IP Address	s Range : 1				Search
					4	
🗆 Ali	Host Name	IP Address	BSSID	Name 3	No.	5
	AP-95M	192.168.0.10	00-90-C7-	Sales1	1 🗸	Add
	AP-95M	192.168.0.11	00-90-C7-	Sales2	2 🗸	Add

Click the <Search> button after entering the IP address range of the access points.

When starting a search, the button changes to both <Refresh> and <Cancel>.

The discovered access point information will be displayed in a list. ① When only IP start address is entered, a search starts.

- ① If BSSID is already registered in the Area Entry List, it is not displayed.
- ① When the [IP Advanced Radio System] setting of an access point that is set to "Enable" in [Notification] that is same Tenant (Fleet) Number with the RoIP Gateway, and a name is registered, you can search for the BSSID and name. When it is set to "Disable," you cannot search with the RoIP Gateway.

	Interface :	ath0		~
	BSSID :	00-90-C7-09-DC-47		
Tenant Number	Notification		Name	
1	🔿 Disable 💿 Er	nable	Sales1	
2	O Disable 💿 Er	nable		

(AP-95M Wireless LAN1 IP Advanced Radio System screen)

Oheck Box	Click a Check Box to add a check mark for registering a discovered access point. ① By clicking [All], you can select or cancel all access points in the list.
3 Name	The name that is set in [IP Advanced Radio System] of an access point is displayed. ① An area name is registered on [Number] in [Area Setting].

Transceiver Controller > RoIP Server Settings > Area Call

Access Point Search

Se	arches a		nts that support this Range :1	s function.			Search
2		Host Name	IP Address	BSSID	Name 3	4 No.	6
		AP-95M	192.168.0.10	00-90-C7-	Sales1	1 🗸	Add
		AP-95M	192.168.0.11	00-90-C7-	Sales2	2 🗸	Add

4 No	 Select an area to register from a "Number" in [Area Setting]. When an area number that is already registered is selected, BSSID is added to the area number. ① If the area number is already registered in [Area Call], it cannot be selected. ① An area number is selected, depending on the name that is registered with the same Tenant (Fleet) Number in [IP Advanced Radio System] of an access point, as shown below. When the area number's name is already registered in [Area Setting], the area number is selected (A blank is also recognized as a part of the name). When the area number's name is not registered in [Area Setting], an unused and initial area number is selected.
5 <add></add>	Click to register a discovered access point in [Access Point Search].
6 <apply selection=""></apply>	Click to register a selected access point in [Check Box] (2).

```
Transceiver Controller > RoIP Server Settings > Area Call
```

Area Entry List

Display the list of the registered [Area Setting] or [Access Point Search].

No.	Name	BSSID	0 2
1	Sales1	00-90-C7-	Edit Delete
2	Sales2	00-90-C7-	Edit Delete

● <edit></edit>	Click to edit the setting in [Area Setting].
2 <delete></delete>	Click to delete the selected entry. ① After clicking <delete>, the entry cannot be recalled.</delete>
3 <delete all=""></delete>	Click to delete all the entries. ① After clicking <delete all="">, the entries cannot be recalled.</delete>

Transceiver Management screen

Transceiver Controller > Transceiver Settings > Transceiver Management

Transceiver Management

The RoIP Gateway can monitor the registered WLAN transceivers and IP100FSs. And if necessary, the RoIP Gateway can reboot the registered all WLAN transceivers.

6					2	3	4	6		Refresh
🗆 Ali	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current Status	Talkgroup	Location 6	Version
	1	IP100H	Sales1	00101	Disconnected	-	-	-	-	-
	2	IP100H	Sales2	00102	Connected	192.168.0.11	Meeting	1	00-90-C7-	Ver.
	3	IP110H	Sales3	00103	Connected	192.168.0.12	Under a break	1	00-90-C7-	Ver.
	50	IP100FS	IP100FS	00050	Disconnected	-	-	-	-	-

① A WLAN transceiver is displayed in bold when a setting is changed and a reboot is required.

Check Box	 Click a Check Box to add a check mark to the WLAN transceiver that you want to reboot. ① You cannot select an IP100FS, or a WLAN transceiver that has "Disconnected" displayed in [Registration Status]. ① By clicking the [All] box, you can select or cancel all WLAN transceivers in the list.
Registration Status	 Displays the WLAN transceivers' or IP100FSs' Registration Status as either "Connected" or "Disconnected." Displays "Disconnected" if the WLAN transceiver is turned OFF or the IP100FS's application is not running. When the RoIP Gateway sends the reboot command to a WLAN transceiver from the [Transceiver Management] menu, the following status are displayed: "Receiving reboot command," "Reboot command reception success," "Reboot command reception failed," "Downloading," "Status notification failed," "Low battery," and "Programming with software."
③ IP Address	Displays the IP Addresses of the WLAN transceivers or IP100FSs. ① When [Registration Status] displays "Disconnected," "-" is displayed.
Current Status	Displays the Current Status of the WLAN transceivers. (Example: In a meeting)
	 Information If the Status function is set to OFF, "-" is displayed. If you click the <refresh> (?) button, the latest status will be displayed.</refresh> When the WLAN transceiver is remotely locked by the IP100FS, and it cannot communicate with others or cannot transmit, "Transmit and receive disabled" or "Transmit disabled" is displayed.

• If the WLAN transceiver is sending an emergency call, "Emergency" is displayed.

Transceiver Management screen

Transceiver Controller > Transceiver Settings > Transceiver Management

Transceiver Management

•					2	3	4	5		Refresh
	TRX No.	Transceiver Model	Name	Unit ID		IP Address	Current Status		Location 6	Version
	1	IP100H	Sales1	00101	Disconnected	-	-	-	-	-
	2	IP100H	Sales2	00102	Connected	192.168.0.11	Meeting	1	00-90-C7-	Ver.
	3	IP110H	Sales3	00103	Connected	192.168.0.12	Under a break	1	00-90-C7-	Ver.
	50	IP100FS	IP100FS	00050	Disconnected	-	-	-	-	-

① A WLAN transceiver is displayed in bold when a setting has been changed and a reboot is required.

S Talkgroup	 Displays the Talkgroup IDs that are selected by the WLAN transceivers or IP100FSs. When a Talkgroup name is registered, a Talkgroup number (name) is displayed. While a WLAN transceiver or IP100FS does not select a Talkgroup, or [Registration Status] displays "Disconnected," "-" is displayed.
6 Location	Displays the BSSIDs of the wireless access points that the WLAN transceivers are connected to. (1) When [Registration Status] displays "Disconnected," "-" is displayed.
♂ <refresh></refresh>	 Click to reload the Registration Status. The connection status of the WLAN transceiver or IP100FS, or the activation status check of when the WLAN transceiver or IP100FS reboots are renewed.
8 Version	Displays the version of the WLAN transceivers or IP100FSs that are registered to the RoIP Gateway. (1) When [Registration Status] displays "Disconnected," "-" is displayed.
Manual Update	Enable to manually update the WLAN transceiver firmware when the RoIP Gateway sends Manual Reboot () to the WLAN transceiver. When the WLAN transceiver is ready to update the firmware, "F" blinks on the display, and then the WLAN transceiver automatically reboots and starts the firmware update. (Example: IP100H) Blinks 1/24 16:57 Updating 1/24 16:57 Updating When the WLAN transceiver has failed to prepare a firmware update, it does not automatically reboot. If necessary, send a reboot command to the WLAN transceiver.
Manual Reboot	Click <execute> to reboot all of the WLAN transceivers that are selected in [Check Box] (1).</execute>

6-16

Transceiver Controller > Transceiver Settings > Transceiver Registration

Transceiver Settings

Register the WLAN transceiver or IP100FS settings.

① After the registration is completed, you must reboot the WLAN transceiver.

Transceiver Settings		
TRX No. : 1	1	~
Transceiver Model : 2	IP100H	~
Name : 3		
Unit ID : 4		
Security		
Password : 5	iptrx	
Connection Port		
Transceiver Port Number : 6	30000	
Server Port Number : 7	30000	
Profile		
Profile : 8	1 (Sales group)	9 10~
		Add Reset

1 TRX No	Selects the number that the WLAN transceiver or IP1 to. ① Up to 50 terminals can be registered.	00FS is registered (Default: 1)				
2 Transceiver Model	Select a WLAN transceiver model.	(Default: IP100H)				
3 Name	Enter a transceiver name of up to 31 characters.					
④ Unit ID	Enter an individual number between 00001 and 6000	0. (Default: 00001)				
5 Password	 Enter a password to access to the RoIP Gateway. ① Up to 12 characters, lower or upper letters, numbers, and used. 	(Default: iptrx) d symbols can be				
6 Transceiver Port Number	Enter the port number (UDP port) that the WLAN transceiver will use to communicate with the RoIP Gateway.					
	 Information The set port number (RTP) and the port number +1 (RTC communication. We basically recommend that you use the default port numeration. We basically recommend that you use the default port numeration. The default number differs, depending on [TRX No.], as s Default: TRX No. 1 (30000), TRX No. 2 (30002), TRX No. TRX No. 4 (30006),, TRX No. Setting range: Even numbers between 2 and 59998. Some numbers may not be usable. Do not set the port number that has already been used by setting. When [Transceiver Model] (2) is set to "IP100FS," the port displayed. 	mber. hown below. 3 (30004), 50 (30098) y another connection				

Transceiver Controller > Transceiver Settings > Transceiver Registration

Transceiver Settings

Transceiver Settings		
TRX No. : 1	1	~
Transceiver Model : 2	IP100H	~
Name : 3		
Unit ID : 4	00001	
Security		
Password : 5	iptrx	
Connection Port		
Transceiver Port Number : 6	30000	
Server Port Number : 7	30000	
Profile		
Profile : 😣	1 (Sales group)	9 10~
		Add Reset

7 Server Port Number	Enter a port number (UDP port) that the RoIP Gateway will use to communicate with the WLAN transceiver or IP100FS.
	 Information The set port number (RTP) and the port number +1 (RTCP) are used for communication. We basically recommend that you use the default port numbers. The default number differs, depending on the [TRX No.] as shown below. Default: TRX No. 1 (30000), TRX No. 2 (30002), TRX No. 3 (30004), TRX No. 4 (30006),, TRX No. 50 (30098) Setting range: Even numbers between 2 and 65534. Some numbers may not be usable. Do not set a port number that has already been used by another connection setting.
8 Profile	 Select the Profile number that the WLAN transceiver or IP100FS belongs to. (Default: 1) ① The numbers 1 to 50 are selectable. ① Set the Profile setting in the [Common Settings] menu, such as ID list, message, or Receive notification tone settings.
᠑ <add></add>	Click to add the entries. ① The entries are displayed in [Transceiver Setting Entry List].
1 0 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <add>.</add>

Transceiver Controller > Transceiver Settings > Transceiver Registration

■ Transceiver Setting Entry List

The list of the registered WLAN transceivers or IP100FSs.

🗆 Ali	TRX	Transceiver	Name	Unit ID	Password	Connection	Port	Profile	ID	Message	
	No.	Model				Transceiver	Server		List	List	2
	1	IP100H 🗸	Sales1	00101	iptrx	30000	30000	1 🗸	1	1	Delete
	2	IP100H 🗸	Sales2	00102	iptrx	30002	30002	1 🗸	1	1	Delete
	3	IP110H 🗸	Sales3	00103	iptrx	30004	30004	1 🗸	1	1	Delete
	50	IP100FS 🗸	IP100FS	00050	iptrx	-	30098	1 🗸	1	1	Delete

1 Check Box	Click a Check Box to add a check mark to delete an entry. ① By clicking the [All] box, you can select or cancel all entries in the list.
2 <delete></delete>	Click to delete the selected entry. ① After clicking <delete>, the entry cannot be recalled.</delete>
③ <apply></apply>	Click to apply the entries. ① The entries that are edited in [Transceiver Setting Entry List] are registered.
<pre>4<reset></reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>
5 <delete selected=""></delete>	Click to delete an entry that you select in the Check Box (1). ① After clicking <delete selected="">, the entry cannot be recalled.</delete>
6 <delete all=""></delete>	Click to delete all the entries. ① After clicking <delete all="">, the entries cannot be recalled.</delete>

Transceiver Controller > Transceiver Settings > Transceiver Registration

TRX Batch Setting

You can register consecutive Destination IDs collectively. Or you can copy the Destination ID contents to another ID.

TRX Batch Setting	
Range : 1	Add
* Enter Unit ID range.	
Refer to : 2 Default * [Transceiver Settings] applies the initial value.	~
* [Transceiver Settings] applies the initial value.	
Profile : 3 1 (Sales group)	×
•	

1 Range	Enter a range of collective Destination IDs.
	 Click <add> to register consecutive Destination IDs collectively in the box.</add> If a Destination ID is already registered, "Overwrite the following entry" is displayed.
2 Refer to	Select the default settings or the programmed settings to refer to. (Default: Default)
3 Profile	 Select the profile number that WLAN transceivers or IP100FSs belong to. (Default: 1) The numbers 1 to 50 are selectable. You can set an ID List, Message List, or Notification beep setting for each profile in the [Common Settings] menu.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings [IP100H]

Individually assign the functions, or set the receive notification tone to a registered IP100H. ① After the setting is completed, you must reboot the IP100H.

Transceiver Settings		
Unit ID : 1	00101 (Sales1)	~
	IP100H	
Display		
Display Item : 2	Date and Time O Name	
Back Light : 3	Auto	\sim
Transmission		
TX Inhibit : 4	Isable O Enable	
PTT Lock : 5	Isable O Enable	
Destination ID		
PTT Call at Stand-by : 6	O Disable Enable * The last-used ID display is hidden, if disabled.	
Use ID List : 🕜	🔿 Disable 💿 Enable	
Default Destination ID :	All	~
Add All Call to ID List : 8	🔿 Disable 💿 Enable	
Default Talkgroup : 🧐	Disable O Enable	

1 Unit ID	 Only the The ind 	elect the IP100H's Individual number (Name) that you want to edit. Only the individual numbers of the IP100H are selectable. The individual number that the [Transceiver Model] on the [Transceiver Registration] screen is set to "IP100FS," cannot be selected.		
2 Display Item		hether or not the IP100H displays the Date and Time or its the standby mode. (Default: Date and Time)		
		Image: Constraint of the second system Image: Constraint of the second system 10/8 16:57 Sales 8 Sales 1 (Date and Time) (Name)		
	-	ame] on the [Transceiver Registration] screen has not been entered, setting is set to [Name], the IP100H displays the individual number.		
3 Back Light	Select the	e IP100H backlight function. (Default: Auto)		
	• OFF:	The backlight does not light.		
	• ON:	The backlight lights continuously.		
	• Auto:	The backlight lights when an operation is performed, and goes out after 5 seconds.		
4 TX Inhibit	 When the 	nable" to inhibit the IP100H's transmission. (Default: Disable) nis setting is set to "Enable," the IP100H also cannot transmit with an microphone, or using the VOX function.		

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings		
Unit ID	0 : 10 _00101 (Sales1)	~
Transceiver Mode	I: IP100H	
Display		
Display Item	n : 2 💿 Date and Time 🛛 Name	
Back Light	t: 3 Auto	~
Transmission	•	
TX Inhibi	it : 👍 💿 Disable 🔿 Enable	
PTT Lock	k : 🕤 💿 Disable 🔿 Enable	
Destination ID	•	
PTT Call at Stand-by	y: 6 O Disable Enable * The last-used ID display is hidden, if disabled.	
Use ID List	t: 🕜 🔿 Disable 💿 Enable	
Default Destination ID	D: All	~
Add All Call to ID List	t : 8 🔿 Disable 💿 Enable	
Default Talkgroup	p : 9 💿 Disable 🛛 Enable	

S PTT Lock	When the down its	able" to lock the IP100H's PTT switch. is setting is set to "Enable," the IP100H cannot PTT switch, but it can transmit with an optional function as well.	, ,
6 PTT Call at Stand-by	Select whether or not the IP100H displays the Destination ID (Ca in the standby mode. (Default: E		nation ID (Call type) (Default: Enable)
	• Disable:	 The Destination ID (Call type) is not displete standby mode. The Destination ID (Call type) is displayed ID using the function keys. 	
	• Enable:	 The Destination ID (Call type) is displaye mode. ① When the PTT on the IP100H is pushed, the displayed ID (Call type). 	

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings		
Unit ID : 1	00101 (Sales1)	~
Transceiver Model :	IP100H	
Display		
Display Item : 2	Date and Time O Name	
Back Light : 3	Auto	\sim
Transmission		
TX Inhibit : (4)	Disable	
PTT Lock : 5	Disable Enable	
Destination ID		
PTT Call at Stand-by∶6	O Disable	
Use ID List : 🕜	🔿 Disable 💿 Enable	
	All	~
Add All Call to ID List : (8)	🔿 Disable 💿 Enable	
Default Talkgroup : 🥑	Disable	

7 Use ID List Select whether or not the IP100H uses the ID list.

	`
(m	
1 HH	

(Address) key

• Disable:

The call type is fixed to that which is selected in the [Call Type], as shown below, even if you push the [m] key on the IP100H.

(Default: Disable)

- If you set the Call Type to "Individual" or "Group," enter a destination ID between 1 to 60000 in the [Destination ID]. (Default: All)
- ① Even if "Disable" is selected, the IP100H displays a received ID in the ID list.

Use ID List :	Disable Enable	
Call Type :	All	~

Enable:

The call type is changed by pushing the [□] key on the IP100H. Select First Call ID from All, or an ID number (1 to 50) that is displayed when the IP100H is turned ON, in [Call Type]. ① The ID list is selected on the [Common Settings] screen.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings		
Unit ID : 1	00101 (Sales1)	~
	IP100H	
Display		
Display Item : 2	● Date and Time 🔘 Name	
Back Light : 3	Auto	~
Transmission		
TX Inhibit : 👍	Disable	
PTT Lock : 5	Isable O Enable	
Destination ID		
PTT Call at Stand-by : 6	O Disable	
Use ID List : 🕜	🔿 Disable 🔘 Enable	
Default Destination ID :	All	~
Add All Call to ID List : 🔕	🔿 Disable 💿 Enable	
Default Talkgroup : 🧐	🖲 Disable i Enable	

8 Add All Call to ID List	Select whether or not to display All Call in the ID list of the IP100H. (Default: Enable)
	 Disable Does not display "All" in the ID list. ① When "Disable" is selected in [Add All Call to ID List], you cannot select an All call using the [□] key.
	 Enable When [Use ID List] () is set to "Enable," set [Add All Call to ID List] and [Default Talkgroup].
Oefault Talkgroup	Select a Talkgroup if you want to set the IP100H to join a Talkgroup when you turn ON the power. (Default: Disable)
	• Disable The IP100H starts up without joining any Talkgroup. The ID that is set in the "Default Destination ID" in [Use ID List] (7) is displayed when the IP100H is turned ON.
	 Enable The IP100H joins the selected Talkgroup when it is turned ON. ① When [Use ID List] (?) is set to "Disable," this item is not displayed.
	Default Talkgroup : O Disable () Enable Call ID : <u>13 (TG1)</u>

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Ringer Settings	
Volume : 10_10	~
Ringer and Vibration : 🕕 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 ¹⁰	~
Function Settings	
Communication Method : 📵 🔿 Simplex 💿 Full-Duplex	
Priority Call : 🚺 💿 Disable 🛛 Enable	
Area Call : 15 💿 Disable 🕓 Enable	
Message : 🚺 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🚺 💿 Disable ု Enable	
Mixing of Low Priority Call : 🔞 💿 Disable 🔘 Enable	

① The screen shows when the Message (16) is set to "Enable."

Ovolume	 Set the beep level when the IP100H receives a Call or message to between 0 and 32. (Default: 10) ① When this setting set to "0," the notification beep is turned OFF. ① The notification beep is individually set for the Call type or message in [Notification Tone] on the[Profile] screen in the [Common Settings] menu.
Ringer and Vibration	Set the action when the IP100H receives a Call or message to "Notification Beep," "Vibration" or "Notification Beep + Vibration." (Default: Notification Beep)
	• Notification Beep When the IP100H receives a Call or message, the specified Notification beep sounds, depending on the Call or message. The notification beep is set in [Notification Tone] on the [Profile] screen in the [Common Settings] menu.
	• Vibration When the IP100H receives a Call or message, it vibrates for notification.
	Notification Beep + Vibration

When the IP100H receives a Call or message, it vibrates and the Notification beep sounds for notification.

Transceiver Controller > Transceiver Settings > Transceiver Settings

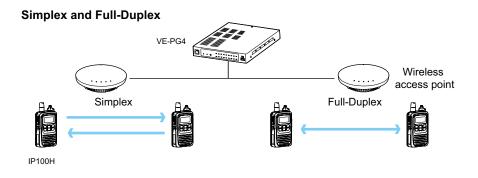
■ Transceiver Settings [IP100H]

Transceiver Settings	
Ringer Settings	
Volume : 10 10	~
Ringer and Vibration : 🕕 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 10	~
Function Settings	
Communication Method : 📵 🔿 Simplex 💿 Full-Duplex	
Priority Call : 🚺 💿 Disable 🛛 Enable	
Area Call : 🚺 💿 Disable 🛛 Enable	
Message : 🔞 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🚺 💿 Disable ု Enable	
Mixing of Low Priority Call : 18 💿 Disable 🔘 Enable	

① The screen shows when the Message (16) is set to "Enable."

12 Volume

wolume				
(Except Reception Notice)	 Set the beep level when the IP100H is transmitting a Call or connecting to the RoIP Gateway, to between 0 and 32. (Default: 10) ① When this setting is set to "0," the notification beep is turned OFF. ① Depending on the [Common Settings], the IP100H sounds a beep when the IP100H is transmitting or connecting to the RoIP Gateway. 			
Communication Method	Select the c	ommunication method that the IP100H uses. (Default: Full-Duplex)		
	 Simplex: 	Toggles the transmission (Talker) and reception (Listener) for communication.		
	① When co	x: Simultaneously transmits and receives, like a telephone. Innecting the optional microphone to the IP100H, you can operate 0H like a telephone.		



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
De group	
Ringer Settings	
Volume : 10_10	~
Ringer and Vibration : 10 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 10	~
Function Settings	
Communication Method : 📵 🔿 Simplex 💿 Full-Duplex	
Priority Call : 1 🖲 Disable 🛛 Enable	
Area Call : 15 💿 Disable 🛛 Enable	
Message : 🚺 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🞁 💿 Disable 🛛 Enable	
Mixing of Low Priority Call : 🔞 💿 Disable 🛛 🔿 Enable	

① The screen shows when the Message (16) is set to "Enable."

Priority Call

Select whether or not the IP100H uses Priority Call.

(Default: Disable)

The	The priority levels of the Call types are in the following order.							
Priority level Priority		Priority	Call type Priority Call		Remarks			
Hi	gh N		Telephone	—	For telephone communication			
		Fixed	Emergency (High)	Enable	_			
			Emergency (Normal)	Disable	—			
			All Call (High)	Enable	Includes the Area Call or using an IP100FS			
			Individual Call (High)	Enable	Includes using an IP100FS			
		Selectable *	Group Call (High)	Enable	Includes the Area Call or using an IP100FS			
			All Call (Normal)	Disable	Includes the Area Call			
			Individual Call (Normal)	Disable	—			
Lc	w		Group Call (Normal)	Disable	Includes the Area Call			

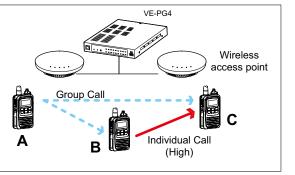
* Selectable in the Call Type Priority on the [RoIP Server] screen in the [RoIP Server Settings] menu.

① Priority is given to the first call between calls with the same priority level.

① When a call is taken, priority is given to the setting of the caller.

Example:

Even while B and C are talking on a Group Call from A, B can make an Individual Call (High) to C. In this case, the Group Call is canceled.



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
De Quanti una	
Ringer Settings	
Volume : 10 10	~
Ringer and Vibration : 1 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 10	~
Function Settings	
Communication Method : 📵 🔿 Simplex 💿 Full-Duplex	
Priority Call : 🚺 💿 Disable 🛛 Enable	
Area Call : 🕕 💿 Disable 🛛 Enable	
Message : 16 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🚺 💿 Disable < Enable	
Mixing of Low Priority Call : 🔞 💿 Disable 🔘 Enable	

① The screen shows when the Message (16) is set to "Enable."

Area Call Select whether or not the IP100H uses Area Call. When the IP100H calls All Call or Group Call using the Area Call function, it calls only other IP100Hs or IP100FSs in the area that is connected to the same wireless access point.

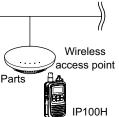
When the BSSID that IP100H is connecting is registered in [Area Setting] (Transceiver Controller > RoIP Server Settings > Area Call), this function is activated.

IP100H makes an All Call with the Area Call function

	7	//
VE-PG4		Wireless
	Sales Accounts	Parts
	All Call	IP100H
		IP100H is included in with

IP100FS calls the All Call with the Area Call function

Location	• •	ι×	Operation	
		*	Display	Mess
		=	Sending All Area For Sales Call	
For Sales				



s that the the Area Call function are set on the [Area Call] screen in the [RoIP Server Settings] menu. (Example: For Sales and For Accounts)

(Default: Disable)

When the IP100FS uses Area Call function. the IP100FS can call IP100Hs that are in the communication range of the access points assigned to the Area Call. When the access point is selected in the

[Location], the Call type (Individual, Group, All, Area, or Telephone) and names are displayed.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings [IP100H]

Transceiver Settings	
Dr. group. re	
Ringer Settings	
Volume : 10_10	~
Ringer and Vibration : 🕕 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 ¹⁰	~
Function Settings	
Communication Method : 📵 🔿 Simplex 💿 Full-Duplex	
Priority Call : 🚺 💿 Disable 🛛 Enable	
Area Call : 15 💿 Disable 🕓 Enable	
Message : 16 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🚺 💿 Disable ု Enable	
Mixing of Low Priority Call : 🔞 💿 Disable i 🔘 Enable	

① The screen shows when the Message (6) is set to "Enable."

6 Message

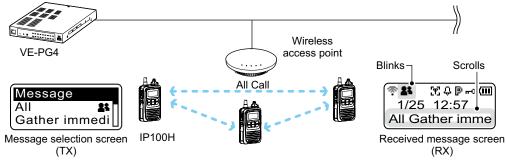
Select whether or not the IP100H can send messages.

(Default: Disable)

When "Enable" is selected, push the [FUNC] key on the IP100H once to enter the Message selection screen.

- ① Up to 10 messages of 32 characters or less can be programmed on the [Messages] screen in the [Common Settings] menu.
- ③ Select the message number 1 to 10 in [Default Message] that is registered on the [Message] screen.

IP100H transmits a message



IP100FS transmits a message

	Operation			
I.	Display	Message		
	All	▼ Gather immediate	Remote Lock	The IP100FS can store up to 100 messages in each site.
	•		Remote Unlock	You can edit the stored messages.
ľ	Selected Call type	Selected or edited message	Remote Monitor	
	Selected Call type	Selected of edited message		

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings [IP100H]

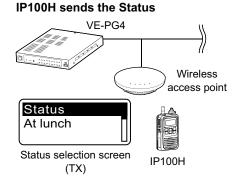
Transceiver Settings	
Ringer Settings	
Volume : 10	~
Ringer and Vibration : 🕦 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 10	~
Function Settings	
Communication Method : 🔞 🔿 Simplex 💿 Full-Duplex	
Priority Call : 🚺 💿 Disable 🛛 Enable	
Area Call : 🕕 💿 Disable 🛛 Enable	
Message : 16 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🚺 💿 Disable 🛛 Enable	
Mixing of Low Priority Call : 🔞 💿 Disable 🛛 Enable	

① The screen shows when the Message (6) is set to "Enable."

10 Status

Select whether or not the IP100H can send Status information. (Example: At lunch, Meeting, Waiting) (Default: Disable) When "Enable" is selected, push the [FUNC] key on the IP100H twice to enter the Status selection screen.

- ① Up to 10 statuses of 32 characters or less can be entered on the [Status] screen in the [Common Settings] menu.
- ① The status that the IP100H sends can be displayed on the [Transceiver Management] screen in the [Transceiver Settings] menu or the One-Touch button of the IP100FS.



IP100FS One-Touch button

All Call	Sales group 1 11	Sa
Sales 1 1 [2] At lunch	Sales 2 2 [5] At the desk	

Name, Destination ID, Status number and Status information

VE-PG4 Transceiver Management screen

Transceiver Management

🗆 Ali	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current	Status	Talkgroup
	1	IP100H	Sales1	00001	Connected	192.168.0.201	At lunch	ı	1
	2	IP100H	Sales2	00002	Connected	192.168.0.202	At th	esk	1
	3	IP100H	Sales3	00003	Disconnected	-	-		-
	50	IP100FS	IP100FS	00050	Disconnected	-	-		-

Status

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
De Guanh La	
Ringer Settings	
Volume : 10 10	~
Ringer and Vibration : 🕕 Notification Beep	~
Notice Tone(Except Reception Notice)	
Volume : 12 10	~
Function Settings	
Communication Method : 📵 🔿 Simplex 💿 Full-Duplex	
Priority Call : 🚺 💿 Disable 🛛 Enable	
Area Call : 🚺 💿 Disable 🕓 Enable	
Message : 16 🔿 Disable 💿 Enable	
Default Message : 1 (Gather immediately.)	~
Status : 🚺 💿 Disable ု Enable	
Mixing of Low Priority Call : 🔞 💿 Disable 🔘 Enable	

① The screen shows when the Message (16) is set to "Enable."

18 Mixing of Low Priority Call

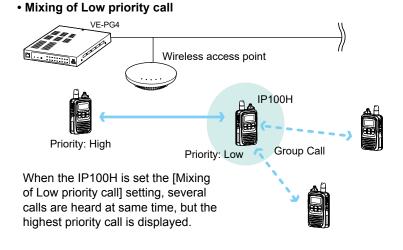
Select whether or not the IP100H receives Mixed audio.

(Default: Disable)

When this setting is set to "Enable," the RoIP Gateway sends the mixed audio of all calls that call the IP100H.

① The IP100H displays the called station that has the highest priority in the mixed audio.

See page 6-27 for details of the Priority level.



Transceiver Controller > Transceiver Settings > Transceiver Settings

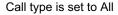
■ Transceiver Settings [IP100H]

Transceiver Settings	
	\leq
Fix Call Destination : 19 Disable	~
Key Assignment	
Option Key : 20 No Function	~
Clear Down during Telephone Call : (2) O Disable	
Target Availability Check 🙋 🔿 Disable 💿 Enable	

19 Fix Call Destination



(🗟 🛔	m	
All 🗕		- 2nd line
Sales8 →		- 3rd line



(? 1)
Seles group1 +-	2nd line
Sales8	3rd line

Call type is set to Group

Select whether or not the IP100H uses the Fix Call Destination function. (Default: Disable)

When this setting is set to other than "Disable," the IP100H calls the preset destination instead of the selected destination that is displayed on the third line. The Fix Call Destination function separates the fixed call from the general calls by the specified method to start transmission.

Disable

The Fix Call Destination is not specified, and the IP100H calls the selected destination.

• PTT

The Fix Call Destination is specified as PTT transmission. When [PTT] is held down, the IP100H calls the preset destination.

Fix Call Destination

Call Destination	
Fix Call Destination :	PTT
Call Type :	All
,,	

(Example: All call is specified to the PTT)

Earphone Mic or Headset

The Fix Call Destination is specified as the external Mic transmission. When the external microphone's PTT switch is held down, or its VOX function is active, the IP100H calls the preset destination.

-ix Call	Destinat	tion			
		E :	Call	Deel	in et

Fix Call Destination :	Earphone Mic or Headset
Call Type :	Group
Destination ID :	00001

(Example: Group call is specified to the Earphone Mic or Headset)

(i) Information

- · Set the Call type to "Individual," "Group," or "All."
- · When the "Call Type" is set to "Individual" or "Group," enter the Individual ID or Group ID between 00001 to 60000 in the [Destination ID].
- The Destination ID, Name (if [Name] is selected in the [Display Item] (2)) or Call type of the Fix Call Destination is displayed on the 2nd line. (Usually Date and Time or Own Name is displayed on the 2nd line.)
- · When the IP100H receives a call with this setting, it does not display the Caller's ID or Call type on the 3rd line.
- · When both of the IP100H's [PTT] and external microphone's PTT switch are held down, the external PTT has priority and the internal microphone will be muted.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Fix Call Destination : 📵 Disable	~
Key Assignment	
Option Key : 20 No Function	~
Clear Down during Telephone Call : 🗿 🔿 Disable 💿 Enable Target Availability Check	
Target Availability Check : 2 🔿 Disable 💿 Enable	

20 Option Key

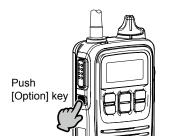
Assign "Message," "One Touch," "Clear Down," "Mute," "Emergency," or "No Function" to the IP100H's [Option] key. (Default: No Function)
When this setting is set to "No Function," nothing changes by pushing the [Option] key on the IP100H in the standby mode.

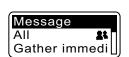
• Message

Pushing the [Option] key on the IP100H displays the Message selection screen.

③ Select the message number 1 to 10 in the [Message No.] that is displayed on the [Message] screen.

Key Assignment		
	Option Key :	Message
	Message No. :	1 (Gather immediately.)





Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Ph. stillation	\leq
Fix Call Destination : 📵 Disable	~
Key Assignment	
Option Key : 20 No Function	~
Clear Down during Telephone Call : 2 O Disable	
Target Availability Check : 2 🔿 Disable 💿 Enable	

20 Option key

One Touch

Pushing the [Option] key on the IP100H selects a specified Call type and destination ID or phone number.

Select the "Individual," "Group," "All," or "Telephone" Call type.

- ① When "Individual" or "Group" is selected, enter the Individual ID or Group ID between 00001 to 60000 in the [Destination ID].
- When "Telephone" is selected, enter up to 31 numbers and symbols (#, *) in the [Destination Phone Number].

Key Assignment	
Option Key :	One Touch
Call Type :	Individual
Destination ID :	Group All
Clear Down during Telephone Call :	Telephone



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Ph. stination	\leq
Fix Call Destination : 19 Disable	~
Key Assignment	
Option Key : 10 No Function	~
Clear Down during Telephone Call : 2) 〇 Disable	
Target Availability Check 🙋 🔿 Disable 💿 Enable	

20 Option key

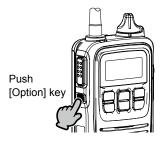
Clear Down

Pushing the [Option] key on the IP100H terminates the phone call with an IP phone.

① You can assign another function if you select "Enable" on [Clear Down during Telephone Call] (2).

Key Assignment

Option Key : Clear Down



When the [Option] key is pushed before a phone call is received, or during telephone call, the phone call is terminated. (1) The phone call is terminated from the IP100H only when the

from the IP100H, only when the IP100H is individually called from a telephone, or when the IP100H calls a telephone.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Ph. stination	\leq
Fix Call Destination : 19 Disable	~
Key Assignment	
Option Key : 20 No Function	~
Clear Down during Telephone Call : 2 O Disable	
Target Availability Check : 2 🔿 Disable 💿 Enable	

20 Option key

• Mute

Hold down the [Option] key for 1 second on the IP100H when you want to mute the received audio. (The Notification beep cannot be muted.) Hold down the [Option] key for 1 second to turn the Mute function ON or OFF.

- ① You can turn OFF the Mute function by pushing [PTT]. However, selecting "Enable" in the [Clear Down during Telephone Call] (2), terminates the phone call.
- If you select "Enable" in [Mute Automatic Release], turn OFF the Mute function after a specified period of time has passed. (Default: Disable) If you select "Enable," set the period of time to release the Mute function to between 10 to 600 (seconds). (Default: 60 (seconds))





Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Ph. offination	\leq
Fix Call Destination : 19 Disable	~
Key Assignment	
Option Key : 20 No Function	~
Clear Down during Telephone Call : (2) 〇 Disable	
Target Availability Check : 2 🔿 Disable 💿 Enable	

20 Option key

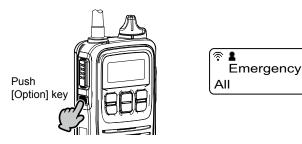
Emergency

Hold down the [Option] key until "Emergency" is displayed to send an Emergency call.

When the Emergency call is sent, an alarm sounds. The Emergency call is canceled and the alarm stops when the transceiver receives a response, or the [Option] key of the transceiver is held down.

- ① You can set the period of time to send the Emergency call, and sound the alarm, in [Emer SW ON Timer] (⁽⁵⁾).
- ① When "Enable" is selected in [Emer SW OFF] (3), you can set the period of time to cancel the Emergency call and stop the alarm.

(111)



NOTE:

The RoIP Gateway should not be used when high reliability is necessary.

The communication cannot be made, depending on the environment around the RoIP Gateway, such as the consumption of a battery, the signal environment, or the access point or network status.

Use the [Emergency] and [Lone Worker] functions as a supplementary function.

Transceiver Controller > Transceiver Settings > Transceiver Settings

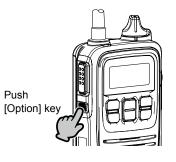
Transceiver Settings [IP100H]

Transceiver Settings	
Ph. stillation	\leq
Fix Call Destination : 10 Disable	~
Key Assignment	
Option Key : 20 No Function	~
Clear Down during Telephone Call : 2 〇 O Disable	
Target Availability Check : 2 🔿 Disable 💿 Enable	

2) Clear Down during Telephone Call

Select "Enable," if you want to terminate a phone call by pushing the IP100H's [Option] key. (Default: Enable)

When "Clear Down" is selected on the [Option Key] (2), this item is not displayed.



Before the target telephone is picked up, or during a phone call, pushing the [Option] key terminates the phone call.

The IP100H can terminate the phone call, when a telephone calls the IP100H individually, or when the IP100H calls a telephone.

22 Target Availability Check ...

Select whether or not the IP100H displays a confirmation after it makes an Individual Call. (Default: Enable) When "Enable" is selected, the IP100H displays the "Connected," "Busy" or "No response" connection status.



- ① When the target station is out of range, "No response" is displayed.
- ① If the [Connection Notice Tone] is set to "Enable," the Success Tone or Failure Tone sounds to notify its connection status.

(Transceiver Controller > Common Settings > Profile > Profile > Connection Notice Tone)

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings		
Key-Touch Beep		
Key-Touch Beep : 23 🔾 [Disable 💿 Enable	
Key-Touch Beep : 23 C [Key-Touch Beep Level : 10		~
Microphone		
Gain :24 _0	✓	dB
Earphone Mic		
Monitor : 2 💿 [Disable 🔿 Enable	

8 Key-Touch Beep	Select whether or not the IP100H sounds the Key-Touc	h beep. (Default: Enable)
	When "Disable" is selected, the IP100H does not sound confirmation beep when a key is pushed.	d the
	 Key-Touch Beep Level Set the volume level of the notification beeps when the is pushed. The selectable range is between 0 and 32. When "0" is selected in this setting, the IP100H does not even if the volume level is set. When "Disable" is selected, this setting is grayed out an cannot be changed. 	(Default: 10) sound any beep,
❷ Gain	 Adjust the microphone sensitivity. Range: -12 (low) ~ 12 (high) dB, in 3 dB steps. When the noise level around the IP100H is high, set to low speak in a slightly louder voice that makes listening easier noise level around the IP100H is quiet, set to high sensitivity smaller voice that makes listening easier. 	. Or when the
29 Monitor	 Select whether or not the IP100H with an earphone mid the Monitor function. (When this setting is set to "Enable," you can hear your from the earphone. Set the monitor level to between 0 a ① When "0" is set, your voice is not heard from an earphone regardless of the audio setting in the IP100H. ① To prevent howling, set this setting to "Disable" when using microphone, such as the HM-186LS. 	Default: Disable) transmit audio and 32. (Default: 10) microphone,

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings [IP100H]

Transceiver Settings		
Headset		
	O Disable	
Attack Time : 20		milliseconds
Release Time : 🛽	200	milliseconds
Voice Delay : 😕	200	milliseconds
VOX Threshold :		%
Sidetone : 3	Disable Enable	
Sidetone Volume : 32	10	~

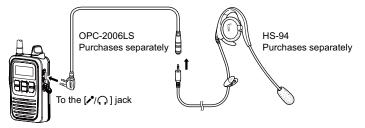
(This is an example of when the [VOX] (26) is set to "Enable.")

26 VOX

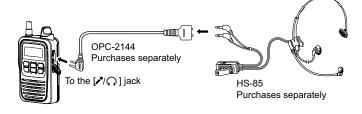
Select whether or not the IP100H can use the VOX (voice operated transmission) function. (Default: Disable) The transceiver has a VOX function, which allows hands-free operation.

(i) Information

- The VOX function requires an optional headset and connection cable, such as the HS-94, HS-95, or HS-97 headset and OPC-2006LS cable, or the HS-102 headset and OPC-2359 cable.
- The VOX function starts transmission when you speak into the microphone, without needing to push [PTT]; then, automatically returns to reception when you stop speaking.
- Be sure to turn OFF the IP100H's power, before connecting or disconnecting optional equipment to or from the [→∩] jack.
- When "Enable" is selected, the [Attack Time] (2) through [Sidetone Volume] (3) is displayed.



• The HS-85 has the VOX function, so if you connect the HS-85 to the IP100H through the OPC-2144, set the [VOX] (2) to "Disable."



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Headset	
VOX : 26 🔿 Disable 💿 Enable	
Attack Time : 20 .50	milliseconds
Release Time : 28 200	milliseconds
Voice Delay : 29 .200	milliseconds
VOX Threshold : 30 40	%
Sidetone : 🜖 💿 Disable ု Enable	
Sidetone Volume : 32 10	~

(This is an example of when the [VOX] (26) is set to "Enable.")

Attack Time VOX: Enable	Adjust the Attack time. • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps When audio from a headset microphone is input for this s the IP100H starts transmitting.	(Default: 50)
Release Time	Adjust the Release time. • Range: $5 \approx 2000$ (milliseconds) in 5 millisecond stops	(Default: 200)
VOX: Enable	 Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps The release time is amount of time the transmitter stays ON after you stop speaking. 	
Voice Delay VOX: Enable	Adjust the Voice Delay time to prevent clipping of the first after you begin speaking. • Range: 0 ~ 500 (milliseconds) in 5 millisecond steps	few syllables (Default: 200)
1 VOX Threshold	Adjust the VOX Threshold level. • Range: 0 ~ 100 (%)	(Default: 40)
VOX: Enable	 The lower values make the VOX function more sensitive to y 	our voice.
Sidetone VOX: Enable	Select whether or not to use the Sidetone function. (D When "Enable" is selected, you can hear your voice from	efault: Disable) the headset.
Sidetone Volume VOX: Enable	Adjust the Sidetone level. • Range: 0 (minimum) ~ 32 (maximum)	(Default: 10)

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	\frown
Emergency Settings	
Emergency : 🕄 🔿 Disable 💿 Enable	
Assign Emergency to Log Key (long 3 ○ Disable ● Enable press) :	
Emer SW ON Timer : 35 5	seconds
Emer SW OFF : 3 🖸 Disable 💿 Enable	
Emer SW OFF Timer : 2	seconds
Emergency Alert Tone : 😗 🖸 Disable 💿 Enable	
Emergency Alert Tone Volume : 32	~
Call Type : 🚳 🔠	~
Cancel on Reply : $\mathfrak{Y} \bigcirc$ Disable \odot Enable	
Cancel by Time : 🐠 🔿 Disable 💿 Enable	
Time : 60	seconds

(This is an example of when the Emergency (3), Emer SW OFF (6), and Cancel by Time (4) are set to "Enable.")

Bergency	 Select whether or not to use the Emergency function. (Default: Disable) Holding down the [Option Key] (20) or [Assign Emergency to Log Key (long press)] (39) until "Emergency" is displayed turns ON the Emergency function, and sends an Emergency call to the previously set User ID. The Emergency call is canceled when an RX code is received, or holding down the [Option] key or [Log] key for a set period of time in the [Emer SW OFF Timer] (36). The period of time that the key must be held down to turn the Emergency function ON or OFF is set in the [Emer SW ON Timer] (35) or in the [Emer SW OFF Timer] (36).
Assign Emergency to Log Key (long press) Emergency: Enable	Select whether or not to use the [া key to send an Emergency call. (Default: Enable)
Semer SW ON Timer	Enter the period of time for which the [Option] key or [Log] key must be held down to turn the Emergency function ON. (Default: 5 seconds)
Emer SW OFF Emergency: Enable	Select whether or not to cancel the Emergency call by pushing the [Option] key or [Log] key. (Default: Disable) When "Enable" is selected, enter the period of time for which the [Option] or [Log] key must be held down to turn OFF the Emergency function, between 1 and 10 seconds. (Default: 2 seconds)

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
Emergency Settings	
Emergency : 33 O Disable	e 💿 Enable
Assign Emergency to Log Key (long) Oisable press):	e 🖲 Enable
Emer SW ON Timer : 35 5	seconds
Emer SW OFF : 36 O Disable	e 💿 Enable
Emer SW OFF Timer : 2	seconds
Emergency Alert Tone : 🛐 🔿 Disable	e 💿 Enable
Emergency Alert Tone Volume : 32	¥
Call Type : 38 _All	¥
Cancel on Reply : 👩 🔿 Disable	e 💿 Enable
Cancel by Time : 🐠 🔿 Disable	e 💿 Enable
Time : 60	seconds

③ Emergency Alert Tone Emergency: Enable	Select whether or not to sound an alarm when an Emergency call is sent. When this item is set to "Disable," "Emergency" is not displayed on the screen, and IP100H sends the Emergency call. (Default: Enable)
	When "Enable" is selected, set the [Emergency Alert Tone Volume](audio level) of the alarm to between 0 and 32.(Default: 32)
Call Type Emergency: Enable	Select the call type of Emergency call from Individual, Group, All, or Telephone. (Default: All) If you select "Individual" or "Group," enter the Destination ID between 00001 to 60000. If you select "Telephone," enter a Destination Phone Number of up to 31 characters (0–9, #, and *).
Cancel on Reply Emergency: Enable	Select whether or not to cancel the Emergency call when any RX code is received. (Default: Enable)
Cancel by Time Emergency: Enable	Select whether or not to cancel the Emergency call after the set period of time has passed.(Default: Disable)If you select "Enable," enter a period of time to between 1 and 255 seconds.(Default: 60 (seconds))

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
R Ennergeficy Settinge	
Alert Tone : 🌗 🔿 Disable 💿 Enable	
Alert Tone Volume : 32	~
Alert Tone Action : Notification Beep + Vibration	~
Lone Worker : 🕙 🔿 Disable 💿 Enable	
Lone Worker ON Timer : 43 .60	minutes
Lone Worker Reminder Timer : 49 _60	seconds
PTT Delay : 45 🔿 Disable 💿 Enable	
PTT Delay Timer : 10	x100 milliseconds

(This is an example of when the [Lone Worker] (42) is set to "Enable.")

Alert Tone Emergency: Enable	Select whether or not to cancel an Emergency call after the set period of time has passed. (Default: Enable) If you select "Enable," set the Volume (audio level) to between 0 and 32, and select the action. (Default: 32, Notification Beep+Vibration) (1) In the [Alert Tone Action], select "Notification Beep," "Vibration," or "Notification Beep + Vibration" to activate when an Emergency call is received.
Lone Worker Emergency: Enable	If the Lone Worker function is activated, the Emergency function is automatically turned ON after the set period of time has passed with no operation. (Default: Disable)
Lone Worker ON Timer Lone Worker: Enable	 Enter the period of time for starting the Lone Worker function. (Default: 60 (minutes)) Range: 1 ~ 255 (minutes) in 1 minute steps When the IP100H is operated within the period of time in this item, the times for [Lone Worker ON Timer] (⁽³⁾) and [Lone Worker Reminder Timer] (⁽⁴⁾) are reset.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
RX Ennorgency Settingo	
Alert Tone : 41 🔿 Disable 💿 Ena	ıble
Alert Tone Volume : 32	<u> </u>
Alert Tone Action : Notification Beep +	Vibration V
Lone Worker : 🔨 🔿 Disable 💿 Ena	ible
Lone Worker ON Timer : 43 _60	minutes
Lone Worker Reminder Timer : 44 _60	seconds
PTT Delay : 45 🔿 Disable 💿 Ena	ıble
PTT Delay Timer : 10	x100 milliseconds

(This is an example of when the [Lone Worker] (④) is set to "Enable.")

Lone Worker Reminder Timer Lone Worker: Enable	 Enter the period of time to start the Emergency call transmission after the period of time that is set in [Lone Worker ON Timer] ((3) has passed. (Default: 60 (seconds))) When the transceiver is not operated after the period of time has passed, the Emergency call automatically starts. Range: 1 ~ 255 (seconds) in 1 second steps When the transceiver is operated by the [Emergency] function activation, [Lone Worker ON Timer] and [Lone Worker Reminder Timer] are reset. When the [Lone Worker Reminder Timer] is activated, beeps sound every 2 seconds until the timer is reset.
PTT Delay (Lone Worker: Enable)	 Enter the period of time for the delay time to transmit by pushing [PTT] while [Lone Worker On Timer] and [Lone Worker Reminder Timer] are activated. (Default: Enable, 10) Range: 1 ~ 255 (×100 milliseconds) If this item is set to a longer period of time, you can reset [Lone Worker On Timer] and [Lone Worker Reminder Timer] by momentary pushing [PTT]

6-45

 \textcircled Hold down [PTT] for more than the set period of time in this item to transmit.

without transmitting.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
V/RoIP Settings	
Buffering Type : 👍 🔿 Static 💿 Dynamic	
TOS Type : 105	~
Media (RTP) Priority Level : 48 7	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : E0	
Antenna	
Antenna Type : 49 Transceiver's Setting	~
IP Address	
IP Address Settings : 50 Transceiver's Setting	~

46 Buffering Type

Select the buffer type to control any interrupted sound.

(Default: Dynamic)

Static

The buffer time is set [Receive Buffer Size]. Set the buffer time to between 20 and 500 milliseconds to keep the audio from breaking up. A shorter value improves the delay, but it may frequently break the audio signal.

V/RoIP Settings		
Buffering Type :	Static O Dynamic	
Receive Buffer Size :	40	~
TOS Type :	TOS	

• Dynamic

The buffer time changes according to the audio fluctuation.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings		
V/RoIP Settings		
Buffering Type : 46	⊖ Static	
TOS Type : 47	TOS	~
Media (RTP) Priority Level : 48		
Media (RTP) Service Type :	0	
Media (RTP) (HEX) :	E0	
Antenna	-	
Antenna Type : 49	Transceiver's Setting	~
IP Address		
IP Address Settings : 50	Transceiver's Setting	~

used, and are fixed as 0.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
V/RoIP Settings	
Buffering Type : 4 🔿 Static 💿 Dynamic	
TOS Type : 47_TOS	~
Media (RTP) Priority Level : 48 7	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : E0	
Antenna	
Antenna Type : 49 Transceiver's Setting	~
IP Address	
IP Address Settings : 50 Transceiver's Setting	~

48 Media (RTP)..... S

Select the Priority level and Service type of the sent VoIP packets. (1) The item is not displayed when [TOS Type] ((1)) is set to "Not Used."

- Media (RTP) Priority Level Set the TOS priority level to between 0 (lowest) and 7 (highest). (Default: 7)
- Media (RTP) Service Type Set the TOS service type code to between 0 and 15. (Default: 0)

Media (RTP) DSCP

Set the DSCP (Differentiated Services Code Point) code to between 0 and 63. (Default: 56)

- This item is displayed when the [TOS Type] (4) is set to "Diffserv."

V/RoIP Settings	
Buffering Type :	⊖ Static ● Dynamic
TOS Type :	Diffserv
Media (RTP) DSCP :	56
Media (RTP) (HEX) :	E0

■ Transceiver Settings [IP100H]

Transceiver Settings		
V/RoIP Settings		
Buffering Type : 🍊	⊖ Static	
TOS Type : 47	TOS	~
Media (RTP) Priority Level : 48	7	
Media (RTP) Service Type :	0	
Media (RTP) (HEX) :	E0	
Antenna	-	
Antenna Type : (49)	Transceiver's Setting	~
IP Address		
IP Address Settings : 50	Transceiver's Setting	~

49 Antenna Type	Select the antenna that the IP100H will use. (Default: Transceiver's Setting)
	 Transceiver's Setting Uses the last antenna set by the CS-IP100H or the RoIP Gateway.
	Internal Antenna Uses the internal antenna when you want to:
	 Reduce the communication range. Limit the communication area and improve security. Reduce electrical interference among WLAN transceivers. Control the communication speed in an environment where some access points are installed in a comparatively small area.
	 External Antenna Uses the external antenna. The external antenna extends the communication range.
IP Address Settings	Select the IP100H's IP settings. (Default: Transceiver's Setting)
	 Transceiver's Setting Uses the last IP setting set by the CS-IP100H or the RoIP Gateway.
	 DHCP Client Selects the DHCP Client when the IP address is automatically obtained by a DHCP server.
	IP Address IP Address Settings : DHCP Client Primary DNS Server : Secondary DNS Server :

If necessary, enter the [Primary DNS Server] or [Secondary DNS Server] settings.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP100H]

Transceiver Settings	
V/RoIP Settings	
Buffering Type : 4 🔿 Static 💿 Dynamic	
TOS Type : 47_TOS	~
TOS Type : 107 TOS Media (RTP) Priority Level : 18 7	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : E0	
Antenna	
Antenna Type : 49 Transceiver's Setting	~
IP Address	
IP Address Settings : 🧐 _ Transceiver's Setting	~

50 IP Address Settings

Static IP

Selects the Static IP address, if it is specified according to your network environment.

IP Address	
IP Address Settings :	Static IP
IP Address :	
Subnet Mask :	
Default Gateway :	
Primary DNS Server :	
Secondary DNS Server :	

- ① Enter the default gateway address, if your network connects to a different network.
- ① If necessary, enter the [Primary DNS Server] or [Secondary DNS Server] settings.

■ Transceiver Settings [IP100H]

Transceiver Settings
Maimenance
Provisioning Server : 5
Accept Reboot Command from Other 🕄 💿 Disable 🔘 Enable than the Master Controller :
SNTP Server : 53
Automatic Firmware Updating at 3 Enable (with Automatic Reboot)
Firmware Server :
SYSLOG Host IP Address : 59
SYSLOG Severity : 😏 🗆 DEBUG 🗔 INFO 🗌 NOTICE
Security Read/Write Password : 59 60 Apply Reset

⑤ Provisioning Server	 Enter an IP address or Host name of the Provisioning Server for the IP100H, of up to 63 characters. When the RoIP Gateway is used as its Provisioning Server, this entry is not necessary.
Accept Reboot Command from	·
Other than the Master Controller	 Select whether or not the IP100Hs can be rebooted by the other than the specified Provisioning Server (5). (Default: Disable) The VE-PG4, IP1000C, and IP1100CV are compatible with this function. (As of June, 2023)
SNTP Server	Enter the IP address of the device that is specified as the SNTP Server for the IP100H.
	① When the RoIP Gateway is used as its SNTP Server, this entry is not necessary.
Automatic Firmware Updating	
at Power ON	Select whether or not the IP100H will use the Automatic Update function. (Default: Enable (with Automatic Reboot))
	• Disable Disables the automatic firmware updating when the IP100H is turned ON.
	• Enable (without Automatic Reboot) When this setting is set to "Enable (without Automatic Reboot)," the IP100H works as follows.
	 The IP100H confirms the latest firmware in the RoIP Gateway when it is turned ON.
	The IP100H automatically downloads the firmware if it needs to be updated.
	The IP100H will be updated when it is turned ON again.
	• Enable (with Automatic Reboot)
	When this setting is set to "Enable (with Automatic Reboot)," the IP100H works as follows.
	1. The IP100H confirms the latest firmware in the RoIP Gateway when it is turned ON.
	 The IP100H automatically downloads the firmware if it needs to be updated.
	 a) The IP100H is updated automatically, and then it is rebooted. a) You can check the firmware version of the IP100H in the [TOP] menu.

Fransceiver Controller	 Transceiver Settings > 	Transceiver Settings
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■ Transceiver Settings [IP100H]

Transceiver Settings	
Maimenance	
Provisioning Server : 5	
Accept Reboot Command from Other 52 Disable C Enable than the Master Controller :	
SNTP Server : 53	
Automatic Firmware Updating at 64 Enable (with Automatic Reboot) Power ON : 65	~
Firmware Server :	
SYSLOG Host IP Address : 59	
SYSLOG Severity : 🐬 🗆 DEBUG 🗆 INFO 🗌 NOTICE	
Security Read/Write Password : ⁵⁸	Apply Reset

5 Firmware Server	 Enter an IP Address or Host name of the Firmware Server for the IP100H, of up to 63 characters. ① When the RoIP Gateway is used as its Firmware Server, this entry is not necessary.
SYSLOG Host IP Address	Enter the SYSLOG host's address. ① The host device must have the SYSLOG server function.
SYSLOG Severity	Select the log information to send to the SYSLOG host. The SYSLOG host is sent to another host that is set in the [SYSLOG Host IP Address] (6). (Default: DEBUG INFO NOTICE) ① Enter a check mark to send the log entries.
Read/Write Password	Enter a password of up to 16 characters. The password is used when reading from, or writing to the IP100H, or updating the firmware using the CS-IP100H*. * CS-IP100H is the cloning software for the IP100H, and can be downloaded from the Icom website.
S S	 Click to apply the entries. ① Some parts of the entries are displayed in [Transceiver Setting List], such as the Transceiver Model, Name, Unit ID, Use ID List, Area Call, Message, and Status.
<pre>60 < Reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Individually assign the functions, or set the receive notification tone to a registered IP110H. ① After the setting is completed, you must reboot the IP110H.

Transceiver Settings			
	Unit ID :	00103 (Sales3)	~
	Transceiver Model :	IP110H	
Display			
	Display Item : 2	Date and Time O Name	
	Back Light : 3	Auto	~
	Back Light Brightness :	◯ Dark	
	Contrast :5	8	*
	Name for All Call :6		
	Startup Comment :		

1 Unit ID	 Only the The ind 	e IP110H's Individual number (Name) that yo e individual numbers of the WLAN transceiver are ividual number that the [Transceiver Model] on the ation] screen is set to "IP100FS," cannot be select	e selectable. e [Transceiver
Display Item	Name in f If the [N	ether or not the IP110H displays the Date ar the standby mode. (Defau ame] on the [Transceiver Registration] screen ha s setting is set to [Name], the IP110H displays the	It: Date and Time) s not been entered,
3 Back Light	Select the	e IP110H backlight function.	(Default: Auto)
	• OFF:	The backlight does not light.	
	• ON:	The backlight lights continuously.	
	• Auto:	The backlight lights when an operation is perform after 5 seconds.	ned, and goes out
4 Back Light Brightness	Select the	e screen backlight brightness from Dark and	Bright. (Default: Bright)
5 Contrast	Set the so	creen contrast to between 1 (the lowest) and	16 (the highest). (Default: 8)
6 Name for All Call	Enter a na	ame for All call of up to 5 characters, if neces	ssary.
Startup Comment		omment of up to 8 characters. The comment IP110H boots up.	is displayed

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings
Transmission
TX Inhibit 8 🖲 Disable 🔿 Enable
PTT Lock 🧐 🖲 Disable 🔿 Enable
One Touch PTT :10 🖲 Disable 🔿 Enable

8 TX Inhibit	 Select "Enable" to inhibit the IP110H's transmission. (Default: Disable) When this setting is set to "Enable," the IP110H also cannot transmit with an optional microphone, or using the VOX function. 	
9 PTT Lock	 Select "Enable" to lock the IP110H's PTT switch. (Default: Disable) When this setting is set to "Enable," the IP110H cannot transmit by holding down its PTT switch, but it can transmit with an optional microphone or using the VOX function as well. 	
One Touch PTT	Select whether or not to enable the One Touch PTT function. (Default: Disable) This function enables you to push [PTT] to transmit and push again to	
	standby, so you can transmit without continuously holding down [PTT].	

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		_
Destination ID	UISADIE OTE	\sim
	O Disable	
Use ID List :12	O Disable Enable	
Default Destination ID :	All	~
Add All Call to ID List :	O Disable 🔘 Enable	
Default Talkgroup :14	Disable Enable	
5 5	10	~
Ringer and Vibration :16 Notice Tone(Except Reception Notice)	Notification Beep	~
Volume :	10	~
Function Settings		
Communication Method :	○ Simplex	

<pre>① PTT Call at Stand-by</pre>	Select whether or not the IP110H displays the Dest in the standby mode.	ination ID (Call type) (Default: Enable)
	 Disable: The Destination ID (Call type) is not dis standby mode. The Destination ID (Call type) is displayed ID using the function keys. 	
	 Enable: The Destination ID (Call type) is display mode. ① When the PTT on the IP110H is pushed, displayed ID (Call type). 	
12 Use ID List	Select whether or not the IP110H uses the ID list.	(Default: Disable)
	 Disable: The call type is fixed to that which is selected in the [Call Type], a shown below, even if you push the [m CLR] key on the IP110H. (i) If you set the Call Type to "Individual" or "Group," enter a destination I between 1 to 60000 in the [Destination ID]. (Defaultion is selected, the IP110H displays a received ID in the III Use ID List: Disable Enable Call Type: Enable: 	
	The call type is changed by pushing the $[m]$ CLR]	key or selecting in

the menu screen on the IP110H. Select Default Destination ID from All, or an ID number (1 to 500) that is displayed when the IP110H is turned ON, in [Call type]. ① The ID list is selected on the [Common Setting] screen.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		_
Destination ID	DISADJE	\sim
PTT Call at Stand-by :🕕	○ Disable	
Use ID List :12	O Disable Enable	
Default Destination ID :	All	~
Add All Call to ID List :	O Disable Enable	
Default Talkgroup :14	Disable Enable	
Ringer Settings		
Volume :15	10	~
Ringer and Vibration :	Notification Beep	~
Notice Tone(Except Reception Notice)		
Volume :1	10	~
Function Settings		
Communication Method 18	○ Simplex ● Full-Duplex	

Add All Call to ID List	Select whether or not to display All Call in the ID list of the IP110H. (Default: Enable)
	 Disable Does not display "All" in the ID list. ① When "Disable" is selected in [Add All Call to ID List], you cannot select an All call using the [m CLR] key.
	 Enable When [Use ID List] (12) is set to "Enable," set [Add All Call to ID List] and [Default Talkgroup].
Default Talkgroup	Select a Talkgroup if you want to set the IP110H to join a Talkgroup when you turn ON the power. (Default: Disable)
	• Disable The IP110H starts up without joining any Talkgroup. The ID that is set in the "Default Destination ID" in [Use ID List] (12) is displayed when the IP110H is turned ON.
	 Enable The IP110H joins the selected Talkgroup when it is turned ON. ① When [Use ID List] (12) is set to "Disable," this item is not displayed.
	Default Talkgroup : O Disable Enable Call ID : 13 (TG1) ✓

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		_
Destination ID	SAUTE	\sim
PTT Call at Stand-by :🕕 🔿 Dis	sable 🔘 Enable * The last-used ID display is hidden, if disabled.	
Use ID List :12 O Dis	sable 🖲 Enable	
Default Destination ID : All		~
Add All Call to ID List : 🚺 🔿 Dis	sable 🖲 Enable	
Default Talkgroup :14 🖲 Dis	sable 🔿 Enable	
Ringer Settings		
Volume : 15 _ 10		~
Ringer and Vibration 16 Notif	ication Beep	~
Notice Tone(Except Reception Notice)		
Volume : 10		~
Function Settings		
Communication Method 1 🛛 Sir	mplex 🖲 Full-Duplex	

Ringer Settings

Volume	 Set the beep level when the IP110H receives a Call or message to between 0 and 32. (Default: 10) ① When this setting set to "0," the notification beep is turned OFF. ① The notification beep is individually set for the Call type or message in [Notification Tone] on the [Profile] screen in the [Common Settings] menu.
Ringer and Vibration	Set the action when the IP110H receives a Call or message to "Notification Beep," "Vibration" or "Notification Beep + Vibration." (Default: Notification Beep)
	• Notification Beep When the IP110H receives a Call or message, the specified Notification beep sounds, depending on the Call or message. The notification beep is set in [Notification Tone] on the [Profile] screen in the [Common Settings] menu.
	 Vibration When the IP110H receives a Call or message, it vibrates for notification.
	Notification Beep + Vibration

When the IP110H receives a Call or message, it vibrates and the Notification beep sounds for notification.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		_
Destination ID	ile offe	
PTT Call at Stand-by 🕕 🔿 Disab	le Inable * The last-used ID display is hidden, if disabled.	
Use ID List 👥 🔿 Disab	le 🖲 Enable	
Default Destination ID :All		*
Add All Call to ID List 🔞 🔿 Disab	le 🖲 Enable	
Default Talkgroup 🚹 🔍 Disab	le 🔿 Enable	
Ringer Settings		
Volume : 10		~
Ringer and Vibration 16 Notificat	tion Beep	~
Notice Tone(Except Reception Notice)		
Volume : 10		~
Function Settings		
Communication Method 🔞 🔿 Simpl	ex Full-Duplex	

🕡 Volume

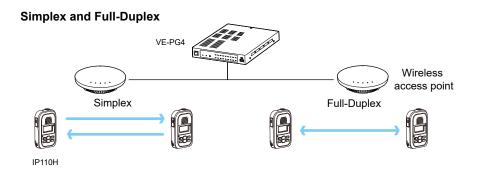
(Except Reception Notice)

Set the beep level when the IP110H is transmitting a Call or connecting to the RoIP Gateway, to between 0 and 32. (Default: 10)

- ① When this setting is set to "0," the notification beep is turned OFF.
- ① Depending on the [Common Settings], the IP110H sounds a beep when the IP110H is transmitting or connecting to the RoIP Gateway.
- **18** Communication Method ...
- Select the communication method that the IP110H uses.

(Default: Full-Duplex)

- **Simplex:** Toggles the transmission (Talker) and reception (Listener) for communication.
- Full-Duplex: Simultaneously transmits and receives, like a telephone.
 With the Full-Duplex communication, you can transmit and receive like a telephone, even while the destination is transmitting.



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		_
Voiuithe		\sim
Function Settings		
Communication Method : 🛽 🛛 🕬	Simplex Full-Duplex	
Priority Call 📵 🔘	Disable 🔘 Enable	
Area Call :2 💿	Disable 🔿 Enable	
Message :20	Disable Enable	
Default Message : 1	(Gather immediately.)	~
Status 🙋 🖲	Disable 🔿 Enable	
Minimum Audio Level 23 _0		~
Mixing of Low Priority Call 24 🖲	Disable 🔿 Enable	
Bluetooth 25 〇	Disable 💿 Enable	
Bluetooth Auto Connect : 26 〇	Disable Enable	
Voice Recording : 27 🔍	Disable 🔿 Enable	
Fix Call Destination		
Fix Call Destination 28 _Di	isable	*

Priority Call

Select whether or not the IP110H uses Priority Call.

(Default: Disable)

The priority levels of the Call types are in the following order.

Priority level			Priority Call	Remarks
High		Telephone		For telephone communication
	Fixed	Emergency (High)	Enable	_
		Emergency (Normal)	Disable	—
		All Call (High)	Enable	Includes the Area Call or using an IP100FS
	Selectable*	Individual Call (High)	Enable	Includes using an IP100FS
		Group Call (High)	Enable	Includes the Area Call or using an IP100FS
		All Call (Normal)	Disable	Includes the Area Call
\downarrow		Individual Call (Normal)	Disable	—
Low		Group Call (Normal)	Disable	Includes the Area Call

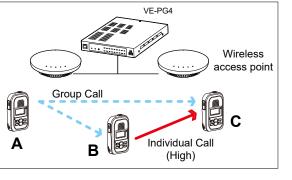
* Selectable in the Call Type Priority in the [RoIP Server] screen in the [RoIP Server Settings] menu.

Priority is given to the first call between calls with the same priority level.
 When a set is taken arises to the setting of the setting.

 $\ensuremath{\textcircled{}}$ When a call is taken, priority is given to the setting of the caller.

Example:

Even while B and C are talking on a Group Call from A, B can make an Individual Call (High) to C. In this case, the Group Call is canceled.



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Voium		\sim
Function Settings		
Communication Method :) Simplex Full-Duplex	
Priority Call (19	🖲 Disable 🔘 Enable	
Area Call 20	🖲 Disable 🔿 Enable	
	🔿 Disable 🔘 Enable	
Default Message :	1 (Gather immediately.)	~
Status 2	🖲 Disable 🔿 Enable	
Minimum Audio Level 23	0	~
Mixing of Low Priority Call 24	🖲 Disable 🔿 Enable	
Bluetooth 25	🔿 Disable 🔘 Enable	
Bluetooth Auto Connect 26	🔿 Disable 🔘 Enable	
Voice Recording 20	🖲 Disable 🔿 Enable	
Fix Call Destination		
Fix Call Destination 28	Disable	~

20 Area Call

Select whether or not the IP110H uses Area Call.

(Default: Disable)

When the IP110H calls All Call or Group Call using the Area Call function, it calls only other IP110Hs in the area that is connected to the same wireless access point.

When the BSSID that IP110H is connecting is registered in [Area Setting] (Transceiver Controller > RoIP Server Settings > Area Call), this function is activated.

VE-PG4 • • • • Sales Parts Accounts :83 IP110H All Call

IP110H makes an All Call with the Area Call function

IP100FS calls the All Call with the Area Call function

Location	▼ ₽ ×	Operation	
For Sales	E	Display Sending All Area For Sales Call	Mess



The wireless access points that the IP110H is included in with the Area Call function are set on the [Area Call] screen in the [RoIP Server Settings] menu. (Example: For Sales and For Accounts)

When the IP100FS uses Area Call function, the IP100FS can call IP110Hs that are in the communication range of the access points assigned to the Area Call. When the access point is selected in the [Location], the Call type (Individual, Group, All, Area, or Telephone) and names are displayed.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Voiume		\sim
Function Settings		
Communication Method 18	○ Simplex ● Full-Duplex	
Priority Call 19	Disable Enable	
Area Call 20	Disable Enable	
Message 2	O Disable 🔘 Enable	
Default Message :	1 (Gather immediately.)	*
Status 22	Disable O Enable	
Minimum Audio Level :23	0	~
Mixing of Low Priority Call 24	Disable Enable	
Bluetooth (25)	○ Disable	
Bluetooth Auto Connect : 26	O Disable Enable	
	Disable Enable	
Fix Call Destination		
Fix Call Destination 28	Disable	~

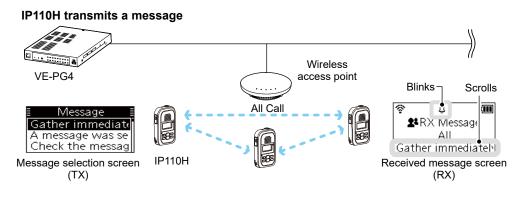
2 Message

Select whether or not the IP110H can send messages.

(Default: Disable)

When "Enable" is selected, you can select a message from the menu screen on the IP110H.

- ① Up to 10 messages of 32 characters or less can be programmed on the [Messages] screen in the [Common Settings] menu.
- ③ Select the message number 1 to 10 in [Default Message] that is registered on the [Message] screen.



IP100FS transmits a message

Operation			
Display All	Message	Remote Lock	The IP100FS can store up to 100 messages in each site.
f	Gather immediate	Remote Unlock	You can edit the stored messages.
Selected Call type	Selected or edited message	Remote Monitor	

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

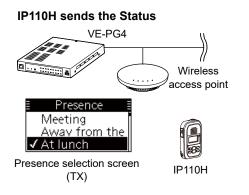
Transceiver Settings		
Volume		\sim
Function Settings		
Communication Method :	◯ Simplex	
Priority Call :19	Disable	
Area Call :20	Disable	
Message :2	🔿 Disable 🔘 Enable	
Default Message :	1 (Gather immediately.)	~
Status :22	Disable	
Minimum Audio Level :23	0	~
Mixing of Low Priority Call : 24	Disable	
Bluetooth :25	🔿 Disable 🔘 Enable	
Bluetooth Auto Connect : 26	🔾 Disable 🔘 Enable	
	Disable	
Fix Call Destination		
Fix Call Destination : 28	Disable	~

2 Status

Select whether or not the IP110H can send Status information. (Example: At lunch, Meeting, Waiting) (Default: Disable) When "Enable" is selected, you can select a status from the menu screen on the IP110H.

Up to 10 statuses of 32 characters or less can be entered on the [Status] screen in the [Common Settings] menu.

① The status that the IP110H sends can be displayed on the [Transceiver Management] screen in the [Transceiver Settings] menu or the One-Touch button of the IP100FS.



IP100FS One-Touch button

All Call	Sales group 1 11	Sa
Sales 1 1 [2] At lunch	Sales 2 2 [5] At the desk	

Name, Destination ID, Status number and Status information

VE-PG4 Transceiver Management screen

Transceiver Management

🗆 Ali	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current Status	Talkgroup
	1	IP110H	Sales1	00001	Connected	192.168.0.201	At lunch	1
	2	IP100H	Sales2	00002	Connected	192.168.0.202	At the desk	1
	3	IP100H	Sales3	00003	Disconnected	-	-	-
	50	IP100FS	IP100FS	00050	Disconnected	-	-	-

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Volume		\sim
Function Settings		
Communication Method 🔞 🤇) Simplex 🔘 Full-Duplex	
Priority Call :19	🖲 Disable 🔘 Enable	
Area Call : 2 🌘	Disable	
Message :21	🔿 Disable 🔘 Enable	
Default Message :	1 (Gather immediately.)	~
Status 22	🖲 Disable 🔿 Enable	
Minimum Audio Level :23 _	0	~
Mixing of Low Priority Call : 24	🖲 Disable 🔿 Enable	
Bluetooth : 25	🔿 Disable 🔘 Enable	
Bluetooth Auto Connect : 26	🔿 Disable 🔘 Enable	
	🖲 Disable 🔿 Enable	
Fix Call Destination		
Fix Call Destination 28 _	Disable	~

²³ Minimum Audio Level

Wixing of Low Priority Call

Set the settable minimum audio level on the IP110H to between 0 and 32. (Default: 0)

Select whether or not the IP110H receives Mixed audio.

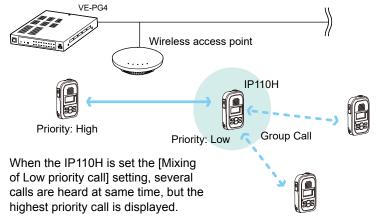
(Default: Disable)

When this setting is set to "Enable," the RoIP Gateway sends the mixed audio of all calls that call the IP110H.

① The IP110H displays the called station that has the highest priority in the mixed audio.

See page 6-59 for details of the Priority level.

Mixing of Low priority call



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Volume		\sim
Function Settings		
Communication Method 18) Simplex 🔘 Full-Duplex	
Priority Call 🗐 🆲	Disable 🔿 Enable	
Area Call 2 🖲	Disable 🔿 Enable	
) Disable 🔘 Enable	
Default Message :	1 (Gather immediately.)	~
Status : 🕰 🔍	Disable 🔿 Enable	
Minimum Audio Level :23 _	0	~
Mixing of Low Priority Call 24	Disable 🔿 Enable	
Bluetooth :25) Disable 🔘 Enable	
Bluetooth Auto Connect 26) Disable 🔘 Enable	
Voice Recording 20	Disable 🔿 Enable	
Fix Call Destination		
Fix Call Destination 28	Disable	~

Bluetooth	Select whether o	r not to use the Bluetooth function.	(Default: Disable)
Bluetooth Auto Connect	· · · ·	is set to "Enable," select whether or ction with the paired Bluetooth device	
Voice Recording	If enabled, you ca menu screen on	r not to record the transmitted and re an turn the recording function ON or the IP110H. of call to be recorded, only Individua	(Default: Disable) OFF from the
	Voice Recording : Recording Call Type : ation Fix Call Destination :	Disable Enable Individual Call Individual Call All	~

The maximum record time is 4 minutes, and up to 10 files can be saved.

① For full-duplex calls, only the received audio is recorded.
① You cannot download the audio data from the transceiver.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings [IP110H]

Transceiver Settings		
	Disable mole	\mathbb{N}
Bluetooth Auto Connect : 26) Disable 🔘 Enable	
Voice Recording 27	🖲 Disable 🔿 Enable	
Fix Call Destination		
Fix Call Destination : 😢 _	Disable	~

8 Fix Call Destination

Select whether or not the IP110H uses the Fix Call Destination function. (Default: Disable)

When this setting is set to other than "Disable," the IP110H calls the preset destination instead of the selected destination that is displayed on the third line. The Fix Call Destination function separates the fixed call from the general calls by the specified method to start transmission.

Disable

The Fix Call Destination is not specified, and the IP110H calls the selected destination.

• PTT

The Fix Call Destination is specified as PTT transmission. When [PTT] is held down, the IP110H calls the preset destination.

Fix Call Destination			
Fix Call Destination :	PTT		
Call Type :	All		
71			

(Example: All call is specified to the PTT)

Earphone Mic or Headset

The Fix Call Destination is specified as the external Mic transmission. When the external microphone's PTT switch is held down, or its VOX function is active, the IP110H calls the preset destination.

Fix Call Destination	
Fix Call Destination :	Earphone Mic or Headset
Call Type :	Group
Destination ID :	00001
Dootandator iD .	

(Example: Group call is specified to the Earphone Mic or Headset)

(i) Information

- Set the Call type to "Individual," "Group," or "All."
- When the "Call Type" is set to "Individual" or "Group," enter the Individual ID or Group ID between 00001 to 60000 in the [Destination ID].
- The Destination ID, Name (if [Name] is selected in the [Display Item] (2)) or Call type of the Fix Call Destination is always displayed on the above of the Default call destination.
- When both of the IP110H's [PTT] and the PTT switch of an external microphone such as an optional microphone or a Bluetooth headset are held down, the external PTT has priority and the internal microphone will be muted.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		\sim
P1:29	No Function	~
P2 :	No Function	~
P3 :	No Function	~
P4 :	No Function	~
P5 :	No Function	~
Clear Down during Telephone Call :30 Target Availability Check	O Disable Enable	
Target Availability Check : Key-Touch Beep	O Disable Enable	
Key-Touch Beep : 32	O Disable 🔘 Enable	
Key-Touch Beep Level :	10	~
Microphone	-	
Gain :	<u> </u>	✓ dB



Assign "Message," "One Touch," "Clear Down," "Mute," "Emergency," "Playback Recording," "Temporary Audio Level," or "No Function" to a IP110H's Programmable key ([P1] to [P5]).

① When this setting is set to "No Function," nothing changes by holding down the programmable key in the standby mode.

• Message

Holding the programmable key for 1 second displays the Message selection screen.

③ Select the message number 1 to 10 in the "Message No." item that registered on the [Message] screen.

Programmable Key Settings	
P1:	Message
Message No. :	1 (Gather immediately.)

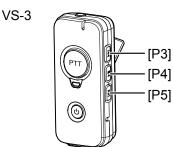
One Touch

Holding the programmable key for 1 second selects a specified Call type and destination ID or phone number.

Specify the "Individual," "Group," "All," or "Telephone" Call type.
When "Individual" or "Group" is selected, enter the Individual ID (00001 ~ 60000) or Group ID (00001 ~ 60000) in the "Destination ID" item.

① When "Telephone" is selected, enter up to 31 numbers and symbols (#, *) in the "Destination Phone Number" item.

Programmable Key Settings		
P1 :	One Touch	
Call Type :	Individual	
Destination ID :	Individual	
P2 :	Group	
P3 :	All Telephone	
	No Eurotion	



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		
P1:29	No Function 🗸	
P2 :	No Function 🗸	
P3 :	No Function 🗸	
P4 :	No Function 🗸	
P5 :	No Function 🗸	
Clear Down during Telephone Call :30 Target Availability Check	O Disable	
Target Availability Check : Key-Touch Beep	O Disable	
Key-Touch Beep : 32	🔿 Disable 🔘 Enable	
Key-Touch Beep Level :	10 ~	
Microphone	0 v dB	
Gain :	0 v dB	

29 [P1] ~ [P5]



VS-3

Clear Down

Holding the programmable key for 1 second terminates the phone call with an IP phone.

① You can assign another function, if you select "Enable" on the [Clear Down during Telephone Call] (p. 6-70) item.

Programmable Key Settings		
	P1:	Clear Down

• Mute

Hold down the programmable key for 1 second when you want to mute the received audio. (The Notification beep cannot be muted.) Hold down a programmable key for 1 second to turn the mute function ON or OFF.

- ① You can turn OFF the mute function by pushing [PTT]. However, if you select "Enable" in the [Clear Down during Telephone Call] (p. 6-70) item, terminates the phone call in the phone call.
- If you select "Enable" in the [Mute Automatic Release] item, turn OFF the mute function after specified time period has passed. (Default: Disable) If you select "Enable," set the time period to release the mute function to between 10 to 600 (seconds). (Default: 60 (seconds))

Programmable Key Settings

P1:	Mute
P2 :	No Function
P3 :	No Function
P4 :	No Function
P5 :	No Function
Mute Automatic Release : Mute Automatic Release Timer :	O Disable Enable 60

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		\sim
P1:29	No Function	~
P2 :	No Function	~
P3 :	No Function	~
P4 :	No Function	~
P5 :	No Function	~
Clear Down during Telephone Call :30 Target Availability Check	O Disable Enable	
Target Availability Check : Key-Touch Beep	O Disable Enable	
Key-Touch Beep 32	🔿 Disable 🔘 Enable	
Key-Touch Beep Level :	10	~
Microphone	-	dP
Gain :33	U	✓ dB

❷ [P1] ~ [P5]

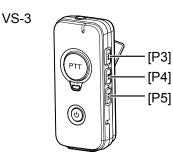


Emergency

Hold down the programmable key until "Emergency" is displayed to send an emergency call.

When the emergency call is sent, an alarm sounds. The emergency call is canceled and the alarm stops when the transceiver receives a response or the programmable key of the transceiver is held down.

① The time of period for which the key must be held down to turn the emergency function ON or OFF is set in the [Emer SW ON Timer] item or [Emer SW OFF Timer] item (p. 6-78).



NOTE:

The RoIP Gateway should not be used when high reliability is necessary.

The communication cannot be made, depending on the environment around the RoIP Gateway, such as the consumption of a battery, the signal environment, or the access point or network status.

Use the [Emergency] and [Lone Worker] functions as a supplementary function.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		
P1:29	No Function	~
P2 :	No Function	~
P3 :	No Function	*
P4 :	No Function	*
P5 :	No Function	~
Clear Down during Telephone Call :30 Target Availability Check	◯ Disable ● Enable	
Target Availability Check : Key-Touch Beep	O Disable	
Key-Touch Beep : 32	O Disable 🔘 Enable	
Key-Touch Beep Level :	10	~
Microphone	-	-D
Gain :33	0	✓ dB

29 [P1] ~ [P5]



Playback Recording

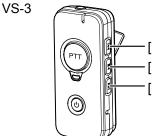
Holding down the programmable key for 1 second displays the recorded log screen. Select and push [ENT] on the IP110H to start playing back the recorded audio.

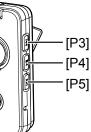
Temporary Audio Level

Holding down the programmable key for 1 second increases or decreases the Audio output volume, based on the current volume on the IP110H.

Select the increasing or decreasing level to between "-32" and "+32" or "0" (disabled).







Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		\sum
P1:29	No Function	~
P2 :	No Function	~
P3 :	No Function	~
P4 :	No Function	~
P5 :	No Function	~
Clear Down during Telephone Call :30 Target Availability Check	O Disable Enable	
Target Availability Check : Key-Touch Beep	○ Disable	
Key-Touch Beep : 32	🔿 Disable 🔘 Enable	
Key-Touch Beep Level :	10	~
Microphone	-	✓ dB
Gain :33	U	✓ dB

1 Clear Down during Telephone Call

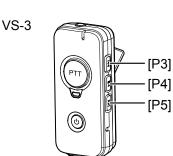
[P2]

IP110H

[P1]

Select "Enable," if you want to terminate a phone call by pushing the IP110H's programmable key. (Default: Enable)

- When the programmable key is set to "Clear Down," this item will not be displayed.
- ① Before the target telephone is picked up, or during phone call, pushing the programmable key terminates the phone call.
- The IP110H can terminate the phone call only when a telephone calls the IP110H individually, or when the IP110H calls a telephone.



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		
P1:29	No Function	~
P2 :	No Function	~
P3 :	No Function	~
P4 :	No Function	~
P5 :	No Function	~
Clear Down during Telephone Call :30 Target Availability Check	O Disable Enable	
Target Availability Check : Seep Key-Touch Beep	O Disable Enable	
Key-Touch Beep :32	🔿 Disable 🔘 Enable	
Rey-Touch Deep Level.	10	~
Microphone Gain :33	0	✓ dB

Target Availability Check	 Select whether or not the IP110H displays a confirmation after it makes an Individual Call. (Default: Enable) When "Enable" is selected, the IP110H displays the "Connected," "Busy," or "No response" connection status. When the target station is out of range, "No response" is displayed. If the [Connection Notice Tone] is set to "Enable," the Success Tone or Failure Tone sounds to notify its connection status. (Transceiver Controller > Common Settings > Profile > Profile > Connection Notice Tone)
8 Key-Touch Beep	Select whether or not the IP110H sounds the Key-Touch beep. (Default: Enable)
	When "Disable" is selected, the IP110H does not sound the confirmation beep when a key is pushed.
	 Key-Touch Beep Level
	Set the volume level of the notification beeps when the IP110H's key is pushed. (Default: 10)
	The selectable range is between 0 and 32.
	When "0" is selected in this setting, the IP110H does not sound any beep, even if the volume level is set.

① When "Disable" is selected, this setting is grayed out and the volume level cannot be changed.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Programmable Key Settings		\sim
P1:29	No Function	~
P2 :	No Function	~
P3 :	No Function	~
P4 :	No Function	~
P5 :	No Function	~
Clear Down during Telephone Call :30 Target Availability Check	O Disable Enable	
Target Availability Check : 30 Key-Touch Beep	O Disable Enable	
Key-Touch Beep : 32	O Disable Enable	
Key-Touch Beep Level :	10	~
Microphone	-	🖌 dB
Gain :	U	▼ 0D

33 Gain

Adjust the microphone sensitivity.

(Default: 0 (dB))

Range: -12 (low) ~ 12 (high) dB, in 3 dB steps.
When the noise level around the IP110H is high, set to low sensitivity and speak in a slightly louder voice that makes listening easier. Or when the noise level around the IP110H is quiet, set to high sensitivity and speak in smaller voice that makes listening easier.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings	
Headset/Earphone Mic	
	🔿 Disable 🔘 Enable
VOX : 65	Earphone Mic * The VOX will be disabled when the Internal Mic. is selected during the duplex communication.
Attack Time :36	50 milliseconds
Release Time :37	200 milliseconds
Voice Delay 38	200 milliseconds
VOX Threshold :39	40 %
Sidetone :40	Isable O Enable
Echo Canceller: (4)	O Disable Enable

Noise Canceller	Select whether or not to use the noise canceller function, reduces the environmental noise and the destination can voice clearer. This setting commonly effects to the internal microphone microphone, and headset.	hear your
39 VOX	 Select whether or not the IP110H can use the VOX (voice transmission) function. (D The transceiver has a VOX function, which allows hands ① Turn OFF the IP110H before connecting and disconnecting a microphone or headset. ① When you select other than "Disable," the setting items from "VOX Threshold" are displayed. ① The VOX function is not usable when you select "Internal Mit transceiver that is set to the Full-duplex communication. 	efault: Disable) free operation. he earphone "Attack Time" to
Image: Second system VOX: Enable	Adjust the Attack time. • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps When audio from a headset microphone is input for this s the IP110H starts transmitting.	(Default: 50)
37 Release Time VOX: Enable	Adjust the Release time. • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps The release time is amount of time the transmitter stays stop speaking.	(Default: 200) ON after you
Image: Second system Image: Second system VOX: Enable Image: Second system	Adjust the Voice Delay time to prevent clipping of the first after you begin speaking.Range: 0 ~ 500 (milliseconds) in 5 millisecond steps	t few syllables (Default: 200)
Image: Second system VOX: Enable	Adjust the VOX Threshold level. • Range: 0 ~ 100 (%) ① The lower values make the VOX function more sensitive to y	(Default: 40) vour voice.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
		\sim
Headset/Earphone Mic		
Noise Canceller : 34	🔾 🔿 Disable 🔘 Enable	
VOX :35	Earphone Mic	~
	* The VOX will be disabled when the Internal Mic. is selected during the duplex communication.	
Attack Time :36	50 milliseco	nds
Release Time :	200 milliseco	nds
Voice Delay :38	200 milliseco	nds
VOX Threshold :39	40	%
Sidetone :	Disable	
Echo Canceller: (4)	O Disable Enable	

40 Sidetone Select whether or not to use the Sidetone function. (Default: Disable) When "Enable" is selected, you can hear your voice from the headset. If enabled, adjust the Sidetone level to between 0 (minimum) and 32 (maximum). (Default: 10) O Disable

Enable Sidetone : 10

Sidetone Volume :

① The Sidetone function and Echo Canceller function cannot be used together.

4 Echo Canceller

Select whether or not to enable the echo canceller function. The function reduces caused during duplex communication.

(Default: Enable)

① The Sidetone function and echo canceller function cannot be used together.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
Bluetooth Mic Settings	
Synchronous Volume : 42 O	Disable 🖲 Enable
Mic Line Switch : 43 Au	uto 🗸 🗸
	Only Headset O Headset+Speaker
Auto Disconnect : 45 🖲	Disable 🔿 Enable
Mic Level Offset : 46 10) 🗸
AF Level Offset : 47 15	5 v
Echo Canceller : 48 🔿	Disable 🖲 Enable
Input Gain : 49_0	✓ dB
Voice Delay : 50 35	milliseconds
Noise Canceller : 5	Disable 💿 Enable
Power Save (for ICOM Option) : 52 🖲	Disable 🔿 Enable
One Touch PTT (for ICOM Option) : 53 🖲	Disable 🔿 Enable
Show One Touch PTT (for ICOM Option) : 59 O	Disable 💿 Enable
PTT Beep (for ICOM Option) : 55 🔘	Disable 🔿 Enable

Synchronous Volume	Select whether or not to synchronize the audio volume level of the Bluetooth headset with the setting of IP110H. (Default: Enable When this function is enabled, you can adjust the headset audio volume on the IP110H.)
49 Mic Line Switch	Select which microphone to use while the Bluetooth headset is connected. (Default: Auto)
	• Auto: Transmits the audio from the device whose [PTT] is pushed.	
	 Radio Mic: When pushing the Bluetooth headset's [PTT], the IP110H transmits the audio from the optional microphone, if connected, or the transceiver's microphone if no optional microphone is connected. ① No audio may be transmitted, depending on the type of connected microphone and the transceiver settings. ① When pushing [PTT] on other than the Bluetooth headset, transmits the audio from the device whose [PTT] is pushed. 	
	 Bluetooth Mic: Transmits the audio from the Bluetooth headset's microphone, no matter which [PTT] is pushed. 	
	Set the audio output device while using the Bluetooth headset. (Default: Only Headset	;)
	Only Headset: Outputs the audio only to the Bluetooth device.	

• Headset+Speaker: Outputs the audio to both the IP110H and the Bluetooth device.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings	
Bluetooth Mic Settings	
Synchronous Volume : 🕢 🔿 Dis	able 💿 Enable
Mic Line Switch : 43 Auto	~
	y Headset O Headset+Speaker
Auto Disconnect : 45	able 🔿 Enable
Mic Level Offset : 46 _ 10	~
AF Level Offset : 47 _ 15	~
Echo Canceller : 48 🔿 Dis	able 💿 Enable
Input Gain : 49_0	✓ dB
Voice Delay : 50 35	milliseconds
Noise Canceller : 51 🔿 Dis	able 💿 Enable
Power Save (for ICOM Option) : 52 🔍 Dis	able 🔿 Enable
One Touch PTT (for ICOM Option) : 53 🔍 Dis	able 🔿 Enable
Show One Touch PTT (for ICOM Option) : 54 \bigcirc Dis	able 💿 Enable
PTT Beep (for ICOM Option) : 55 🖲 Dis	able 🔿 Enable

Auto Disconnect	Select whether or not to terminate the SCO (Synchronous Oriented) with the Bluetooth headset. (Def If enabled, the IP110H automatically disconnect the SCO II headset when the set period time has passed without voice output from the headset.	ault: Disable) nk to the
Mic Level Offset	Adjust the microphone level of a Bluetooth device to betwee 20 if the sensitivity of the device is extremely higher or low transceiver or external microphone.	
<pre> ④AF Level Offset </pre>	Adjust the audio output level of a Bluetooth device to betwee 22 if the output from the device is extremely higher or lower transceiver or external speaker.	
Bcho Canceller	Select whether or not to enable the echo canceller function function reduces caused during duplex communication. (De	n. The fault: Enable)
Input Gain	Set the signal echo canceller input gain when using a Blue to between –40 and 40 (dB). (De	tooth device efault: 0 (dB))
o Voice Delay	Adjust the Voice Delay time when using a Bluetooth device clipping of the first few syllables after you begin speaking. (Default: 35 (r The adjustable range is between 0 and 160 milliseconds.	e to prevent milliseconds))
Soise Canceller	Select whether or not to use the noise canceller function w a Bluetooth device. The function reduces the environmenta the destination can hear your voice clearer. (De	•

Transceiver Controller >	Transceiver Settings >	> Transceiver Settings
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Transceiver Settings	
Bluetooth Mic Settings	
Synchronous Volume : 42 O Disab	e 🖲 Enable
Mic Line Switch : 43 Auto	×
	leadset ◯ Headset+Speaker
Auto Disconnect : 45	e 🔿 Enable
Mic Level Offset : 46 10	×
AF Level Offset : 47 15	×
Echo Canceller : 48 🔿 Disab	e 🖲 Enable
Input Gain : 49_0	✓ dB
Voice Delay : 50 35	milliseconds
Noise Canceller : 5) O Disab	e 💿 Enable
Power Save (for ICOM Option) : 52	le 🔿 Enable
One Touch PTT (for ICOM Option) : 53 Disable	le 🔿 Enable
Show One Touch PTT (for ICOM Option) : 54 O Disable	le 🖲 Enable
PTT Beep (for ICOM Option) : 55 🖲 Disab	le 🔿 Enable

Power Save (for ICOM Option)	 Select whether or not to use the power saving function when using a Bluetooth device. (Default: Disable) The power saving function is temporarily disabled when a call has been received. When transmitting, push [PTT] to cancel the power saving function (a beep sounds,) and then push [PTT] again to transmit.
One Touch PTT (for ICOM Option)	Select whether or not to use the one touch PTT function when using a Bluetooth device. (Default: Disable) This function enables you to push [PTT] to transmit and push again to standby, so you can transmit without continuously holding down [PTT].
Show One Touch PTT (for ICOM Option)	 Select whether or not to display "One Touch PTT" on the transceiver's Bluetooth menu screen. (Default: Disable) ① Icom has checked the PTT operation with some 3M Peltor headsets, such as the WS Headset XP, WS ProTac XP and WS Alert XP, however, compatibility is not guaranteed.
9 PTT Beep (for ICOM Option)	Select whether or not to use the PTT beep function when using a Bluetooth device. (Default: Disable) When the function is enabled, a beep "Pi-Pa" sounds by pushing [PTT] on the Bluetooth microphone.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings		
Emergency Settings		\sim
	🔿 Disable 🔘 Enable	
Emer SW ON Timer :	r .	econds
Emer SW OFF :58	🔿 Disable 🔘 Enable	
Emer SW OFF Timer :		econds
Emergency Alert Tone : 59	🔿 Disable 🔘 Enable	
Emergency Alert Tone Volume	32	~
Call Type :	All	~
Cancel on Reply :	🔿 Disable 🔘 Enable	
Cancel by Time :63	🔿 Disable 🔘 Enable	
Time :	60 s	econds
RX Emergency Settings	-	
Alert Tone :64	🔿 Disable 🔘 Enable	
Alert Tone Volume :65	32	~
Alert Tone Action :66	Notification Beep + Vibration	~

S Emergency	 Select whether or not to use the emergency function. (Default: Disable) This function is usable only when the emergency function is assigned to a programmable key. (p. 6-66) Holding down the programmable key that the emergency function is assigned to until "Emergency" is displayed turns ON the Emergency function, and sends an emergency call to the previously set User ID. The emergency call is canceled when an RX code is received, or by holding down the programmable key for set period of time in "Emer SW OFF Timer" (See below). The time of period for which the key must be held to turn the emergency function ON or OFF is set in [Emer SW ON Timer] or [Emer SW OFF Timer]. 	
57 Emer SW ON Timer Emergency: Enable	Enter the time period for which the programmable turn the emergency function ON.	key must be held to (Default: 5 seconds)
Emer SW OFF Emergency: Enable	Select whether or not to cancel the Emergency call programmable key.	by pushing the (Default: Disable)
	When "Enable" is selected, enter the period of time programmable key must be held down to turn OFF function, between 1 and 10 seconds.	
Semergency Alert Tone Emergency: Enable	Select whether or not to sound an alarm when the emergency call is sent. When this item is set to "Disable," IP110H sends the emergency call	
Emergency Alert Tone Volume Emergency: Enable	silently, without any alert on itself. Set the audio level of the alarm to between 0 and 3	(Default: Enable) 2. (Default: 32)
Emergency: Enable		

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings		
Emergency Settings		\sim
	🔿 Disable 🔘 Enable	
Emer SW ON Timer :57	5	onds
Emer SW OFF	◯ Disable	
Emer SW OFF Timer :		onds
Emergency Alert Tone : 59	🔿 Disable 🔘 Enable	
Emergency Alert Tone Volume	32	~
Call Type :	All	~
Cancel on Reply :62	🔿 Disable 🔘 Enable	
Cancel by Time :	🔿 Disable 🔘 Enable	
Time :	60sec	conds
RX Emergency Settings	-	
Alert Tone :64	🔿 Disable 🔘 Enable	
Alert Tone Volume :65	32	~
Alert Tone Action :66	Notification Beep + Vibration	~

Call Type Emergency: Enable	 Select the call type of emergency call from Individual, Graden Telephone. If you select "Individual" or "Group," enter the destination ID If you select "Telephone," enter a Destination Phone Number characters (0–9, #, and *). 	(Default: All) (00001 ~ 60000).
Cancel on Reply Emergency: Enable	Select whether or not to cancel the emergency call when is received.	n any RX code Default: Enable)
Cancel by Time Emergency: Enable	Select whether or not to cancel the emergency call after of time has passed.	the set period Default: Disable)
	If you select "Enable," enter a time period to between 1 a seconds. (Defaul	and 255 t: 60 (seconds))
Alert Tone Emergency: Enable	Select whether or not to sound an alarm when an emerg received.	jency call is Default: Enable)
Alert Tone Volume Emergency: Enable	Enter the audio level of the alarm when the emergency of to between 0 and 32.	call is received (Default: 32)
Alert Tone Action Emergency: Enable	 Select the Action when an emergency call is received. (Default: Notification I In the [Alert Tone Action], select "Notification Beep," "Vibratio "Notification Beep + Vibration" to activate when an Emerger received. 	on," or

Transceiver Controller > Transceiver Settings > Transceiver Settings

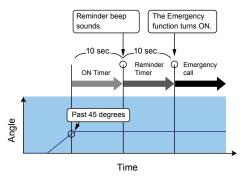
■ Transceiver Settings [IP110H]

Transceiver Settings	
Man Down Settings	
-	e 🖲 Enable
Monitoring :68 O Disable	e 🖲 Enable
ON Timer : 10	seconds
Warning : 69 O Disable	e 🖲 Enable
Reminder Timer : 10	seconds
Angle : 70 45	✓ degrees
With Stationary 📶 🖲 Disable	e 🔿 Enable
Lone Worker Settings	
	e 🖲 Enable
Lone Worker ON Timer: (7) 60	minutes
Lone Worker Reminder Timer 🐴 <u>60</u>	seconds
PTT Delay : 75 O Disable	
PTT Delay Timer : 10	x100 milliseconds
With Stationary : 76 Oisable	e 🔿 Enable

67 Man Down

Select whether or not to use the Man Down function. (Default: Disable) If the Man Down function is activated, the Emergency function is automatically turned ON after the set period of time has passed with the transceiver leaning past the preset angle.

Example: ON Timer: 10 seconds Reminder Timer: 10 seconds Angle: 45 degrees



Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings	
Man Down Settings	
Man Down :67 🔿 Disable	e 🖲 Enable
Monitoring :68 O Disable	e 🖲 Enable
ON Timer : 10	seconds
Warning :69 O Disable	e 🖲 Enable
Reminder Timer : 10	seconds
Angle : 70 45	✓ degrees
With Stationary (1) Stable	e 🔿 Enable
Lone Worker Settings	
	e 🖲 Enable
Lone Worker ON Timer 73 60	minutes
Lone Worker Reminder Timer 🙀 60	seconds
PTT Delay : 75 O Disable	
PTT Delay Timer : 10	x100 milliseconds
With Stationary 🔞 Disable	e 🔿 Enable

🚳 Monitoring/	
ON Timer	 Select whether or not to monitor for the set period of time until activating the Man Down function. If [Monitoring] is set to "Enable," set On Timer between 1 and 255 seconds. (Default: 10 seconds) When the transceiver is raised back from the preset angle towards the vertical position within this set period of time, Man Down's ON Timer is reset. After this set period of time has passed with the transceiver leaning past the preset angle, Man Down's Reminder Timer (^(B)) starts.
Warning/ Dominder Timer	Coloct whether ar not to countdown for out the nerical of time to start
Reminder Timer	 Select whether or not to countdown for set the period of time to start an emergency call transmission. If [Warning] is set to "Enable," set Reminder Timer between 1 and 255 seconds. (Default: 10 seconds) An emergency call is transmitted after this set period has passed. ① Countdown beeps sound during the timer period. ① When the transceiver is raised back from the preset angle towards the vertical position during the countdown, Man Down's ON Timer (③) and Reminder Timer are reset.
O Angle	Set the angle for the Man Down function. (Default: 45 degrees) If the transceiver leans past the set angle for the Man Down's ON Timer (6) period, Reminder Timer (6) starts. Select 45, 60, or 75 degrees.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
Man Down Settings	
Man Down :67 O Disable	Enable
Monitoring :68 O Disable	Enable
ON Timer : 10	seconds
Warning : 69 O Disable	Enable
Reminder Timer : 10	seconds
Angle : 70 45	✓ degrees
With Stationary 📶 🖲 Disable	⊖ Enable
Lone Worker Settings	
	Enable
Lone Worker ON Timer 73 60	minutes
Lone Worker Reminder Timer 🙀 60	seconds
PTT Delay : 75 O Disable	Enable
PTT Delay Timer : 10	x100 milliseconds
With Stationary : 76 Oisable	O Enable

With Stationary

Select whether or not to use the Man Down function with the Stationary function option. (Default: Disable)

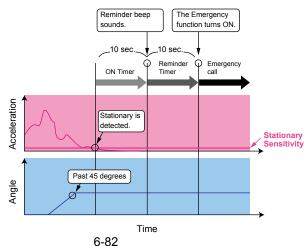
- If this item is set to "Enable," Reminder Timer (69) starts when:
- - AND

• The user is detected as stationary for the Man Down's ON Timer period. After the Reminder Timer period ends, an emergency call is transmitted.

- ① The stationary status is detected by Stationary Sensitivity (83).
- ① When the transceiver is raised back from the preset angle towards the vertical position, or when the user moves the transceiver during the Reminder Timer period of time, Man Down's ON Timer and Reminder Timer are reset.

Example:

ON Timer: 10 seconds Reminder Timer: 10 seconds Angle: 45 degrees



Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

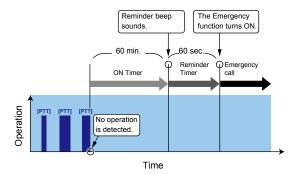
Transceiver Settings	
Man Down Settings	
Man Down :67 O Dis	sable 🖲 Enable
Monitoring : 68 O Dis	sable 💿 Enable
ON Timer : 10	seconds
Warning : 👩 🔿 Dis	sable 💿 Enable
Reminder Timer : 10	seconds
Angle : 70 45	✓ degrees
With Stationary 📶 🖲 Dis	sable 🔿 Enable
Lone Worker Settings	
Lone Worker : 🕧 🔿 Dis	
Lone Worker ON Timer (73 60	minutes
Lone Worker Reminder Timer 🙀 60	seconds
PTT Delay :75 O Dis	sable 💿 Enable
PTT Delay Timer : 10	x100 milliseconds
With Stationary 76 O Dis	sable 🔿 Enable

Lone Worker

Select whether or not to use the Lone Worker function.

(Default: Disable) If the Lone Worker function is activated, the Emergency function is automatically turned ON after the set period of time has passed with no operation.

Example: ON Timer: 60 minutes Reminder Timer: 60 seconds



Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings	
Man Down Settings	
Man Down :67 O Disable	Enable
Monitoring :68 O Disable	Enable
ON Timer : 10	seconds
Warning :69 O Disable	Enable
Reminder Timer : 10	seconds
Angle : 70 45	✓ degrees
With Stationary (1) Stable	○ Enable
Lone Worker Settings	
	Enable
Lone Worker ON Timer 73 60	minutes
Lone Worker Reminder Timer 🙀 60	seconds
PTT Delay : 75 O Disable	Enable
PTT Delay Timer : 10	x100 milliseconds
With Stationary : 76 O Disable	C Enable

Lone Worker ON Timer	 Set the period of time to activate the Lone Worker function to between 1 and 255 minutes (1 minute steps). (Default: 60 minutes) When the IP110H is operated within this set period of time, Lone Worker's ON Timer is reset. After this set period of time has passed with no operation, Lone Worker's Reminder Timer (⁽¹⁾) starts.
Lone Worker Reminder Timer	 Set the period of time to start an emergency call transmission to between 1 and 255 seconds (1 second steps). (Default: 60 seconds) An emergency call is transmitted after this set period has passed. ① Countdown beeps sound during the timer period. ① When the IP110H is operated during the countdown, Lone Worker's ON Timer (³) and Reminder Timer are reset.
⁽³⁾ PTT Delay/ PTT Delay Timer	 Set the period of time for the delay time to transmit by pushing [PTT] while Lone Worker's ON Timer (³) and Reminder Timer (³) are activated. (Default: 10 ×100 milliseconds) Set a time between 1 and 255 ×100 milliseconds (100 millisecond steps). (1) If this item is set to a long period of time, you can reset Lone Worker's ON Timer and Reminder Timer by momentarily pushing [PTT] (for a period of time less than the set time), without transmitting. (1) Hold down [PTT] for more than the selected period of time to transmit.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
Man Down Settings	
	Enable
Monitoring :68 O Disable	Enable
ON Timer : 10	seconds
Warning : 69 O Disable	Enable
Reminder Timer : 10	seconds
Angle : 70 45	✓ degrees
With Stationary 📶 🖲 Disable	⊖ Enable
Lone Worker Settings	
	Enable
Lone Worker ON Timer: (7) 60	minutes
Lone Worker Reminder Timer 🙀 60	seconds
PTT Delay : 75 O Disable	Enable
PTT Delay Timer : 10	x100 milliseconds
With Stationary : 76 Disable	O Enable

With Stationary

Select whether or not to use the Lone Worker function with the Stationary function option. (Default: Disable)

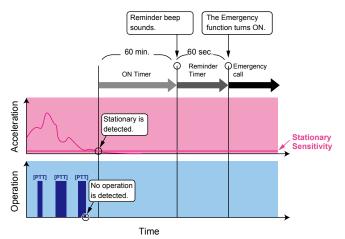
- If this item is set to "Enable," Reminder Timer (1) is started when:
- No operation occurs for Lone Worker's ON Timer (12) period. AND
- The user is detected as stationary for the Lone Worker's ON Timer period.

After the Reminder Timer period ends, the emergency call is transmitted.

- ① The stationary status is detected by Stationary Sensitivity (183).
- ① When the transceiver is operated, or when the user moves the transceiver during the Reminder Timer period, Lone Worker's ON Timer and Reminder Timer are reset.

Example:

ON Timer: 60 minutes Reminder Timer: 60 seconds



Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings		
Stationary Detection	PT-UNITS TO	
Stationary Detection :77	O Disable Enable	
ON Timer :	60	seconds
Reminder Timer	~~	seconds
Motion Detection		
Motion Detection :80	O Disable Enable	
Motion Detection Timer :	10	seconds
Reminder Timer : (8)	10	seconds
Detection Sensitivity		
Stationary Sensitivity 83	2	~
Motion Sensitivity : 84	7	~

Stationary Detection	Select whether or not to use the Stationary Detection function. (Default: Disable)			
ON Timer	 Set the period of time to activate the Stationary Detection function to between 1 and 255 seconds. (Default: 60 seconds) ① When the user is detected as stationary for this set period of time, the Stationary Detection's Reminder Timer (?) starts. ① The stationary status is detected by Stationary Sensitivity. Example: ON Timer: 60 seconds Reminder Timer: 60 seconds 			
	Reminder beep sounds. 60 sec. 0N Timer Reminder Call Stationary is detected. Stationary is detected. Stationary is			
🕲 Reminder Timer	Set the period of time to start an emergency call transmission to between 1 and 255 seconds. (Default: 60 seconds) An emergency call is transmitted after this set period has passed.			

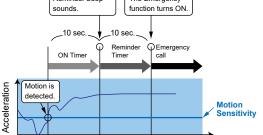
- ① Countdown beeps sound during the timer period.
- If the user moves the transceiver during the countdown, Stationary Detection's ON Timer ([®]) and Reminder Timer are reset.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings		
Stationary Detection		
Stationary Detection : 77	🔿 Disable 🔘 Enable	
ON Timer : 178	60	seconds
Reminder Timer (79		seconds
Motion Detection		
Motion Detection : 80	🔿 Disable 🔘 Enable	
Motion Detection Timer :	10	seconds
Reminder Timer : 82	10	seconds
Detection Sensitivity		
Stationary Sensitivity :83	2	~
Motion Sensitivity :84	7	~

Motion Detection	Select whether or not to use the Motion Detection function. (Default: Disable)			
Motion Detection Timer	 Set the period of time to activate the Motion Detection function to between 1 and 255 seconds. (Default: 10 seconds) ① When the user continuously moves the transceiver for this set period of time, Motion Detection's Reminder Timer (1) starts. ① The motion status is detected by Motion Sensitivity. 			
	Example: Motion Detection Timer: 10 seconds Reminder Timer: 10 seconds			



82 Reminder Timer

Set the period of time to start an emergency call transmission to between 1 and 255 seconds. (Default: 10 seconds) An emergency call is transmitted after this set period has passed. ① Countdown beeps sound during the timer period.

① When the user stops moving the transceiver during the countdown, Motion Detection Timer (③) and Reminder Timer are reset.

Transceiver Controller > Transceiver Settings > Transceiver Settings

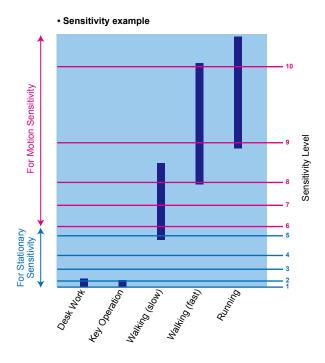
■ Transceiver Settings [IP110H]

Transceiver Settings		
Stationary Detection		
Stationary Detection : 77	O Disable Enable	
ON Timer : 78	60	seconds
Reminder Timer : 79	~~	seconds
Motion Detection		
Motion Detection :80	O Disable Enable	
Motion Detection Timer :	10	seconds
Reminder Timer : (8)	10	seconds
Detection Sensitivity		
Stationary Sensitivity :83	2	~
Motion Sensitivity : 84	7	~

8 Stationary Sensitivity

Set the acceleration sensor sensitivity to detect if the user is stationary or not for the Stationary Detection function. (Default: 2) This setting is used for the Stationary Detection function, and it determines the acceleration threshold level to activate the Stationary Detection's ON Timer (78).

If you set at higher level, the Emergency function is more easily activated. Select a level between 1 (high sensitivity) and 10 (low sensitivity).



89 Motion Sensitivity

Set the acceleration sensor sensitivity to detect whether the user is moving or not, for the Motion Detection function. (Default: 7) This setting is for the Motion Detection function, and it determines the acceleration threshold level to activate Motion Detection Timer. If you set a lower level, the Emergency function is more easily activated. Select a level between 1 (high sensitivity) and 10 (low sensitivity).

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
	\sim
V/RoIP Settings	
Buffering Type :85 🔿 Static 💿 Dynamic	
TOS Type : 66 TOS	*
Media (RTP) Priority Level 🔞 7	
Media (RTP) Service Type :0	
Media (RTP) (HEX) : E0	
IP Address	
IP Address Settings 88 Transceiver's Setting	~

85 Buffering Type

Select the buffer type to control any interrupted sound.

(Default: Dynamic)

Static

The buffer time is set [Receive Buffer Size]. Set the buffer time to between 20 and 500 milliseconds to keep the audio from breaking up. A shorter value improves the delay, but it may frequently break the audio signal.

Buffering Type :	Static O Dynamic
Receive Buffer Size :	40
TOS Type :	TOS

• Dynamic

The buffer time changes according to the audio fluctuation.

 Image: Select the TOS (Type-Of Service) format.
 (Default: TOS)

 Image: Not Used: The TOS function is disabled.

- **TOS:** Sends the 8 bit VoIP packets to the TOS field in the IP header using the TOS format. Sets to between 1 (lowest) and 3 bits (Priority level) or 4 and 7 (highest) bits (Type of Service), based on the RFC1349. The 1 bit remaining is not used, and is fixed as 0.
- Diffserv: Sends the 8 bit VoIP packets to the TOS field in the IP header using the Diffserv (Differentiated Service) format. Sets to between 1 and 6 bits (DSCP). The 2 bits remaining are not used, and are fixed as 0.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
	\sim
V/RoIP Settings	
Buffering Type :85 🔘 Static 💿 Dynamic	
TOS Type : 86 _ TOS	*
Media (RTP) Priority Level 🔞 7	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : E0	
IP Address	
IP Address Settings 88 Transceiver's Setting	~

1 Media (RTP).....

Select the Priority level and Service type of the sent VoIP packets. ① The item is not displayed when [TOS Type] (10) is set to "Not Used."

Media (RTP) Priority Level

Set the TOS priority level to between 0 (lowest) and 7 (highest). (Default: 7)

Media (RTP) Service Type

Set the TOS service type code to between 0 and 15. (Default: 0)

Media (RTP) DSCP

Set the DSCP (Differentiated Services Code Point) code to between 0 and 63. (Default: 56) v."

٦ (i)	This item	is displayed	when the	[TOS	Type] ((86) is	set to	"Diffser
-------	-----------	--------------	----------	------	---------	---------	--------	----------

V/RoIP Settings	
Buffering Type :	◯ Static ● Dynamic
TOS Type :	Diffserv
Media (RTP) DSCP :	56
	=0
Media (RTP) (HEX) :	E0

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
V/RoIP Settings	\smallsetminus
Buffering Type :🚯 🔿 Static 🔘 Dynamic	
TOS Type : 86 TOS	~
Media (RTP) Priority Level .87 7	
Media (RTP) Service Type :	
Media (RTP) (HEX) : E0	
IP Address	
IP Address Settings : 188 Transceiver's Setting	*

88 IP Address Settings

Select the IP110H's IP settings.

(Default: Transceiver's Setting)

Transceiver's Setting

Uses the last IP setting set by the CS-IP110H or the RoIP Gateway.

DHCP Client

Selects the DHCP Client when the IP address is automatically obtained by a DHCP server.

IP	Ad	dı	re	s	\$
IP	Ad	dı	re	s	\$

IP Address	IP Address Settings :	DHCP Client
	II Address Cettings .	
	Primary DNS Server :	
	Secondary DNS Server :	

① If necessary, enter the [Primary DNS Server] or [Secondary DNS Server] settings.

Static IP

Selects the Static IP address, if it is specified according to your network environment.

IP Address

Static IP

- ① Enter the default gateway address, if your network connects to a different network.
- ① If necessary, enter the [Primary DNS Server] or [Secondary DNS Server] settings.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings	
Maintenance	
Provisioning Server :	
Accept Reboot Command from Other than the Master Controller :	Isable O Enable
SNTP Server :	
Automatic Firmware Updating at Power ON :	Enable (with Automatic Reboot)
Firmware Server :93	
SYSLOG Host IP Address : 94	
SYSLOG Severity : 95 Security	
Read/Write Password :96 Provisioning Settings	
Initialization during provisioning 🧐	Configuration History Bluetooth Unit

Provisioning Server	 Enter an IP address or Host name of the Provisioning Server for the IP110H, of up to 63 characters. ① When the RoIP Gateway is used as its Provisioning Server, this entry is not necessary.
Accept Reboot Command from Other than the Master Controller	 Select whether or not the IP110Hs can be rebooted by the other than the specified Provisioning Server (⁽³⁾). (Default: Disable) ① The VE-PG4, IP1000C, and IP1100CV are compatible with this function. (As of June, 2023)
SNTP Server	Enter the IP address of the device that is specified as the SNTP Server for the IP110H. ① When the RoIP Gateway is used as its SNTP Server, this entry is not necessary.

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Transceiver Settings [IP110H]

Transceiver Settings	
Maintenance	
Provisioning Server : 89	
Accept Reboot Command from Other 🗐 🖲 Disable 🔿 Enable than the Master Controller :	
SNTP Server : 9)	
Automatic Firmware Updating at 🤨 Enable (with Automatic Reboot) 🗸 🗸	
Firmware Server : 93	
SYSLOG Host IP Address : 99	
SYSLOG Severity : 🤧 🗌 DEBUG 🗌 INFO 🗌 NOTICE	
Security	
Read/Write Password : 96 Provisioning Settings	
Initialization during provisioning : 🥑 🗌 Configuration 🗌 History 🗌 Bluetooth Unit	

Automatic Firmware Updating

at Power ON

Select whether or not the IP110H will use the Automatic Update function. (Default: Enable (with Automatic Reboot))

Disable

Disables the automatic firmware updating when the IP110H is turned ON.

• Enable (without Automatic Reboot)

When this setting is set to "Enable (without Automatic Reboot)," the IP110H works as follows.

- 1. The IP110H confirms the latest firmware in the RoIP Gateway when it is turned ON.
- 2. The IP110H automatically downloads the firmware if it needs to be updated.
- 3. The IP110H will be updated when it is turned ON again.

• Enable (with Automatic Reboot)

When this setting is set to "Enable (with Automatic Reboot)," the IP110H works as follows.

- 1. The IP110H confirms the latest firmware in the RoIP Gateway when it is turned ON.
- 2. The IP110H automatically downloads the firmware if it needs to be updated.
- 3. The IP110H is updated automatically, and then it is rebooted.
- ① You can check the firmware version of the IP110H on the [TOP] menu.

B Firmware Server..... Enter an IP Address or Host name of the Firmware Server for the IP110H, of up to 63 characters.

① When the RoIP Gateway is used as its Firmware Server, this entry is not necessary.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Settings	
Maintenance	
Provisioning Server : 89	
Accept Reboot Command from Other than the Master Controller :	Isable O Enable
SNTP Server :91	
Automatic Firmware Updating at Power ON :	Enable (with Automatic Reboot)
Firmware Server :93	
SYSLOG Host IP Address : 94	
SYSLOG Severity :05	
Security	
Read/Write Password :96 Provisioning Settings	
Initialization during provisioning 🧐	Configuration History Bluetooth Unit

SYSLOG Host IP Address	Enter the SYSLOG host's address. ① The host device must have the SYSLOG server function.
SYSLOG Severity	Select the log information to send to the SYSLOG host. The SYSLOG host is sent to another host that is set in the [SYSLOG Host IP Address] ((). (Default: DEBUG INFO NOTICE) () Enter a check mark to send the log entries.
Read/Write Password	 Enter a password of up to 16 characters. The password is used when reading from, or writing to the IP110H, or updating the firmware using the CS-IP110H*. * CS-IP110H is the programming software for the IP110H, and can be downloaded from the Icom website.
Initialization during provisioning	Select the item that you want to initialize the setting during provisioning. (Default: Configuration History Bluetooth Unit) ① Enter a check mark to initialize.

Transceiver Controller > Transceiver Settings > Transceiver Settings

Ā	Pres	set 98	99		100			103	
	No.			ethod		Password	External Authentication Username	Client Certificate	104
	1		EAP-TLS	~		۲		1 (Not Set) 🗸	Delet
	2		EAP-TLS	~		۲		1 (Not Set) 🗸	Delet
	3		EAP-TLS	~		۲		1 (Not Set) 🗸	Delete
	4		EAP-TLS	~		۲		1 (Not Set) 🗸	Delet
	5		EAP-TLS	~		۲		1 (Not Set) 🐱	Delet
	6		EAP-TLS	~		۲		1 (Not Set) 🐱	Delete
	7		EAP-TLS	~		۲		1 (Not Set) 🐱	Delete
	8		EAP-TLS	~		۲		1 (Not Set) 🗸	Delete
	9		EAP-TLS	~		۲		1 (Not Set) 🐱	Delete
	10		EAP-TLS	~		۲		1 (Not Set) 🐱	Delete

98 Name	Enter a name of up to 31 characters.
Authentication Method	Set a authentication method to "PEAP (MSCHAPv2)," "EAP-TTLS (MSCHAPv2)," or "EAP-TLS." (Default: EAP-TLS)
Osername	 Enter a user name for the EAP authentication of up to 63 characters. When authenticating via Windows Active Directory, enter in the "NT domain name\account name" format.
Password	Enter a password of up to 63 characters. ① This item can be set when [Authentication Method] (⑲) is set to "PEAP (MSCHAPv2)" or "EAP-TTLS (MSCHAPv2)."
External Authentication Usernar	ne
	If you use a different name for the external authentication from it for the internal authentication, enter a name of up to 63 characters. ① This item can be set when [Authentication Method] (^(g)) is set to

- (PEAP (MSCHAPv2)" or "EAP-TTLS (MSCHAPv2)."
 (D) When this item is not set, the name set in [Username] is used for the internal
- authentication and external authentication.

Transceiver Controller > Transceiver Settings > Transceiver Settings

AP	Pres	set 98	99	_	100	101		103	
	No.	Name	Authentication Meth	nod	Username	Password	External Authentication Username	Client Certificate	104
	1		EAP-TLS	~		۲		1 (Not Set) 🖌	Delete
	2		EAP-TLS	•		۲		1 (Not Set) 🗸	Delete
	3		EAP-TLS	~		۲		1 (Not Set) 🗸	Delete
	4		EAP-TLS	•		۲		1 (Not Set) 🗸	Delete
	5		EAP-TLS	~		۲		1 (Not Set) 🖌	Delete
	6		EAP-TLS	•		۲		1 (Not Set) 🗸	Delete
	7		EAP-TLS	•		۲		1 (Not Set) 🗸	Delete
	8		EAP-TLS	~		۲		1 (Not Set) 🗸	Delete
	9		EAP-TLS	•		۲		1 (Not Set) 🗸	Delete
	10		EAP-TLS	•		۲		1 (Not Set) 🗸	Delete

Client Certificate	Select one of the certificates that have been registered in [Certificate Management]. (1) This item can be set when [Authentication Method] ((9)) is set to "EAP-TLS."
<pre>@<delete></delete></pre>	Click to delete the EAP preset.
® <apply></apply>	 Click to apply the entries. ③ Some parts of the entries are displayed in [Transceiver Setting List], such as the Transceiver Model, Name, Unit ID, Use ID List, Area Call, Message, and Status.
<pre>@<reset></reset></pre>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Certificate Management [IP110H]

Set the certificate to use the EAP Preset settings.

		2	3	4			
No.	File Format	Name	Certificate File	Password			
	Certificate informat	tion			6 6		
1	PKCS12	~	Choose File Nen	٠	Apply Delete		
	Certificate is not re	gistered.					
2	PKCS12	~	Choose File Nen		Apply Delete		
	Certificate is not registered.						
3	PKCS12	~	Choose File Nen		Apply Delete		
	Certificate is not registered.						
4	PKCS12	~	Choose File Nen	۲	Apply Delete		

File Format	Select the certificate file format. • PKCS12: • PEM (Only Root Certificate):	Root Certificate and O	(Default: PKCS12) Client Certificate
2 Name	Enter a name of up to 31 charac	ters.	
3 Certificate File	Click to <choose file=""> to select</choose>	a certificate.	
Password	Enter a password of up to 127 cl ① This item can be set when [File F		CS12."
5 <apply></apply>	Click to register the certificates. (1) The previous certificates are over	written new certificates.	
6 <delete></delete>	Click to delete the registered cer	tificate.	

Transceiver Controller > Transceiver Settings > Transceiver Settings

■ Copy Transceiver Settings

The individual settings in the [Transceiver Settings] screen can be copied to another WLAN transceiver. ① IP address settings are not copied.

Copy Transceiver Settings					
	Source Transceiver	00101 (Sales1) * Select in the Unit ID of the Transceiver Settings above.			
Copy the	e Transceiver Settings to				
	00102(Sales2)				
		2 3			
		Apply			

Check Box	Enter a check mark to [All] or the [Unit ID] that you want to copy the settings to.
2 ≺Apply>	 Click to apply the entries. The entries in the [Transceiver Settings] of the Source Transceiver are copied to the transceiver settings that have a check mark in [Check Box] (1).
③ <reset></reset>	Click to reset the settings. () You cannot reset, after clicking <apply></apply>

Transceiver Controller > Transceiver Settings > Transceiver Settings

Transceiver Setting List

Display the list of the registered WLAN transceivers. ① When verifying the contents, or editing the settings, select the individual number in the Unit ID.

nsceiver Setting List							
Transceiver Model	Name	Unit ID	Use ID List	Area Call	Message	Status	
IP100H	Sales1	00101	Disable	Disable	Disable	Disable	
IP100H	Sales2	00102	Disable	Disable	Disable	Disable	
IP110H	Sales3	00103	Disable	Disable	Disable	Disable	

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

Register wireless LAN settings that are commonly used by the WLAN transceivers.

You can individually set the common settings to each registered group in [Profile] on the [Common Settings] screen. If any setting in this screen has been changed, you must reboot the WLAN transceivers.

Wi	reless LAN					
* Re	motely changes trar	nsceiver's Wireless LAN se	ettings.			
		No. : 1 2				~
		Name : 2				
		Scan Mode : 3 ☑ 11g ☑ 11a				
		Power Level : 4 High				*
	Roam	ing Threshold : 575_				✓ dBm
IP11 * Cl	I 0H earing SSID will also	clear other related setting	IS.			
	SSID 6	Authentication 7	Encryption	8	WEP Encryption Key or PSK(Pre-Shared Key)	Advanced Settings
	IP110HWPA	WPA/WPA2 V	TKIP/AES	~	PSK:	Advanced
	IP110HHPSK	WPA-PSK/WPA2- 🗸	TKIP/AES	~	PSK:	
		Open System/Sh₂ ✔	None	~	WEP:	
		Open System/Sh₂ ✔	None	~	WEP:	
		Open System/Sh⊱ ✓	None	~	WEP: •	

1 No	Select a group number between 1 and 20 to assign to the transceivers.	ne WLAN
	Up to 20 groups can be registered.	(Default: 1)
2 Name	Enter a Group name of up to 31 characters.	(Default: Blank)
3 Scan Mode	Select the frequency band that the WLAN transceiver us (Default	ses. : 🗹 11g, 🗹 11a)
	Selecting "11g" includes "11b."	
	① Access points that comply with the wireless LAN standards the WLAN transceiver.	can be used with
Power Level	Set the WLAN transceiver transmit power level to High,	Middle, or Low. (Default: High)
	When "High" is set, the transmission distance of the WLAN maximum.	transceiver is
	Or when setting to a lower level, the distance will be reduce	ed.
	① Power Level is set to a lower level when you want to:	
	Reduce the communication range.	
	Limit the communication area and improve security.	
	Reduce electrical interference among WLAN transceivers Control the communication speed in an environment when	
	 Control the communication speed in an environment when points are installed in a comparatively small area. 	re some access

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

Wi	ireless LAN						
* Re	emotely changes tran	sceiver's Wireless LAN se	ettings.				
		No. : 1 2				~	
		Name : 2					-
		Scan Mode : 3 ☑ 11g ☑ 11a					
		Power Level : 4 High				~	_
	Roami	ng Threshold : 575_				🗸 dBm	
* CI	10H learing SSID will also	clear other related setting	S.				-
	SSID 6	Authentication 7	Encryption	8	WEP Encryption Key or PSK(Pre-Shared Key)	Advanced Settings	
	IP110HWPA	WPA/WPA2 V	TKIP/AES	~	PSK:	Advanced	
	IP110HHPSK	WPA-PSK/WPA2- 🗸	TKIP/AES	~	PSK:		
		Open System/Sh⊱ ✔	None	~	WEP:		
		Open System/Sh⊱ ✔	None	~	WEP:		
		Open System/Sh⊱ ✓	None	~	WEP:		

Soaming Threshold	Set the received signal strength level when the WLAN transceiver starts roaming. The settable level is between -1 and -100 dBm. (Default: -75 (dBm)) (1) When setting to a high level (example: -50 dBm), it becomes easy to start roaming. Or when setting to a low level (example: -90 dBm), it becomes difficult to start roaming.
IP110H ③ SSID	 Enter an SSID that is the same as that of the wireless access point. Enter up to 32 characters, using numbers, symbols and letters (both lower and upper case). Be careful of the difference between lower and upper case letters. ① Information Up to 10 SSIDs can be registered. The SSID is used to separate the wireless network groups. You cannot connect to different SSID groups. If two or more wireless access points exist in the same area, each wireless network group is identified by the SSID (wireless network name). If you register two or more SSIDs, the WLAN transceiver connects to the SSID which has the strongest radio signal. For any other wireless device, this may be called ESSID. The setting data before version 2.04 automatically moves to the top of the SSID setting.

NOTE:

You cannot apply the Wireless LAN settings when:

- The setting for the same "SSID"(6) and "Encryption" (8) as that you entered already exists.
- The top of the SSID setting overlaps with other Wireless LAN (a different value is set in "No." (1)) settings.

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

' Re	emotely changes tra	ansceiver's Wireless LAN s	settings.			
		No. : 1 2				
		Name : 2				
		Scan Mode : 3 🗹 11 🗹 11	-			
		Power Level : 4 High	1			
	Roar	ning Threshold : 575				🗸 dBr
CI	10H earing SSID will als	o clear other related settin	igs.			
	SSID 6	Authentication 7	Encryption	8	WEP Encryption Key or PSK(Pre-Shared Key)	Advanced Settings
	IP110HWPA	WPA/WPA2 🗸	TKIP/AES	~	PSK:	Advanced
	IP110HHPSK	WPA-PSK/WPA2- 🗸	TKIP/AES	~	PSK: ••••••	
		Open System/Sh₂ ✔	None	~	WEP:	
		Open System/Sh₂ ✔	None	~	WEP:	
					WEP:	

IP110H (Continued) **7** Authentication

Select the authentication method that is the same as that of the wireless access point. (Default: Open System/Shared Key)

① Be sure to verify the Access point setting, because the terminals and access points cannot communicate using different authentication methods.

About authentication methods

Open System/Shared Key

When accessing a wireless access point, "Open System" and "Shared Key" are automatically recognized. If the Encryption key matches the key in the Access point, they can communicate.

Open System

When accessing a wireless access point, confirming the encryption is not necessary.

• WPA/WPA2

The "WPA" and "WPA2" authentications are automatically recognized.

• WPA-PSK/WPA2-PSK

The "WPA-PSK" and "WPA2-PSK" authentications are automatically recognized.

	Open System	Open System/	WPA	WPA-PSK			
	Open System	Shared Key	WPA2	WPA2-PSK			
None	 ✓ 	 ✓ 	-	_			
WEP RC4	 ✓ 	✓	_	_			
TKIP/AES	_	_	~	v			

The combination of the Authentication and Encryption

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

Remotely chan	es transceiver's Wireless LAN se	ttings.			
	No. : 1 2				•
	Name : 2				
	Scan Mode : 3 🗹 11g 🗹 11a				
	Power Level : 4 High				
	Roaming Threshold : 5 -75				✓ dBn
P110H Clearing SSID	Il also clear other related setting	S.			
SSID 6	Authentication 7	Encryption	8	WEP Encryption Key or 9 PSK(Pre-Shared Key)	Advanced Settings
IP110HWP	WPA/WPA2 🗸	TKIP/AES	~	PSK:	Advanced
IP110HHP	WPA-PSK/WPA2- V	TKIP/AES	~	PSK: •••••• •	
	Open System/Sh⊱ ✔	None	~	WEP: •	
	Open System/Sh⊱ ✔	None	~	WEP:	
	Open System/Sha 🗸	None	~	WEP:	

IP110H (Continued)

8 Encryption S

Select the encryption type that is the same as that of the wireless access point. (Default: None)

① Be sure to verify the access point setting, because the terminals and access points cannot communicate using different encryption.

About the encryption types

• None

- No data is encrypted.
- This option can be selected when [Authentication] (?) is set to "Open System" or "Open System/Shared Key."

• WEP RC4

It is an encryption type that can communicate when the encryption keys match.

- ① You can set the encryption key length to between 64 (40) and 128 (104) bits.
- ① You can select this option when [Authentication] (⑦) is set to "Open System" or "Open System/Shared Key."

TKIP/AES

Either the "TKIP" or "AES" encryptions are automatically recognized when connecting to a wireless access point.

① You can select this option when [Authentication] (?) is set to "WPA/WPA2" or "WPA-PSK/WPA2-PSK."

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

Re	emotely changes tra	nsceiver's Wireless LAN se	ettings.			
		No. : 1 2				<u> </u>
		Name : 2				
		Scan Mode : 3 🗹 11g 🗹 11a				
		Power Level : 4 High				<u> </u>
	Roam	ning Threshold : 575_				✓ dBm
C	10H learing SSID will also	o clear other related setting	js.			
	SSID 6	Authentication 7	Encryption	8	WEP Encryption Key or PSK(Pre-Shared Key)	Advanced Settings
	IP110HWPA	WPA/WPA2 V	TKIP/AES	~	PSK:	Advanced
	IP110HHPSK	WPA-PSK/WPA2- 🗸	TKIP/AES	~	PSK: ••••••	
	IP110HHPSK	WPA-PSK/WPA2- ↓ Open System/Sh₂ ↓	TKIP/AES None	*	PSK: Image: Constraint of the second se	
	IP110HHPSK					

 IP110H (Continued)
 WEP Encryption Key or PSK (Pre-Shared Key)

WEP Encryption Key

Enter the encryption key that is the same as that of the wireless access point.

Authentication	Encryption		WEP Encryption Key or PSK(Pre-Shared Key)	A
Open System/Share 🗸	WEP RC4 64 (40)	~	WEP: ••••••	

- ① This option can be selected when [Authentication] (?) is set to "Open System" or "Open System/Shared Key."
- ① Enter hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key length is same as the displayed digits, 10 or 26 using hexadecimal numbers, or half of the displayed digits, 5 or 13 characters using ASCII characters.

• PSK (Pre-Shared Key)

Enter the pre-shared key that is the same as that of the wireless access point.

Authentication		Encryption		WEP Encryption Key or PSK(Pre-Shared Key)	
WPA-PSK/WPA2-PSK	~	TKIP/AES	~	PSK:	۲

- This option can be selected when [Authentication] (?) is set to "WPA-PSK/WPA2-PSK."
- ① Enter hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key length is 64 digits using hexadecimal number, or 8 to 63 characters using ASCII characters.

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

Wi	reless LAN					
* Re	emotely changes tra	Insceiver's Wireless LAN	l settings.			
		No. : 1 2				~
		Name : 2				
		Scan Mode : 3 🗹				
		Power Level : 4 Hig	gh			~
	Roan	ning Threshold : 575	5			🗸 dBm
* CI	10H earing SSID will als	o clear other related sett				
	SSID 6	Authentication 7	Encryption	8	WEP Encryption Key or PSK(Pre-Shared Key)	Advanced Settings
	IP110HWPA	WPA/WPA2	✓ TKIP/AES	~	PSK:	Advanced
	IP110HHPSK	WPA-PSK/WPA2-	✓ TKIP/AES	~	PSK:	
		Open System/Sha	✓ None	~	WEP:	
		Open System/Sha	✓ None	~	WEP:	
		Open System/Sha	 None 	~	WEP:	

IP110H (Continued) **O Advanced Settings**

Displayed only when "Authentication" (7) is set to "WPA/WPA2." Click <Advanced> to display the Wireless LAN Advanced Settings window.

Select "EAP Preset No." for each IP110Hs registered on the Transceiver Settings screen, and then click <Apply>.

TRX No.	Name	EAP Preset No.	Authentication Method	Username	External Certification Username	Client Certificate
3	Sales3	1 🗸	EAP-TLS			1 (Not Set)

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

0H aring SSID will also cle	ear other related settings.			
SSID 1	Authentication 12	Encryption 13		WEP Encryption Key or PSK(Pre-Shared Key)
IP100HHPSK	WPA-PSK/WPA2-PSK 🗸	TKIP/AES	~	PSK:
	Open System/Shared I 🗸	None	~	WEP: •
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •

IP100H

1 SSID

Enter an SSID that is the same as that of the wireless access point. Enter up to 32 characters, using numbers, symbols and letters (both lower and upper case).

Be careful of the difference between lower and upper case letters.

(i) Information

- Up to 10 SSIDs can be registered.
- The SSID is used to separate the wireless network groups. You cannot connect to different SSID groups.
- If two or more wireless access points exist in the same area, each wireless network group is identified by the SSID (wireless network name).
- If you register two or more SSIDs, the WLAN transceiver connects to the SSID which has the strongest radio signal.
- For any other wireless device, this may be called ESSID.
- The setting data before version 2.04 automatically moves to the top of the SSID setting.

NOTE:

You cannot apply the Wireless LAN settings when:

- The setting for the same "SSID"(1) and "Encryption" (13) as that you entered already exists.
- The top of the SSID setting overlaps with other Wireless LAN (a different value is set in "No." (1)) settings.

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

0H aring SSID will also cle	ear other related settings.				
SSID 1	Authentication 12	Encryption 13		WEP Encryption Key or PSK(Pre-Shared Key)	14
IP100HHPSK	WPA-PSK/WPA2-PSK 🗸	TKIP/AES	~	PSK:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲
	Open System/Shared I 🗸	None	~	WEP:	۲

IP100H (Continued)

Authentication

Select the authentication method that is the same as that of the wireless access point. (Default: Open System/Shared Key)

 Be sure to verify the Access point setting, because the terminals and access points cannot communicate using different authentication methods.

About authentication methods

• Open System/Shared Key When accessing a wireless access point, "Open System" and "Shared Key" are automatically recognized. If the Encryption key matches the key in the Access point, they can communicate.

Open System

When accessing a wireless access point, confirming the encryption is not necessary.

• WPA-PSK/WPA2-PSK

The "WPA-PSK" and "WPA2-PSK" authentications are automatically recognized.

The combination of the Authentication and Encryption

	Open System	Open System/ Shared Key	WPA-PSK WPA2-PSK
None	 ✓ 	✓	_
WEP RC4	 ✓ 	 ✓ 	_
TKIP/AES	_	-	~

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

aring SSID will also cle	ear other related settings.			
SSID 1	Authentication 12	Encryption 13		WEP Encryption Key or PSK(Pre-Shared Key)
IP100HHPSK	WPA-PSK/WPA2-PSK V	TKIP/AES	~	PSK:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:

IP100H (Continued)

13 Encryption

Select the encryption type that is the same as that of the wireless access point. (Default: None)

① Be sure to verify the access point setting, because the terminals and access points cannot communicate using different encryption.

About the encryption types

• None

- No data is encrypted.
- ① This option can be selected when [Authentication] (12) is set to "Open System" or "Open System/Shared Key."

• WEP RC4

It is an encryption type that can communicate when the encryption keys match.

- ① You can set the encryption key length to between 64 (40) and 128 (104) bits.
- ① You can select this option when [Authentication] (1) is set to "Open System" or "Open System/Shared Key."

TKIP/AES

Either the "TKIP" or "AES" encryptions are automatically recognized when connecting to a wireless access point.

① You can select this option when [Authentication] (1) is set to "WPA-PSK/WPA2-PSK."

Wireless LAN screen

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

)H aring SSID will also cle	ear other related settings.			
SSID 1	Authentication 12	Encryption 13		WEP Encryption Key or PSK(Pre-Shared Key)
IP100HHPSK	WPA-PSK/WPA2-PSK 🗸	TKIP/AES	~	PSK:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •

IP100H (Continued) WEP Encryption Key or PSK (Pre-Shared Key)

WEP Encryption Key

Enter the encryption key that is the same as that of the wireless access point.

Authentication	Encryption	WEP Encryption Key or PSK(Pre-Shared Key)
Open System/Share 🗸	WEP RC4 64 (40) 🗸	WEP: ••••••• •

- ① This option can be selected when [Authentication] (12) is set to "Open System" or "Open System/Shared Key."
- ① Enter hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key length is same as the displayed digits, 10 or 26 using hexadecimal numbers, or half of the displayed digits, 5 or 13 characters using ASCII characters.
- The entered characters are displayed as * (asterisk) or (black circle.)
 You can check the entered characters by clicking the eye icon to the right.

• PSK (Pre-Shared Key)

Enter the pre-shared key that is the same as that of the wireless access point.

Authentication		Encryption		WEP Encryption Key or PSK(Pre-Shared Key)	
WPA-PSK/WPA2-PSK	~	TKIP/AES	~	PSK: •••••	۲

- ① This option can be selected when [Authentication] (12) is set to "WPA-PSK/WPA2-PSK."
- ① Enter hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key length is 64 digits using hexadecimal number, or 8 to 63 characters using ASCII characters.
- ① The entered characters are displayed as * (asterisk) or (black circle.) You can check the entered characters by clicking the eye icon to the right.

Wireless LAN screen

Transceiver Controller > Common Settings > Wireless LAN

Wireless LAN

	ear other related settings.			
SSID 1	Authentication 12	Encryption 3		WEP Encryption Key or PSK(Pre-Shared Key)
IP100HHPSK	WPA-PSK/WPA2-PSK 🗸	TKIP/AES	~	PSK: •
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP:
	Open System/Shared I 🗸	None	~	WEP: •

(**b** < Apply>

Click to apply the entries. (1) The entries are displayed in [List of Wireless LAN Entries].

16 < Reset >

Click to reset the settings. ① You cannot reset after clicking <Apply>.

Wireless LAN screen

Transceiver Controller > Common Settings > Wireless LAN

■ List of Wireless LAN Entries

Display the list of the wireless LAN settings.

No.	Name	SSID(IP110H)	SSID(IP100H)	1 2
1	Sales	IP110HWPA IP110HPSK	IP100HPSK	Edit Delete

❶ <edit></edit>	Click to edit the entries in [Wireless LAN].
2 <delete></delete>	Click to delete the selected entry. ① After clicking <delete>, the entry cannot be recalled.</delete>
3 <delete all=""></delete>	Click to delete all the entries. ① After clicking <delete all="">, the entries cannot be recalled.</delete>

Transceiver Controller > Common Settings > ID List

■ ID List Common Settings

Select an ID list that the WLAN transceivers will use.

- ① You can individually specify an ID list to the groups that the WLAN transceivers belong to in [Profile] on the [Common Settings] screen.
- ① If any entries on this screen have been changed, you must reboot the WLAN transceiver.

ID List Common Settings		
ID List Common Setting Number :	1 (7 Entries)	~
5	* If you change this item, the screen automatically updates to the selected list.	

ID List Common Setting Number

Select the group number between 1 and 50, and then enter IDs that the WLAN transceivers will use.

① When the group name or IDs are registered in the group, they are displayed as shown below.

ID List Common Setting Number :	1 (Sales / 5 Entries)
	* If you change this item,
	the screen automatically updates to the selected list.

Transceiver Controller > Common Settings > ID List

ID List Advanced Settings

Enter the group name that is selected in [ID List Common Settings].

Γ	ID List Advanced Settings	
	Name 1 🔛	Apply Reset
1 N	ame	Enter a group name of up to 31 characters. The group is selected in [ID List Common Setting] on the [ID List] screen. When the group is selected on the [ID List] and [Profile] screens, the group name is displayed.
2<	Apply>	Click to apply the entries.
3<	Reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Transceiver Controller > Common Settings > ID List

Save or Write the ID List Setting

You can save an ID list file on your PC, or load an ID list file to the RoIP Gateway. ① If any WLAN transceiver settings have been changed, you must reboot it.

Save or Write the ID List Set	Save or Write the ID List Setting		
Load Settings from File :	Choose File No file chosen		
	Write A CSV format file can be written to this product.		
	When the file is written, the current settings will be overwritten.		
Save to File :2	Save Save to tn01_id_list001.csv file.		

This is an example of when Group 1 is selected in [ID List Common Setting].
 When a name is registered in a group, the name is also displayed.

Load Settings from File	 Load an ID list file, which is saved on [Save to File] (2), to the RoIP Gateway. Click <choose file=""> to select the file to load.</choose> Select the target file on screen, and click <open>. The selected file is displayed in [Load Settings from File].</open> Click <write> after selecting the target file. Then, the selected file is loaded to [ID List Entries].</write> When the file is loaded, the previous data in [ID List Entries] is deleted. If you select the file that is saved on the [Settings Restore] screen in the [Management] menu, the setting is overwritten.
2 Save to File	 Save an ID list file, which is listed in [ID List Entries], to your PC. Click <save>, and then <save> on the box to save an ID list file (a CSV file) to your PC.</save></save> ① A file name varies, depending on the group number in [ID List Common Settings]. For example, the file name becomes "tn01_id_list001.csv" when Group 1 of Tenant 1 is selected.

Transceiver Controller > Common Settings > ID List

Save or Write the ID List Setting

O About the rules of a CSV file for the ID list

Icom is not responsible for writing another ID list file except a saved ID list file or an ID list file that is edited, as shown below.

Format of a CSV file for the ID list file

	A	В	С	D	E	F	G
1	#	VE-PG4	ID List Settings	ID List file			
2	#	Firm Ver.					
3	#	File Ver.					
4	#Group Name	Sales					
5	#Index	Name	Call type(indi=Individual group=Group tel=Telephone)	Destination ID	Destination Phone Number	Talkgroup	Nickname
6	1	Sales1	indi	101		0	Sales1
7	2	Sales2	indi	102		0	Sales2
8	3	Sales3	indi	103		0	Sales3

Column	Title	Description
A		 Group name: Up to 31 characters, No.: 1 ~ 500 Do not duplicate the number. ① Only 50 destinations are saved into the IP100H, from address numbers 1 to 50.
В	Name	Up to 32 characters
С	Call Type	indi: Individual, group: Group, tel: Telephone
D	Destination ID (Individual/Group)	Up to 4 characters
E	Destination ID (Telephone)	Up to 31 digits using numbers and symbols (#, st)
F	Talkgroup	0: Disable, 1: Enable
G	Nickname	Up to 32 characters

Transceiver Controller > Common Settings > ID List

ID List

ID List	
Add Type : 1) Enter Individually Select From List	
No.: 2 7	~
Name : 3	
Nickname : 4	
Call Type : 5 Individual	~
Destination ID : 6 00001	7 8
-	Apply Reset

This is an example of when "Enter individually" is selected in the "Add Type" (1).
 When a name is registered in a group, the name is also displayed.

Add Type

Select [Enter Individually] or [Select From List] in the [Add Type]. When [Select From List] is selected, the Destination IDs that are registered on the [Transceiver Registration] screen or [Destination Settings] screen, are displayed.

- By selecting [All], you can select or cancel all entries in the list.
 When [Select From List] is selected, you can enter a name of up to 32
 - characters.

D List(Sales)				
	Add Type :	○ Enter Individually ● Set	ect From List	
	Name	Call Type	Destination ID/Phone Number	
	Sales1	Individual	00101	
	Sales2	Individual	00102	
	Sales3	Individual	00103	
	IP100FS	Individual	00050	
	Group0001	Group	00001	

ID List screen

Transceiver Controller > Common Settings > ID List

ID List

ID List		
Add Type	Enter Individually O Select From List	
No.2	7	~
Name 3		
Nickname		
Call Type 5	Individual	~
Call Type Destination ID	00001	78
		Apply Reset

This is an example of when "Enter individually" is selected in the "Add Type" (1).
 When a name is registered in a group, the name is also displayed.

S Call Type	Select the Call type. Options: Individual, Group, Talkgroup, or Telephone
6 Destination ID	Enter a target individual ID, group ID, or talkgroup ID (00001 ~ 60000). When "Telephone" is selected as [Call Type] (\mathfrak{S}), enter a target phone number of up to 31 digits using numbers and symbols (#, \star).
♂ <apply></apply>	Click to apply the entries. ① The entries are displayed in [ID List Entries].
8 <reset></reset>	Click to reset the settings. (1) You cannot reset after clicking <apply>.</apply>

Transceiver Controller > Common Settings > ID List

ID List Entries

Displays the list of entered Group Calls.

		P100Hs from address nu			0	2
No.	Name	Nickname	Call Type	Destination ID/Phone Number		•
1	Sales1	Sales1	Individual	00101	Edit	Delete
2	Sales2	Sales2	Individual	00102	Edit	Delete
5	UT-136-32	UT-150-52	relephone)]	Ean	Delete

This is an example of when Group 1 is selected in [ID List Common Settings].
 When a name is registered in a group, the name is also displayed.

● <edit></edit>	Click to edit the entries in [ID List].
2 <delete></delete>	Click to delete the selected entry. ① After clicking <delete>, the entry cannot be recalled.</delete>
S <delete all=""></delete>	Click to delete all the entries. ① After clicking <delete all="">, the entries cannot be recalled.</delete>

Transceiver Controller > Common Settings > Messages

Message Group

Select to register a message that the WLAN transceivers will use.

- ① You can individually specify the message group that the WLAN transceivers belong to in "Message List" in [Profile] on the Profile screen.
- (Transceiver Controller > Common Settings > Profile > Profile > Message List)
- ① If any entries on this screen have been changed, you must reboot the WLAN transceiver.

Message Group		
Message Group Number :	1 (10 Messages)	~
	* If you change this item,	
	the screen automatically updates to the selected list.	

Message Group Number

Select a group number between 1 and 50, and then enter the messages that the WLAN transceivers will use.

① When the group name or messages are registered in the group, they are displayed as shown below.

Message Group

Message Group Number :	1 (Sales / 10 Messages)
5	* If you change this item, the screen automatically updates to the selected list.

Transceiver Controller > Common Settings > Messages

Message Group Detail

Enter the group name that is selected in [Message Group].

Message Group Detail	
 Name : ①	Apply Reset
1 Name	 Enter a group name of up to 31 characters. The group is selected in [Message Group] on the [Message] screen. When the group is selected on the [Messages] screen and [Profile] screen, the group name is displayed.
<pre>2<apply></apply></pre>	Click to apply the entries.
③ <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Transceiver Controller > Common Settings > Messages

Save or Write the Message Setting

You can save a message file on your PC, or load a message file to the RoIP Gateway. ① If any WLAN transceiver settings have been changed, you must reboot it.

Save	or Write the Message Setting
	Load Settings from File : 1 Choose File No file chosen
	Write A CSV format file can be written to this product. When the file is written, the current settings will be overwritten.
	Save to File : 2 Save Save to tn01_msg_list001.csv file.

This is an example of when Group 1 is selected in [Message Group]. When a name is registered in a group, the name is also displayed.

Load Settings from File	Load a message file, which is saved on "Save to File" (2), to the RolP Gateway.		
	 Click <choose file=""> to select the file to load.</choose> Select the target file on screen, and click <open>. The selected file is displayed in "Load Settings from File". Click <write> after selecting the target file. Then, the selected file is loaded to [Messages].</write></open> The previous data in [Messages] is overwritten the loaded data. If you select the file that is saved on the Settings Restore screen in the [Management] menu, the setting is overwritten. 		
2 Save to File	 Save a message file, which is listed in the [Message], to your PC. Click <save>, and then <save> on the box to save a message file (a CSV file) to your PC.</save></save> The file name varies, depending on the group number in [Message Group]. For example, the file name becomes "tn01_msg_list001.csv" when Group 1 of Tenant 1 is selected. 		

Transceiver Controller > Common Settings > Messages

■ Save or Write the Message Setting

O About the rules of a CSV file for the message file

Icom is not responsible for writing another message file except a saved message file or a message file that is edited as shown below.

Format of a CSV file for the message file

	A	В	С	D
1	#	VE-PG4	Message Settings	Message file
2	#	Firm Ver.		
3	#	File Ver.		
4	#Group Name	Sales		
5	#Index	Message		
6	1	Gather immediately.		
7	2	A message was sent.		
8	3	Check the message.		
9	4	Is it no problem?		
10	5	Give me a reply.		
11	6	Give me a reply immediately.		
12	7	Please disperse there.		
13	8	Back to the office ASAP.		
14	9	The parcel arrived.		
15	10	The work finished.		

Column	Title	Description
А	Index	Group name: Up to 31 characters, No.: 1 ~ 10 Do not duplicate the number
В	Message	Up to 32 characters

Transceiver Controller > Common Settings > Messages

Message List

Enter messages in the group that is selected in [Message Group]. You can transmit fixed message of up to 32 characters. ① You can enter up to 10 messages in each message group.

No.	Fixed Message
1	Gather immediately.
2	A message was sent.
3	Check the message.
4	Is it no problem?
5	Give me a reply.
6	Give me a reply immediately.
7	Please disperse there.
8	Back to the office ASAP.
9	The parcel arrived.
10	The work finished.

When a name is registered in a group, the name is also displayed.

Apply>	 Click to apply the entries.
<pre>2<reset></reset></pre>	 Click to reset the settings. (i) You cannot reset after clicking < Apply>.

Status screen

Transceiver Controller > Common Settings > Status

Status Settings

Select to register a status that the WLAN transceivers use.

- ① You can program statuses of up to 32 characters. You can enter up to 10 statuses.
- ① If any entries on this screen have been changed, you must reboot the WLAN transceiver.

✓AII	Status No.	Status Name
✓	1	Meeting
✓	2	Away from the desk
✓	3	At lunch
✓	4	Under a round
✓	5	At the desk
✓	6	Working
✓	7	Waiting
✓	8	Under preparation
✓	9	In progress
✓	10	Under a break

Oheck Box	 Click a Check Box to display a status name on the WLAN transceiver. When the box is not checked, the status name is not displayed on the WLAN transceiver, even if you entered it. When the status name is not entered, the status number is displayed on the WLAN transceiver only if the box is checked. You can check or uncheck them all at once by clicking [All].
2 <apply></apply>	Click to apply the entries.
3 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Profile screen

Transceiver Controller > Common Settings > Profile

Profile List

Display the entries that are entered in [Common Settings].

No.	Name	Wireless LAN	ID List Number	Common Message Group	23
1		Transceiver's Setting	1	1	Edit Delete
2		Transceiver's Setting	1	1	Edit Delete
3					~
Add					

1 <add></add>	Click to add an new profile.
2 <edit></edit>	Click to edit the entries in [Profile].
3 <delete></delete>	Click to delete the selected entry. ① After clicking <delete>, the entry cannot be recalled.</delete>
4 <delete all=""></delete>	Click to delete all the entries. ① After clicking <delete all="">, the entries cannot be recalled.</delete>

Profile screen

Transceiver Controller > Common Settings > Profile

Profile

Individually assign an ID list, message list or receive notification tone to the group that the WLAN transceiver belongs to. ① After the setting is completed, you must reboot the WLAN transceiver.

Profile		
	No. : 1 (Sales group) * If you change this item,	~
	the screen automatically updates to the selected profile.	
Wireless LAN	Name : 2 Sales group	
WITEIESS LAN	Wireless LAN : 3 Transceiver's Setting	~
Common Settings		
	ID List : 4 1 (Sales)	~
	Message List : 5 1 (Sales)	~

1 No	Select a profile between 1 and 50, to assign to the group that WLAN transceiver belongs to.
2 Name	Enter a profile name of up to 31 characters. The profile name is displayed in [Profile List] on the [Profile] screen.
3 Wireless LAN	Select the wireless LAN setting that is commonly used by the WLAN transceivers in the group. (Default: Transceiver's Setting)
	 Transceiver's Setting Uses the last wireless LAN setting that was set by the CS-IP100H, CS-IP110H, or the RoIP Gateway.
	 1 (Name) to 20 (Name) Select a number that was entered on the [Wireless LAN] screen.
4 ID List	Select an ID list that is commonly used by the WLAN transceivers in the group. (Default: 1) ① Select an ID number that is registered on the [ID list] screen.
5 Message List	Select a Message list that is commonly used by the WLAN transceivers in the group. (Default: 1) ① Select a message number that is registered in [Messages].

Profile screen

Transceiver Controller > Common Settings > Profile

Profile

Profile

Profile		
The List ?		
Registration		
Controller IP Address Notify :		
Registration Interval : 7	60 seconds	
Registration Retry Interval (If failed) : 8	10 seconds	
Number of Registration Retries (If 9	2	
failed) : 0 Expire Time :		
Expire Time :	180 seconds	
Calling Notice Tone		
Individual Call : 🕕	Tone 1 🗸 🗸	
Group Call :	Tone 1 🗸 🗸	
All Call :	Tone 1 🗸 🗸	
Telephone :	Tone 1	

6 Controller IP Address Notify	Enter the IP address or host name of the controller that is selected as the server of WLAN transceiver. Enter an IP address or host name of up to 63 characters. ① If you use the RoIP Gateway as a server, you must not set this item.	
Registration Interval	 Enter the transmit interval for the registration information transceivers will use. Range: 30 ~ 300 (seconds) in 1 second steps Generally use the default setting. When the interval period is short, and a WLAN transceiver the communication area, the WLAN transceiver registration Gateway can be updated earlier. Therefore, if the WLAN an Individual call, the RoIP Gateway can quickly reply "Naturation area the registration of the registratic of the registration of the registratic of the re	(Default: 60) er goes out of on on the RoIP transceiver receives
8 Registration Retry Interval (If failed)	Enter a retry interval when the WLAN transceiver fails RoIP Gateway. • Range: 1 ~ 30 (seconds)	to register to the (Default: 10)
9 Number of Registration Retries (If failed)	Enter a number of registration retries if the WLAN tran register to the RoIP Gateway. • Range: 1 ~ 10	sceiver fails to (Default: 2)
0 Expire Time	 The RoIP Gateway check the WLAN transceivers controls interval. Range: [Registration Interval] (?) setting +1 ~ 900 (secon Generally use the default setting. You cannot set this setting to shorter than the [Registration setting. 	(Default: 180) ds)
Calling Notice Tone	 Select a notice tone for calling. Options: Not Use, or Tone 1 ~ Tone 8 This tone can be individually assigned to each call type, " "Group Call," "All Call," and "Telephone." 	(Default: Tone 1) Individual Call,"

Transceiver Controller > Common Settings > Profile

Profile screen

Profile	
Thomas	$\sim \sim \sim \sim \sim \sim$
Connection Notice Tone	
Success : 12 O Dis	able
Failure : 🚺 🔿 Dis	able
Ringer Settings (Individual Call)	
Notification Tone : 14 Tone	
Ringer Setting : 15 P-Bel	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
Number of Notifications : 6 3 Ringer Settings (Group Call)	\sim
Nomon Tone:	
Courtesy Beep	1
Group Gail .	
All Gall .	
Telephone : 10ne Out of Service Area Notice	
Out of Service Area Notice Tone : 18 O Dis	able O Enable
Sidetone Mute : 19 O Dis	
uccess	Select a notice tone for a successful connection. (Default: Ena ① When an Individual call, Message call, Status call or telephone call
	 connection is successful, the Notice Tone sounds. (1) When [Target Availability Check] on the [Transceiver Settings] screen is s to "Disable," the Notice Tone will not sound.
ailure	 Select a notice tone for connection failure. (Default: Enal) When an Individual call, Message call, Status call or telephone call connection fails, the Notice Tone sounds. When [Target Availability Check] on the [Transceiver Settings] screen is s to "Disable," the Notice Tone will not sound.
otification Tone	Select a notice tone when a call is received. (Default: Not U • Options: Not Use, or Tone 1 ~ Tone 8

This tone can be individually assigned to each call type, "Individual Call," "Group Call," "All Call," "Telephone," and "Message."

Profile screen

Transceiver Controller > Common Settings > Profile

Profile

Profile		
	$\sim \sim \sim \sim$	
Connection Notice Tone		
Success : 12) Disable	
Failure : 3 Ringer Settings (Individual Call)) Disable () Enable	
Notification Tone : 14	Tone 1	~
Ringer Setting : 15	P-Bell	~
Number of Notifications : 16		~
Ringer Settings (Group Call)		\frown
Courtesy Beep	diffe	
Individual Call :	Tone 1	~
Group Call : 17	Tone 1	~
All Call :	Tone 1	~
Telephone :	Tone 1	~
Out of Service Area Notice		
Out of Service Area Notice Tone : 18 🦲	Disable 🔘 Enable	
Sidetone Mute : 📵 🦲	🛛 Disable 🔿 Enable	

Ringer Setting.....

Select a notice type between "Pocket Beep" and "P-Bell."

(Default: P-Bell)

- ① This item can be selected when [Notification Tone] (19) is set to "Tone 1" to "Tone 8."
- ① You cannot select this item for a Message call.
- Pocket Beep

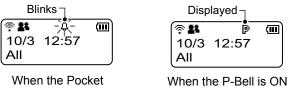
When a specified call is received, the WLAN transceiver sounds the Notification Tone, and the notification icon blinks.

• P-Bell

When a specified call is received, the WLAN transceiver sounds the Notification Tone.

The received audio is muted until you reply to the call.

① After pushing [PTT] on the WLAN transceiver, the mute will be released. (Example: IP100H)



Beep is active



(III)

Select a notification number of "Continuous." • Options: 1, 3, 10, or 20

- ① You can select this item when [Notification Tone] (1) is set to "Tone 1" to "Tone 8."
- ① You cannot select this item for a Message call.

(6) Number of Notifications ...

Profile screen

Transceiver Controller > Common Settings > Profile

Profile

Frome		
phone :	$\sim \sim \sim \sim$	
Connection Notice Tone		
Success : 12	O Disable Enable	
	O Disable Enable	
Ringer Settings (Individual Call)		
Notification Tone : 14	Tone 1	~
Ringer Setting : 15	P-Bell	~
Number of Notifications : 16	3	~
Ringer Settings (Group Call)	\frown \frown \frown \frown	\frown
Normal Tone :		
Courtesy Beep	-	
Individual Call :	Tone 1	~
Group Call : 1	Tone 1	~
All Call :	Tone 1	~
Telephone :	Tone 1	~
Out of Service Area Notice	-	
Out of Service Area Notice Tone : 18	Disable	
Sidetone Mute : 19	Disable	

Tourtesy Beep	 Select a Notice Tone when a received call is finished. (Default: Tone 1) This tone can be individually assigned to each call type, "Individual Call," "Group Call," "All Call," and "Telephone." You can select "Not Use" or "Tone 1" to "Tone 8." After each received call is completed, the WLAN transceiver will sound the specified tone.
Out of Service Area Notice Tone	Select whether or not the WLAN transceiver sounds the Out of Service Area Notice Tone. (Default: Disable) When "Enable" is selected, the WLAN transceiver sounds the Notice Tone when it goes out the service area or returns to the service area.
Sidetone Mute	 Select whether or not the WLAN transceiver uses the Sidetone Mute function. (Default: Disable) When "Enable" is selected, the WLAN transceiver mutes the sidetone or monitor audio when it goes out the service area. At that time, you cannot hear your voice from a headset or earphone speaker. ① When "Monitor" or "Sidetone" is set to "Disable" in the Transceiver Settings menu, this function is not activated.

Profile screen

Fransceiver	Controller >	Common	Settings >	 Profile
-------------	--------------	--------	------------	-----------------------------

Profile

	-
Profi	le

Frome		
$\overline{}$		
Display		
Destination ID : 20 Disable	~	
Caller ID Display (for All and Group 🕗 💿 Disable 🔿 Enable Calls) :		
Date Format : 22_MM/DD	~	
History Display : 2 🔿 Disable 💿 Enable		
Talkgroup Selection : 2) Tunction Key (FUNC Key / Menu) 🛛 🔿 ID LIST Key		
TalkBack		
TalkBack : 🔼 🖸 Disable 💿 Enable		-
TalkBack Timer : 5	 seconds 	-
TalkBack Timer (Telephone) : 20 15	seconds	
TalkBack Lock : 💜 🔿 Disable 💿 Enable		

- 20 Destination ID Select a destination ID that will be displayed after returning to the standby mode. (Default: Disable) ÷. Ē · Disable: Displays the destination ID 10/8 16:57 or call type that is specified All in [Destination ID] on the Destination ID [Transceiver Settings] (Call type) screen. • Transmit: Displays the IDs that the WLAN transceiver recently called. · Transmit and Receive: Displays either IDs that the WLAN transceiver recently called or was called by. · All Operations: Displays either IDs that the WLAN transceiver recently called, was called by or displays the ID list/ History. 2 Caller ID Display (for All and Group Calls) ... Select whether or not the WLAN transceiver displays the Caller ID in (Default: Disable) the All call or Group call. · Disable: When the WLAN transceiver or IP100FS receives an All call or Group call, only the Call type is displayed. • Enable: When the WLAN transceiver or IP100FS receives an All call or Group call, both Call type and Caller ID are displayed. (Example: IP100H) · When receiving an All Call ÷ # m ÷ Ē Alternately 10/8 16:57 10/8 16:57 displayed All Sales 1
 - When receiving an All Call Message



22 Date Format.....

Select a date format to display on the WLAN transceiver's standby screen. (Default: MM/DD)

You can select "MM/DD," "DD/MM," "MM-DD," "DD-MM," "MM.DD," or "DD. MM." (MM: Month, DD: Day)



Transceiver Controller > Common Settings > Profile

Profile screen

Profile Profile Display Destination ID : 20 Disable \sim Caller ID Display (for All and Group 2)
 O Disable O Enable Calls) Date Format : 22 MM/DD History Display : 23 O Disable 💿 Enable Talkgroup Selection : 22
Function Key (FUNC Key / Menu) O ID LIST Key TalkBack TalkBack : 2 🖸 Disable 💿 Enable 5 seconds TalkBack Timer : TalkBack Timer (Telephone) : 26 15 seconds TalkBack Lock : 27 🔿 Disable 💿 Enable ²³ History Display Set the call history display. (Default: Enable) · Disable: Call histories are not displayed on the WLAN transceiver. • Enable: Call histories are displayed on the WLAN transceiver by pushing the [1] key on the IP100H or the menu operation on the IP110H. **29** Talkgroup Selection Set the key to select the Talkgroup. (Default: Function Key (FUNC Key / Menu)) • Function Key (FUNC Key / Menu): Select the Talkgroup by pushing the [FUNC] key on the IP100H or the menu operation on the IP110H.

• **ID LIST Key:** Select the Talkgroup by pushing the [m] key on the IP100H or by pushing the [m CLR] on the IP110H.

25 TalkBack Timer Enter a time between 1 and 30 seconds that the WLAN transceiver will return to the standby mode after a received signal disappears. (Default: 5 (seconds)) ① When "Disable" is selected, the WLAN transceiver returns to the standby mode (standby screen) as soon as the status indicator goes out. TalkBack Timer (Telephone) Enter a time between 0 and 600 seconds that the WLAN transceiver will return to the standby mode after a received signal from a telephone disappears. (Default: 15 (seconds)) ① When "0" is selected, the TalkBack timer (Telephone) is disabled. In that case, the connection does not terminate until the telephone hangs up, or the WLAN transceiver terminates the call by pushing the [Option] key or Programmable key. TalkBack Lock Select whether or not the TalkBack Lock function is "Disable" or "Enable."

 • Enable: When another call is received in the TalkBack Lock function is Disable of Enable. (Default: Enable)
 • Enable: When another call is received in the TalkBack timer time after a call is finished and the WLAN transceiver returns to the standby mode, accepts to receive it if higher priority level call is received, or refuses if the same or lower priority level call is received than the finished call.

After the TalkBack timer has passed, a new call can be received. • **Disable:** Accepts to receive a new call after your current call is finished.

Profile screen

Transceiver Controller > Common Settings > Profile

Profile

Profile	
	\sim
TOT : 28 O Disable Enable	
TOT Timer : 29 180	seconds
Penalty Time : 30 30	seconds
TOT Beep : 3 O Disable Enable	
TOT on Telephone Call : 32 O Disable	
Use PBX Connection : 33 None	3435 >ApplyReset

28 TOT	 Select whether or not the WLAN transceiver uses the Time-out timer. (Default: Disable) (1) When "Enable" is selected, the [TOT Timer] (20), [Penalty Timer] (30), [TOT Beep] (31), [TOT on Telephone Call] (32) are displayed. (1) This function is useful when the WLAN transceiver's PTT switch has accidentally been held down.
29 TOT Timer	Set the Time-out timer. The timer limits the WLAN transceiver's continuous transmission. (Default: 180) • Range: 11 and 600 (seconds) ① When the period of time has passed, transmitting automatically stops.
Openalty Time	Set the TOT Penalty time. After the [TOT Timer] (2) period ends, the TOT Penalty timer starts and inhibits the user from transmitting during the penalty period. (Default: 30) • Range: 1 ~ 600 (seconds)
3) TOT Beep	 Select whether or not the WLAN transceiver uses the TOT beep function. (Default: Enable) When "Enable" is selected, a beep sounds 10 seconds before the period of time that is set in the [TOT Timer] (2) ends.

Profile screen

Transceiver Controller > Common Settings > Profile

Profile

Profile	
ΤΟΤ	
TOT : 28 🔿 Disable 💿 Enabl	e
TOT Timer : 29_180	seconds
Penalty Time : 30_30	seconds
TOT Beep : 31 O Disable 💿 Enabl	e
TOT on Telephone Call : 32 O Disable Enable PBX Connection	e
Use PBX Connection : 33 None	33 35 ✓ Apply Reset

TOT on Telephone Call	 Select whether or not the WLAN transceiver uses the Time-out timer on Telephone Call. (Default: Enable) When "Disable" is set, transmitting does not stop, even if the period of time that is set in the [TOT Timer] (⁽²⁾) has passed during a telephone call. 	
Over the second state of the second state o	When a phone number from the WLAN transceiver is not registered in the [Destination Settings], select "Transceiver Controller Telephone Connection." (Default: None)	
ୠ <apply></apply>	Click to apply the entries.	
<pre>69 <reset></reset></pre>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>	

Profile screen

Transceiver Controller > Common Settings > Profile

Profile Batch Setting

	Profile Batch Setting			
	Range 1	✓	✓ Add	
		lect Profile No. range. ault	~	
1 F	Range	Sets a range of collective Pr	ofiles.	
		Click <add> to register cons ① If a Profile is already register</add>		
2 F	Refer to	Selects the default settings of	or the programmed settin	gs to refer to. (Default: Default)

CONNECTION PORT SETTINGS

Digital Transceiver (D-TRX) screen
Digital Transceiver Connection
Digital Transceiver System
Digital Transceiver Connection (System: NXDN-Trunking)
Communication Settings (System: NXDN-Trunking)
Bridge Communication (System: NXDN-Trunking)
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Communication Settings System: NXDN-Conventional
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Bridge Communication
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Microphone Input Control
 ■ Voice Output Control
RoIP Gateway screen

7 CONNECTION PORT SETTINGS

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Bridge Communication (Mode: Transceiver)	7-65
Transceiver Control.	7-66

Connection Port Settings > Digital Transceiver (D-TRX)

Digital Transceiver Connection

Select a digital transceiver to connect to the RoIP Gateway.

Digital Transceiver			
Port Selection :	Digital Transceiver1 (D-TRX1)	~	

Port Selection

Select a Digital Transceiver port to edit the settings. (Default: Digital Transceiver 1 (D-TRX1))

Connection Port Settings > Digital Transceiver (D-TRX)

■ Digital Transceiver System

Select a digital transceiver system that you want to connect the RoIP Gateway to.

Digital Transceiver System		
System :	NXDN Trunking	~
	*Each setting is initialized after changing.	
		Apply Reset

 System
 Select a digital transceiver system, and then click <Apply> to apply.

 (Default: NXDN Trunking)

 ① The settings on this screen will be initialized after clicking <Apply>.

Connection Port Settings > Digital Transceiver (D-TRX)

■ Digital Transceiver Connection (System: NXDN-Trunking)

Edit the settings of the Digital transceiver to connect to the RoIP Gateway. You can connect a maximum of 4 digital transceivers to the network.

Connected Repeater's Address	
Connected Repeater's Port Number	
Source Port Number	43000
Connection Key Code	. 4 ucfr5000
Area Bi	t: 5 ● OFF ○ ON
Integrator Code	a: 6 1
System Code	a: 1
Prefix ID	1
	. <u>9</u> <u>1</u>
Prefix ID): @ _1
Talkgroup ID Encryption	D: ① _1
	:12 O Disable 💿 Enable
Encryption Key Status	c. <u>1</u>
	Disconnected Connect Refresh

① The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to the Digital Transceiver 1 (D-TRX1).

① The above screen shows when the Encryption is set to "Enable."

Oconnected Repeater's Address Enter the UC-FR5000's IP address.

2 Connected Repeater's Port Number	Enter the Connection Receive Port number that is set in the UC-FR5000. Do not duplicate the other port number. (Default: Digital Transceiver 1 (D-TRX1): 41220 Digital Transceiver 2 (D-TRX2): 41221 Digital Transceiver 3 (D-TRX3): 41222 Digital Transceiver 4 (D-TRX4): 41223) • Range: 1 ~ 65535	
Source Port Number	Enter the Local Port number that is set in the UC-FR5000. Do not duplicate the other port number. (Default: Digital Transceiver 1 (D-TRX1): 43000 Digital Transceiver 2 (D-TRX2): 43001 Digital Transceiver 3 (D-TRX3): 43002 Digital Transceiver 4 (D-TRX4): 43003) • Range: 1 ~ 65535	
4 Connection Key Code	Enter the Key Code that is set in the UC-FR5000. (Default: ucfr5000)	
S Area Bit	Turn the Area Bit function ON or OFF, according to the UC-FR5000 setting. (Default: OFF)	
6 Integrator Code	Displays the Integrator Code that is set in the UC-FR5000.	

Connection Port Settings > Digital Transceiver (D-TRX)

■ Digital Transceiver Connection (System: NXDN-Trunking)

	ed Repeater's Address : 👤	
Connected R	epeater's Port Number : 2	
	Source Port Number :	
	Connection Key Code :	ucfr5000
	Area Bit : 5	● OFF ○ ON
	Integrator Code : 6	1
Unit	System Code : 🔽	1
	Prefix ID :	1
Talkgroup	Unit ID :9	
	Prefix ID :	1
Encryption	Talkgroup ID : 🛈	
	Encryption :02	🔿 Disable 💿 Enable
Status	Encryption Key :	1

The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to the Digital Transceiver 1 (D-TRX1).

① The above screen shows when the Encryption is set to "Enable."

Displays the System Code that is set in the UC-FR5000.	
Enter the Prefix ID (for NXDN Trunking) that is set in the UC-FR5000	
• Range: 1 ~ 30	(Default: 1)
Enter the Unit ID that are set in the UC-FR5000. • Range: 1 ~ 2000	(Default: 1)
Enter the Prefix ID (for NXDN Trunking) that is set in the UC	
• Range: 1 ~ 30	(Default: 1)
Enter a Talkgroup ID. • Range: 1 ~ 2000	(Default: 1)
Select whether or not to enable the Encryption function.	ult: Disable)
When you enable the function, enter an encryption key betw 32767.	,
Click to connect or disconnect the transceiver, or to refresh t connection status. ① The buttons are grayed out when Connected Repeater's Addres ① The settings cannot be changed while connection is established <disconnect> before changing the settings on this screen</disconnect>	s is blank.
	 Enter the Prefix ID (for NXDN Trunking) that is set in the UC Range: 1 ~ 30 Enter the Unit ID that are set in the UC-FR5000. Range: 1 ~ 2000 Enter the Prefix ID (for NXDN Trunking) that is set in the UC Range: 1 ~ 30 Enter a Talkgroup ID. Range: 1 ~ 2000 Select whether or not to enable the Encryption function. (Defa When you enable the function, enter an encryption key betw 32767. Click to connect or disconnect the transceiver, or to refresh t connection status. The buttons are grayed out when Connected Repeater's Address

Connection Port Settings > Digital Transceiver (D-TRX)

Communication Settings (System: NXDN-Trunking)

Edit the settings required for calling transceivers from the digital transceiver connected to the RoIP Gateway.

Communication Settings			
TalkBack :	O Disable		
TalkBack Time :	5	✓ seconds	
RX All Call : 2 Default Callee ID	● Disable ○ Enable		
Call Type : 3	Group	~	
Destination Prefix ID : 4	<u> </u>		
Destination ID : 5	1		

1) TalkBack	Select whether or not to enable to talkback from a client transceiver, when a digital transceiver that is connected to the RoIP Gateway has called to the client transceiver. (Default: Enable) When the function is enabled, select the TalkBack time. (Default: 5) • Range: 1 ~ 10 (seconds)
2 RX All Call	Select whether or not to permit all Talkgroups to receive a call. (Default: Disable)
3 Call Type	Select a call type to call from the transceiver, that is connected to the RoIP Gateway, to its client transceiver(s). (Default: Group) • Options: Individual, Group, or All
Destination Prefix ID	Enter a destination prefix ID of a client transceiver. (Default: 1) • Range: 1 ~ 30
5 Destination ID	Displayed only when the Call Type (③) is set to "Individual" or "Group." Enter an Individual or Group ID of the client transceiver. (Default: 1) • Range: 1 ~ 2000.

Connection Port Settings > Digital Transceiver (D-TRX)

■ Bridge Communication (System: NXDN-Trunking)

Set Talkback Time for calling digital transceivers from the digital transceiver connected to the RoIP Gateway.

Bridge Communication

```
TalkBack Time : 5
```

TalkBack Time

Select the TalkBack time. • Range: 1 ~ 10 (seconds) (Default: 5)

seconds

Connection Port Settings > Digital Transceiver (D-TRX)

Digital Transceiver Connection (System: NXDN-Conventional)

Edit the settings of the digital transceiver to connect to the RoIP Gateway. You can connect a maximum of 4 digital transceivers to the network.

Digital Tr	ansceiver Connect	ion
Connect	ed Repeater's Address :	
TCP Port Nur	mber (Connection Port)	41200
UDP P	ort Number (Data Port)	41220
	Connection Key Code :4	ucfr5000
Packet Encry		
	Digital Frame Packet :5	🔿 Disable 💿 Enable
	Common Key :	0000000
Unit	Unit ID:6	1
Talkgroup	Unit ID .	
•••	Talkgroup ID :	1
RAN		
	RX RAN 8	
Encryption	Specify TX RAN 9	Specify
	Encryption :10	◯ Disable
Status	Encryption Key :	<u>_1</u>
	Connection Status :	Disconnected Connect Refresh

- ① The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to the Digital transceiver 1 (D-TRX1).
- ① The above screen shows when the Digital Frame Packet (5) and Scrambler (1) are set to "enabled," and Specify TX CC (10) is checked.

Ocumented Repeater's Address Enter the UC-FR5000's IP address.

2 TCP Port Number	
(Connection Port)	Enter the Connection Receive Port number that is set in the UC-
	FR5000. Do not duplicate the other port number.
	(Default: Digital Transceiver 1 (D-TRX1): 41200
	Digital Transceiver 2 (D-TRX2): 41201
	Digital Transceiver 3 (D-TRX3): 41202
	Digital Transceiver 4 (D-TRX4): 41203)
	• Range: 1024 ~ 65535
3 UDP Port Number	
(Data Port)	Enter the Data Receive Port number that is set in the UC-FR5000.
	Do not duplicate the other port number.
	(Default: Digital Transceiver 1 (D-TRX1): 41220
	Digital Transceiver 2 (D-TRX2): 41221
	Digital Transceiver 3 (D-TRX3): 41222
	Digital Transceiver 4 (D-TRX4): 41223)
	• Range: 1024 ~ 65535
Connection Key Code	Enter the Key Code that is set in the UC-FR5000. (Default: ucfr5000)
5 Digital Frame Packet	Select whether or not to enable the Packet Encryption function,
- 0	according to the UC-FR5000 setting. (Default: Disable)
	When you enable the function, enter an 8 digit Common key.
	(Default: 0000000)

7 CONNECTION PORT SETTINGS

Digital Transceiver (D-TRX) screen

Connection Port Settings > Digital Transceiver (D-TRX)

■ Digital Transceiver Connection (System: NXDN-Conventional)

Connecte	d Repeater's Address :		
TCP Port Num	ber (Connection Port):	41200	
UDP Po	rt Number (Data Port) :	41220	
	Connection Key Code :	ucfr5000	
Packet Encryp	tion		
	Digital Frame Packet :	🔿 Disable 💿 Enable	
Unit	Common Key :	_0000000	
	Unit ID :	1	
Talkgroup			
RAN	Talkgroup ID :	1	
	RX RAN :	1	
Encryption	Specify TX RAN :		
	Encryption :	Disable 💿 Enable	
Status	Encryption Key :	<u>_1</u>	
	Connection Status :	Disconnected Connect Refresh	

The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to the Digital transceiver 1 (D-TRX1).

① The above screen shows when the Digital Frame Packet (5) and Encryption (10) are set to "Enable."

6 Unit ID	Enter a unit ID. • Range: 1 ~ 65519	(Default: 1)
⑦ Talkgroup ID	Enter a Talkgroup ID. • Range: 1 ~ 65519	(Default: 1)
8 RX RAN	Enter an RX RAN code. • Range: 0 ~ 63	(Default: 1)
Specify TX RAN	Check to separately enter the TX RAN. (Defaul When checked, enter a TX RAN code between 0 and 63.	lt: Unchecked) (Default: 1)
Encryption	Select whether or not to enable the Encryption function. (De When you enable the function, enter an Encryption key be 32767.	efault: Disable) etween 1 and (Default: 1)
Connection Status	 Click to connect or disconnect the transceiver, or to refresh the connection status. The buttons are grayed out when Connected Repeater's Address is blank. The settings cannot be changed while connection is established. Click <disconnect> before changing the settings on this screen.</disconnect> 	

Connection Port Settings > Digital Transceiver (D-TRX)

Communication Settings (System: NXDN-Conventional)

Edit the settings required for calling transceivers from the digital transceiver connected to the RoIP Gateway.

Communication Settings	
TalkBack : 1 Disable Enable TalkBack Time :	
TalkBack Time : 5	✓ seconds
Digital SQL : 2 💿 Disable 🔿 Enable	
RX All Call : 3 💿 Disable 🛛 Enable	
Default Callee ID	
Call Type : 4 Group	~
Destination ID : 5 1	

1 TalkBack	Select whether or not to enable the TalkBack function When the TalkBack function is ON, Select the TalkBa • Range: 1 ~ 10 seconds	,
2 Digital SQL	Select whether or not to enable the Digital Squelch fu	inction. (Default: Disable)
3 RX All Call	Select whether or not to permit all Talkgroups to rece	ive a call. (Default: Disable)
Call Type	Select a call type. Options: Individual, Group, or All 	(Default: Group)
5 Destination ID	Enter a destination ID. • Range: 1 ~ 65519.	(Default: 1)

7

Digital Transceiver (D-TRX) screen

Connection Port Settings > Digital Transceiver (D-TRX)

Digital Transceiver Connection (System: dPMR Mode 2)

Configure the digital transceiver to connect to the RoIP Gateway. You can connect maximum of 4 digital transceivers through the network.

Digital Transceiver Connection	
Connected Repeater's Address :	
TCP Port Number (Connection Port): 2 412	00
UDP Port Number (Data Port): 3 412	20
Connection Key Code 4 ucfr	5000
Packet Encryption	
Digital Frame Packet : 5 🔼 🛛)isable 💿 Enable
Common Rey .	00000
Unit Unit ID : 6 _201	
RX ID Range	
Talkgroup ID (Start): 7 100	000
Talkgroup	
Talkgroup ID : (8) 100	000
СС	
RX CC : 9 0	
Specify TX CC :10 🔽 S	specify
Scrambler TX CC :	
Scrambler :	Disable 🖲 Enable
Key : 1	
Status	
Connection Status : 12 Disc	onnected Connect Refresh

The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to Digital Transceiver 1 (D-TRX1).

① The above screen shows when the Digital Frame Packet (⑤) and Scrambler (①) are set to "Enable," and Specify TX CC (⑩) is checked.

Oconnected Repeater's Address Enter the UC-FR5000's IP address.

```
TCP Port Number
                                    Enter the Connection Receive Port number that is set in the
  (Connection Port) .....
                                    UC-FR5000. Do not duplicate the other port number.
                                                           (Default: Digital Transceiver 1 (D-TRX1): 41200
                                                                   Digital Transceiver 2 (D-TRX2): 41201
                                                                   Digital Transceiver 3 (D-TRX3): 41202
                                                                   Digital Transceiver 4 (D-TRX4): 41203)
                                    • Range: 1 ~ 65535
3 UDP Port Number
                                    Enter the Data Receive Port number that is set in the UC-FR5000.
  (Data Port) .....
                                    Do not duplicate the other port number.
                                                           (Default: Digital Transceiver 1 (D-TRX1): 41220
                                                                   Digital Transceiver 2 (D-TRX2): 41221
                                                                   Digital Transceiver 3 (D-TRX3): 41222
                                                                   Digital Transceiver 4 (D-TRX4): 41223)
                                    • Range: 1 ~ 65535
4 Connection Key Code .....
                                    Enter the Key Code that is set in the UC-FR5000.
                                                                                      (Default: ucfr5000)
```

Connection Port Settings > Digital Transceiver (D-TRX)

■ Digital Transceiver Connection (System: dPMR Mode 2)

Digital Transceiver Connec	
Connected Repeater's Address :	
TCP Port Number (Connection Port) : 2	
UDP Port Number (Data Port) : 🕄	
Connection Key Code : Packet Encryption	ucfr5000
Digital Frame Packet : 5	O Disable 💿 Enable
Common Key :	_0000000
Unit ID : C	201
Talkgroup ID (Start) :	100000
Talkgroup ID :	
RX CC : 🧐	0
Specify TX CC :	Specify
TX CC : Scrambler	
Scrambler : 🚺	Disable 💿 Enable
Key :	<u>_1</u>
Connection Status : 👔	2 Disconnected Connect Refresh

The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to Digital Transceiver 1 (D-TRX1).

① The above screen shows when the Digital Frame Packet (⑤) and Scrambler (①) are set to "Enable," and Specify TX CC (①) is checked.

S Digital Frame Packet	according to the UC-FR500	ion, enter an 8 digit Common key.
		(Default: 0000000)
G Unit ID	Enter a unit ID.	(Default: Digital Transceiver (D-TRX1): 201 Digital Transceiver (D-TRX2): 202 Digital Transceiver (D-TRX3): 203 Digital Transceiver (D-TRX4): 204)
	 Range: 1 ~ 9999999 	g
Talkgroup ID (Start)	Enter a Talkgroup start ID. • Range: 1 ~ 9999999	(Default: 100000)
8 Talkgroup ID	Enter a Talkgroup ID. • Range: 1 ~ 9999999	(Default: 100000)
9 RX CC	Enter a CC for receiving. • Range: 0 ~ 63	(Default: 0)
Specify TX CC	Check to separately enter t When checked, enter a TX ① Do not duplicate the RX CC	CC code between 0 and 63. (Default: 0)

Connection Port Settings > Digital Transceiver (D-TRX)

■ Digital Transceiver Connection (System: dPMR Mode 2)

Digital Transceiver Conne	•
Connected Repeater's Address :	
TCP Port Number (Connection Port) :	2 41200
UDP Port Number (Data Port) :	3 41220
Connection Key Code : Packet Encryption	4 ucfr5000
Digital Frame Packet :	5 Disable Enable
Common Key :	
Unit ID :	<u>6</u> 201
RX ID Range Talkgroup ID (Start) :	7 100000
Talkgroup	
Talkgroup ID : CC	
RX CC :	· · _
Specify TX CC :	Image: Specify Specify
TX CC : Scrambler	
Scrambler :	Disable Enable
Key : Status	
Connection Status :	12 Disconnected Connect Refresh

① The above screen shows an example for connecting the IC-FR5000 (with UC-FR5000 installed) to the Digital transceiver 1 (D-TRX1).

① The above screen shows when the Digital Frame Packet (⑤) and Scrambler (①) are set to "Enable," and Specify TX CC (10) is checked.

1 Scrambler Check to enable the Scrambler function . (Default: Disable) When checked, enter a scrambler key between 1 and 32767. (Default: 1) Connection Status Click to connect or disconnect the transceiver, or to refresh the connection status.

① The buttons are grayed out when Connected Repeater's Address is blank.

① The settings cannot be changed while connection is established. Click <Disconnect> before changing the settings on this screen.

Connection Port Settings > Digital Transceiver (D-TRX)

Communication Settings (System: dPMR Mode 2)

Edit the settings required for calling transceivers from the digital transceiver connected to the RoIP Gateway.

	TalkBack : 1 O Disable 💿 Enable	
	TalkBack Time : 5	✓ seconds
	Digital SQL : 2 O Disable O Enable	
Default Callee ID	RX All Call : 3 Cisable 🔿 Enable	
	Call Type : 4 Group	~
	Destination ID : 5 100000	

1 TalkBack	Select whether or not to enable the TalkBack function. When the TalkBack function is ON, Select the TalkBack • Range: 1 ~ 10 seconds	· · · · · · · · · · · · · · · · · · ·
2 Digital SQL	Select whether or not to enable the Digital Squelch fu	nction. (Default: Disable)
3 RX All Call	Select whether or not to permit all Talkgroups to receive	ve a call. (Default: Disable)
Call Type	Select a call type. Options: Individual, Group, or All 	(Default: Group)
5 Destination ID	Enter a destination ID. • Range: 1 ~ 9999999	(Default: 100000)

Connection Port Settings > Digital Transceiver (D-TRX)

■ DTMF Dialing

Edit the details on DTMF Dialing.

DTMF	Dialing		
Timer	DTMF Dialing :	O Disable	
	Permissible Tone Gap :	2 5	➤ seconds
	OFF-hook Detect Timer :	*Applied only if the OFF-hook settings in [Special Number] are set t	milliseconds o values with
	ON-hook Detect Timer :	 one digit. 400 *Applied only if the ON-hook setting in [Special Number] is set to a digit. 	milliseconds value with one

① The screen above shows when "DTMF Dialing" (1) is set to "Enable."

1 DTMF Dialing	Select "Enable" to use DTMF signaling. If enabled, set the details in the Timer.	(Default: Disable)
2 Permissible Tone Gap	Select the period of time to detect that the last digit ha	as been input. (Default: 5)
	• Range: 1~10 (seconds)	(Delault. 5)
3 OFF-hook Detect Timer	Select the period of time to detect the OFF-hook contr	rol signal. (Default: 400)
	Range: 0~2000 (milliseconds) in 100 millisecond steps	(Delault. 400)
ON-hook Detect Timer	Select the period of time to detect the ON-hook control	•
	• Range: 0~2000 (milliseconds) in 100 millisecond steps	(Default: 400)

① 3 and 4 are the timers for the Transceiver Special Number. (PBX > Special Number > Transceiver Special Number)

Connection Port Settings > EXT I/O (EXT)

EXT I/O Port Mode

Select the type of device, and then select its input/output mode of the EXT1 ~ EXT4 ports.

NOTE: If you change an EXT I/O Port Mode, the settings on this screen will be initialized.

EXT I/O Po	rt Mode		
EXT I/O1 (EXT1)			
	Connected Unit :	Transceiver	~
EXT I/O2 (EXT2)			
	Connected Unit :	Transceiver	~
EXT I/O3 (EXT3)			
	Connected Unit : 1	EXT I/O Unit	~
	EXT I/O Port Mode : 2	Separate	~
EXT I/O4 (EXT4)			
	Connected Unit :	EXT I/O Unit	~
	EXT I/O Port Mode :	Separate	~
	2		Apply Reset

Connected Unit	Select the type of device to connect to the EXT ports. (Default for EXT I/O 1 (EXT1): Transceiver Default for EXT I/O 2 (EXT2): Transceiver Default for EXT I/O 3 (EXT3): EXT I/O Unit Default for EXT I/O 4 (EXT4): EXT I/O Unit)
2 EXT I/O Port Mode	 When "EXT I/O Unit" is selected, select the EXT input/output mode. (Default: Separate) Separate: Separately controls the external audio input/output. Combined: Simultaneously controls the external audio input/output to and from an external device. Select this option to connect an external device to A1/A2 (Audio output) and A3/A4 (Audio input) terminals.

Connection Port Settings > EXT I/O (EXT)

EXT I/O

Select an External I/O port on the RoIP Gateway to edit the settings.

EXT I/O			
	EXT I/O Port :	EXT I/O1 (EXT1)	~

EXT I/O Port

Select an External I/O Port to edit the settings.

(Default: EXT I/O (EXT1))

Connection Port Settings > EXT I/O (EXT)

Transceiver Model

This item is displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Transceiver Model :	IC-F5060/F6060	~
	*Remove the transceiver from the main unit before changing this setting. All the settings on this page will be initialized if you change this setting.	
ansceiver Model	Select a transceiver to connect the port selected in	n "EXT I/O Port."
ansceiver Model	l l l l l l l l l l l l l l l l l l l	fault: IC-F5060/F60
ansceiver Model	•	fault: IC-F5060/F60 letailed settings.

① Remove the transceiver from the RoIP Gateway to change the Transceiver Model. All settings will be reset to the defaults.

NOTE: Select "IDAS Mobile with ACC Connector" to connect the following model to the RoIP Gateway through the D-Sub 25-pin serial connector of the transceiver:

- IC-F5060/IC-F6060 series
- IC-F5330D/IC-F6330D (An optional OPC-2078 ACC CABLE is required.)

```
Connection Port Settings > EXT I/O (EXT)
```

Transceiver Connection (Transceiver Model: General Setting)

 This item is displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Transceiver Connection			
TX Volume Offset to the Transceiver :	1 15	~	dB
RX Volume Offset from the Transceiver :	2 -24	~	dB
PTT Type :	3 Separate PTT Combined with Microphone Line		
PTT Logic :	④ ○ Active High		
SQL Type :	5 ● Separate SQL ○ Combined with Speaker Line		
SQL Logic :	6) ● High 🔿 Low		
Power ON/OFF Detection :	7 🔿 Disable 💿 Enable		
Power ON/OFF Detection Signal :	8 Use PTT Type		\sim
Power ON/OFF Detection Signal Logic :	9 ● High 🔾 Low		
Detection Invalidity Timer (OFF ⇒ ON) :	0 *Setting value is set in five milliseconds steps.	milliseco	onds
Ues Pin A3 Bidirectional :	🔟 💿 Disable 🔿 Enable		
Serial Communication :	😢 🖲 Disable 🔘 Enable		

(1) (3) \sim (10) are displayed only when Power ON/OFF Detection (12) is set to "Enable."

TX Volume Offset		
to the Transceiver	 Adjust the RoIP Gateway's transmitting audio level that is sent to the connected transceiver. (Default: Range: -43 ~ +20 (dB) A higher level makes the microphone more sensitive to a small voice, a suitable for a quiet environment. A lower level makes the microphone less sensitive to the voice, and is suitable for a noisy environment with a louder voice. 	
2 RX Volume Offset from the Transceiver	Adjust the RoIP Gateway's audio le • Range: –74 ~ +21 (dB)	evel from the transceiver.(Default: -24)
8 РТТ Туре	Select the PTT circuit type. Separate PTT: Combined with Microphone Line: 	(Default: Separate PTT) The microphone line and PTT input line are separated. The PTT input line is superimposed on the MIC input (A1 terminal).
④PTT Logic	Select the PTT logic. • Active High: • Active Low:	(Default: Active Low) PTT line becomes "High" when [PTT] is pushed. (Active High) PTT line becomes "Low" when [PTT] is pushed. (Active Low)

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Connection (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit.

(Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Transceiver Connection		
TX Volume Offset to the Transceiver : 115	~	dB
RX Volume Offset from the 2 -24 Transceiver :	~	dB
PTT Type : 🅄 💿 Separate PTT 🛛 Combined with Microphone Line		
PTT Logic : 4 🔿 Active High 💿 Active Low		
SQL Type : 5 💿 Separate SQL ု O Combined with Speaker Line		
SQL Logic : 🌀 🖲 High 🔿 Low		
Power ON/OFF Detection : 7 🔿 Disable 💿 Enable		
Power ON/OFF Detection Signal : 8 Use PTT Type		~
Power ON/OFF Detection Signal ᠑ ● High ○ Low Logic :		
Detection Invalidity Timer (OFF ⇒ 0 ON): *Setting value is set in five milliseconds steps.	millisecon	nds
Ues Pin A3 Bidirectional : 🕕 💿 Disable 🛛 Enable		
Serial Communication : 😰 💿 Disable 🛛 Enable		

(1) (3) \sim (10) are displayed only when Power ON/OFF Detection (17) is set to "Enable."

SQL Type	Select the squelch signal type. Separate SQL: Combined with Speaker Line: 	(Default: Separate SQL) The squelch signal is separately input. The squelch signal is superimposed on the speaker input line (A3 terminal).
⑤ SQL Logic	(Active High)	e. (Default: High) es "High" while receiving a signal. es "Low" while receiving a signal.
Power ON/OFF Detection	Select "Enable" to detect the trar	nsceiver's power status (ON/OFF). (Default: Disable)
8 Power ON/OFF Detection Signal	Select the PTT type to detect the	transceiver's power status (ON/OFF). (Default: Use PTT Type)
	Separate PTT:	The microphone line and PTT input line
	Combined with Microphone Line	are separated.The PTT input line is superimposed on the MIC input (A1 terminal).
	• Use PTT Type:	The PTT type selected in PTT Type (3) is used.
9 Power ON/OFF Detection Signal Logic	Select the logic to detect the tran	sceiver's power status (ON/OFF). (Default: High)
		transceiver's power is ON. (Active high)

• Low: Becomes Low when the transceiver's power is ON. (Active low)

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Connection (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit.

(Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Transceiver Connection			
TX Volume Offset to the Transceiver :	1 -15	~	dB
RX Volume Offset from the Transceiver :		~	dB
PTT Type :	3 Separate PTT Combined with Microphone Line		
PTT Logic :	④ Active High ● Active Low		
SQL Type :	5 Separate SQL Combined with Speaker Line		
SQL Logic :	6 ● High 🔿 Low		
Power ON/OFF Detection :	⑦ ○ Disable ● Enable		
Power ON/OFF Detection Signal :	8 Use PTT Type		\sim
Power ON/OFF Detection Signal Logic :	9 ● High ○ Low		
Detection Invalidity Timer (OFF ⇒ ON) :	• • • • · · · · · · · · · · · · · · · ·	milliseco	onds
Ues Pin A3 Bidirectional :	1)		
Serial Communication :	Disable		

(1) (3) \sim (10) are displayed only when Power ON/OFF Detection (17) is set to "Enable."

1 Detection Invalidity Timer

(OFF → ON)	Set the power ON/OFF detection delay time between ((milliseconds) in 5 millisecond steps. When a transceiver's power ON is detected, the RoIP the audio input from the transceiver for the set period (① If "0" is set, the audio input from the transceiver is not mu power ON status is detected.	(Default: 0) Gateway mutes of time.
Use Pin A3 Bidirectional	Select "Enable" to use one common line (A3 terminal) and AF output. If your transceiver commonly uses 1 line as the MIC input and AF output, select "Enable."	
Serial Communication	Select "Enable" to use serial communication. *Items $(B) \sim (B)$ are displayed when "Enable" is selected	(Default: Disable) d.

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Connection (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit.

(Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Serial Communication : 1		
-	● Disable ○ Enable	
TCP Port Number : 💶		
	● Full-Duplex ○ Half-Duplex	
Signal Level : 槌	±5V (RS-232C)	~
Data Mode : 🛈	🔿 Auto 💿 Manual	
Baud Rate: 27	9600	~
Data Bits : 28		~
Parity : 29	None	~
Stop Bits : 30	1	~
Flow Control : 3	None	~
Session Timer : 3	30	
Transceiver Control : 1	🔿 Disable 💿 Enable	
Transceiver Mode : 19	NXDN Conventional	~
Default Callee ID		
Call Type : 2		~
Destination Prefix ID : 2	·	
Destination ID : 22	<u> </u>	
Source Prefix ID : 23	·	
Source ID : 🥰	<u>1</u>	

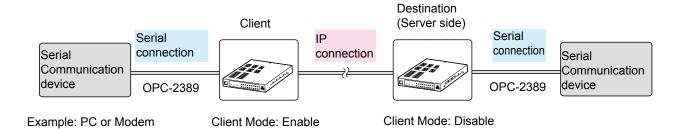
(1) (1) (1) are displayed only when Serial Communication (12) is set to "Enable."

(1) (2) \sim (3) and (8) are displayed only when Data Mode (17) is set to "Manual."

(1) (1) $\sim (2)$ are displayed only when Transceiver Control ((18)) is set to "Enable."

13 Client Mode

Select "Enable" to set the RoIP Gateway as the client in serial communications. (Default: Disable)



7 CONNECTION PORT SETTINGS

EXT I/O (EXT) screen

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Connection (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Serial Communication : 🔃	◯ Disable	
Client Mode : 📵	Disable Enable	
TCP Port Number : 🚺	50000	
Communication Control : 😈	Full-Duplex Half-Duplex	
Signal Level : 🌀	±5V (RS-232C)	/
Data Mode : 🚺	◯ Auto	
Baud Rate: 2	9600	/
Data Bits : 😕		/
Parity : 2		/
Stop Bits : 30	1	/
Flow Control : 3	None	1
Session Timer : 33	30	
Transceiver Control : 📵	◯ Disable ● Enable	
Transceiver Mode : 📵	NXDN Conventional	1
Default Callee ID	_	
Call Type : 🥹		_
Destination Prefix ID : 2		
Destination ID : थ		
Source Prefix ID : 23		_
Source ID : 24	1	

① ③ ~ ⑦ are displayed only when Serial Communication (12) is set to "Enable."

① 27 ~ 33 and 18 are displayed only when Data Mode (17) is set to "Manual."

(1) (1) ~ 2 are displayed only when Transceiver control (18) is set to "Enable."

① The screen below shows when :

- Serial Communication (12) is set to "Enable."
- Client Mode (13) is set to "Enable."

Serial Communication : 😢 🔿 Disable 💿 Enable	
Client Mode : 🚯 🔿 Disable 💿 Enable	
Server Address : 😕	
Server Port Number : 26 50000	
Communication Control : 😈 💿 Full-Duplex 🛛 Half-Duplex	
Signal Level : 16 ±5V (RS-232C)	~
Baud Rate: 209600	~
Data Bits : 28 _8	~
Parity : 29 None	~
Stop Bits : 30 1	~
Flow Control : 3 None	~
Connection Status : 32 Disconnected Connect Refresh	1

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Connection (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

TCP Port Number	Enter a port number between 1024 and 65535. (Default: EXT1=50000, EXT2=50001, EXT3=50002, EXT4=50003)
Communication Control	Select the communication type, Full-Duplex or Half Duplex. (Default: Full-Duplex)
Gignal Level	Select the serial communication line logic voltage level. (Default: ±5V(RS-232C)) • Options: ±5V(RS-232C), 0V/3V (Logic), or 0V/5V (Logic)
Data Mode	 Select the communication method for serial communication between a device and the RoIP Gateway. (Default: Auto) Auto: Automatically starts serial communication from a Virtual Serial Port installed on your PC. Manual: Manually set serial communication method for a device. *Items 2 ~ 3, and 1 are displayed when "Manual" is selected.
Transceiver Control	Select "Enable" to control the transceiver using serial communication. (Default: Disable) *Items (9) ~ 4 are displayed when "Enable" is selected.
Iransceiver Mode	Select an operating mode.(Default: NXDN Conventional)• Options: NXDN Conventional, NXDN Trunking, dPMR, or SAT.
֎ Call Type	Select a call type.(Default: Group)• Options: Individual, Group, or All
② Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending on the system. (Default: Blank) • Range: 0 ~ 30
② Destination ID	Enter the default ID for the EXT port between 00001 and 9999999. (Default: 1) (1) Enter an ID between 00001 and 99999 when the Destination Prefix ID (2) is entered.
Source Prefix ID	Enter a station's source prefix ID. The ID may differ, depending on the system. (Default: Blank) • Range: 0 ~ 30
Source ID	Enter a station's source ID between 00001 and 9999999. The ID is sent to the destination. (Default: 1) ① Enter an ID between 00001 and 99999 when the Source Prefix ID (3) is entered.

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Connection (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Server Address	Enter a destination RoIP Gateway's IP address.	
Server Port Number	Enter a destination RoIP Gateway's port number between 1024 and 65535. (Default: EXT1=50000, EXT2=50001, EXT3=50002, EXT4=50003)	
Baud Rate	Select the serial communication baud rate between a devi	,
Boata Bits	Select the number of bits for serial communication.	(Default: 8)
29 Parity	Select the parity bit. (I	Default: none)
Stop Bits	Select the stop bit length.	(Default: 1)
③ Flow Control	Select the Flow control option. (E	Default: None)
Connection Status	 Click to connect or disconnect the transceiver, or to refresh the connection status. The buttons are grayed out when Connected Repeater's Address is blank. The settings cannot be changed while connection is established. Click <disconnect> before changing the settings on this screen.</disconnect> 	
3 Session Timer	Set the time to cut the TCP session when there is no comr from the host.	nunication (Default: 30)

Connection Port Settings > EXT I/O (EXT)

Bridge Communication

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the Bridge Communication settings for transceivers connected to the EXT1 ~ EXT4 ports. These items are Displayed only when "Connection Unit" is set to "Transceiver."

Bridge Communication	
Encryption : 1 Disable Encryption Key :	
TalkBack : 2 Disable Enable	
TalkBack Time : 5	✓ seconds
Default Callee ID	
Call Type : 3 Group	~
Destination Prefix ID : 4	
Destination ID : 5 1	
Source ID : 6 _301	

① The above screen shows when Encryption (1) is set to "Enable."

① 2~5 are not displayed when the Transceiver Model is set to "IC-SAT100."

1 Encryption	Select whether or not to enable the Encryption function.	
	(Defa) When you enable the function, enter an encryption key betw 32767.	ult: Disable) veen 1 and (Default: 1)
2 TalkBack	Select whether or not to enable the TalkBack function. (Defa When the function is enabled, Select the TalkBack time.	ault: Enable) (Default: 5)
	• Range: 1 ~ 10 (seconds)	(Delault. 5)
S Call Type	Select a call type.(Def• Options: Individual, Group, or All	ault: Group)
4 Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending o system. • Range: 0 ~ 30	n the fault: Blank)
5 Destination ID	Enter the default ID for the EXT port between 00001 and 99	
	① Enter an ID between 00001 and 99999 when the Destination Pr entered.	(Default: 1) efix ID (④) is
6 Source ID	Enter a station's source ID between 1 and 9999999. The ID the destinations.	is sent to
	(Default: EXT1=301. EXT2=302. EXT3=303.	EXT4=304)

Connection Port Settings > EXT I/O (EXT)

Transceiver Control (Transceiver Model: IC-SAT100)

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the control settings for transceivers connected to the EXT1 ~ EXT4 ports. These items are displayed only when "Connection Unit" is set to "Transceiver."

TX Volume : 0	~	dB
RX Volume : 2 _0	~	dB
Connection Notice Tone : 3 🔿 Disable 💿 Enable		
Connection Notice Tone Volume: 4 0	~	dB

4 is displayed only when
 is set to Enable.

1 TX Volume	Adjust the RoIP Gateway's transmitting audio level that is sent to the connected transceiver.(Default: 0)• Range: -12 ~ +6 (dB)
2 RX Volume	Adjust the RoIP Gateway's audio output level of the audio signal that is received from the connected transceiver.(Default: 0)• Range: -12 ~ +6 (dB)
3 Connection Notice Tone	Select Whether or not to notify the connection status (success or failure) to the IC-SAT100 to the caller transceiver (only in the full-duplex communication) with a notification tone. (Default: Disable) When enabling this item, the caller transceiver can receive a notification tone while holding down [PTT]. The RoIP Gateway alerts as a failure when: • The RoIP Gateway could not connect to the IC-SAT100. • The IC-SAT100 could not connect to any satellites.
Connection Notice Tone Volume	Adjust the Connection Notice Tone audio level that is sent to the source transceiver. (Default: 0) • Range: -12 ~ +6 (dB)

```
Connection Port Settings > EXT I/O (EXT)
```

Transceiver Control (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the control settings for transceivers connected to the EXT1 ~ EXT4 ports. These items are displayed only when "Connection Unit" is set to "Transceiver."

Prioritized Receive : 0 O Disable 💿 Enable	
PTT Control : 2 RTP	~
Receive Detection : 3 VOX	<u> </u>
Insert RX Audio to TX Audio : 🕘 💿 Disable ု Enable	
TX Volume : 5 0	∨ di
RX Volume : 6 0	∨ di
Additional Attack Time for Beep 7 400 Sound Elimination : *Setting value is set in five milliseconds steps.	millisecond
Echo Canceller : 8 💿 Disable 🔿 Enable	
Noise Canceller : 🥑 💿 Disable 🔿 Enable	

(1) (2), (8) and (9) are displayed only when the Transceiver Model is set to "General Setting."
 (1) Only (5) and (6) are displayed when the Transceiver Model is set to "IC-SAT100."

Prioritized Receive	Select "Enable" to keep receiving and inhibit the transmission, while the transceiver is receiving. The default value differs, depending on the Transceiver Mode.			
2 PTT Control	Select the audio	transmission method.	(Default: RTP)	
	· VOX:	According to the input audio signal level.		
	• RTP:	The RoIP Gateway sends the PTT control si	gnal to the	
		transceiver during receiving an applicable R	TP packet.	
	• PTT Always-ON	The RoIP Gateway always sends the PTT co	ontrol signal to	
		the transceiver to transmit.		
	No PTT Control:	o PTT Control: The RoIP Gateway does not send the PTT control signal t		
		the transceiver.		
3 Receive Detection	Select the received audio detection method. The default value differs,			
	depending on the Transceiver Mode.			
	• VOX:	According to the input audio signal level.		
	· SQL:	According to the squelch status (Open/Close	e)	
		When setting to "SQL," set also Pull-up Control ON or OFF.		
	Always Receive: Always in the receive mode.			
	• PC CMD:	According to the PC command. (Displayed of	only when the	
		Transceiver Model is set to "General Setting	s.")	
Insert RX Audio to TX Audio	Select "Enable" to	o mix the audio from the repeater with th	e audio from	
-	the telephone.	•	efault: Disable)	
		s selected, select "Disable" in Prioritized Rec	,	
5 TX Volume	Adjust the RoIP (Gateway's transmitting audio level that is	sent to the	
-	connected transc		(Default: 0)	
	• Range: -12 ~ +6		(

Connection Port Settings > EXT I/O (EXT)

■ Transceiver Control (Transceiver Model: General Setting)

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the control settings for transceivers connected to the EXT1 ~ EXT4 ports. These items are displayed only when "Connection Unit" is set to "Transceiver."

ransceiver Control	
Prioritized Receive : 1 〇 Disable 💿 Enable	
PTT Control : 2 RTP	~
Receive Detection : 3 VOX	~
Insert RX Audio to TX Audio : 4 💿 Disable 🛛 Enable	
TX Volume : 5 0	✓ dE
RX Volume : 6 0	∨ dE
Additional Attack Time for Beep 7 400 Sound Elimination : *Setting value is set in five milliseconds steps.	millisecond
Echo Canceller : 8 💿 Disable 🛛 Enable	
Noise Canceller : 🥑 💿 Disable 🔿 Enable	

① 2, ⑧ and ⑨ are displayed only when the Transceiver Model is set to "General Setting."

RX Volume	Adjust the RoIP Gateway's audio output level of the audio signal that is received from the connected transceiver. (Default: 0) • Range: -12 ~ +6 (dB)
Additional Attack Time for Beep Sound Elimination	Enter the period of time to mute the audio (including beep signals) from the connected transceiver. (Default: 400) • Range: 0 ~ 1000 (milliseconds) in 5 millisecond steps
8 Echo Canceller	Select whether or not to enable the Echo Canceller function. The function reduces echo caused during duplex communication. (Default: Disable)
Noise Canceller	Select whether or not to enable the Noise Canceller function. (Default: Disable)

Connection Port Settings > EXT I/O (EXT)

■ DTMF Dialing

These items are displayed when "Transceiver" is selected as a connected unit (except for the Transceiver Model is set to "IC-SAT100.")

(Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the DTMF Dialing settings.

DTMF Dialing			
Timer	DTMF Dialing :	○ Disable	
Timer	Permissible Tone Gap : 2	5	✓ seconds
	OFF-hook Detect Timer :		 milliseconds
	*Applied only if the OFF-hook settings in [Special Number] are set to values with one digit.		et to values with
	ON-hook Detect Timer :	400	 milliseconds
	4	*Applied only if the ON-hook setting in [Special Number] is set to digit.	a value with one

(1) (2) \sim (4) are displayed only when the DTMF Dialing (1) is set to "Enable."

Select whether or not to use the DTMF Dialing function. (Default: Disable)	
period of time to detect that the last digit has been input.	
v 10 (seconds) (Default: 5)	
period of time to detect the OFF-hook control signal.	
(Default: 400) 2000 (milliseconds) in 100 millisecond steps	
period of time to detect the ON-hook control signal.	
(Default: 400) 2000 (milliseconds) in 100 millisecond steps	

① 3 and 4 are the timers for the Transceiver Special Number. (PBX > Special Number > Transceiver Special Number)

Connection Port Settings > EXT I/O (EXT)

PTT Control Setting

These items are displayed when "Transceiver" is selected as a connected unit (except for the Transceiver Model is set to "IC-SAT100.")

(Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the PTT control settings.

PTT Control Setting	
Setting values of Attack Time, Release Time and Voice Delay are set in five milli	seconds steps.
Attack Time : 1 .50	milliseconds
Release Time : 2 500	milliseconds
Voice Delay : 3 200	milliseconds
VOX Threshold : 4 40	%

① 1 and ④ are displayed only when Connection Unit is set to "Transceiver," Transceiver Model is set to "General Setting," and PTT Control is set to "VOX."

① 2 and 3 are displayed only when Connection Unit is set to "Transceiver."

Attack Time	Set the TX Attack time to between 5 and 500 milliseconds. delay time before the VOX switch turns ON after an audio received through the network.	
Release Time	 Set the RX Delay time. It is the delay time for the VOX swit OFF after no audio signal is received through the network. When the PTT Control in [Transceiver Control] is set to "RTP," value is "200." Range: 5 ~ 2000 (milliseconds) 	(Default: 500)
3 Voice Delay	 Enter the amount of time to store the audio, in 5 millisecon ① When the PTT Control in [Transceiver Control] is set to "RTP," value is "300." Range: 0 ~ 1500 (milliseconds) 	(Default: 200)
4 VOX Threshold	Enter the voice threshold level. • Range: 0 ~ 100 (%)	(Default: 40)

```
Connection Port Settings > EXT I/O (EXT)
```

Receive Detection Setting

These items are displayed when "Transceiver" is selected as a connected unit. (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode > EXT I/O 1 ~ 4 > Connected Unit) (Connection Port Settings > EXT I/O (EXT) > EXT I/O > EXT I/O Port)

Edit the DTMF Dialing settings.

*Setting values of Attack Time. Release T	ime and Voice Delay are set in five milliseconds steps.	
Attack Time :		
Release Time : 2	200 milliseconds	
Voice Delay : 3		
VOX Threshold : 4		
Ignore Time : 5	300 milliseconds	
	Apply Reset	
 "VOX." ② Is displayed only when "Conr "SQL." ③ Is displayed only when "Conr 	nen "Connection Unit" is set to "Transceiver," and the "Receive Deter nection Unit" is set to "Transceiver," and the "Receive Detection" is nection Unit" is set to "Transceiver." nection Unit" is set to "Transceiver," and the "Receive Detection" is s	set to "VOX" or
Attack Time	Set the TX Attack time. It is the delay time before the VO ON after an audio signal is received through the network • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps	
2 Release Time	Set the RX Delay time. It is the delay time for the VOX so OFF after no audio signal is received through the networ	
	 Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps 	(,
3 Voice Delay	Enter the period of time to store the audio. ① When the Receive Detection is set to "VOX," the default valu • Range: 0 ~ 1500 (milliseconds) in 5 millisecond steps	(Default: 5) ue is "50."
4 VOX Threshold	Enter the voice threshold level. • Range: 0 ~ 100 (%)	(Default: 40)
5 Ignore Time	Enter the period of time to ignore the detected SQL signation	al. (Default: 300)
	 Range: 0 ~ 2000 (milliseconds) in 5 millisecond steps 	(

```
Connection Port Settings > EXT I/O (EXT)
```

EXT I/O Device Connection

This item is displayed only when "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Combined." (Connection Port Settings > EXT I/O (EXT))

I/O Device Connectior	1	
Connected EXT I/O Unit :	General Setting	
	*Remove the transceiver from the main unit before changing this setting. All the settings on this page will be initialized if you change this setting.	

Connected EXT I/O Unit

Select the connected external input/output unit.

```
Connection Port Settings > EXT I/O (EXT)
```

Bridge Communication

Edit the Bridge Communication settings for external input/output devices connected to the EXT1 ~ EXT4 ports.

These items are displayed only when "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Combined." (Connection Port Settings > EXT I/O (EXT))

Encryption : Disable Encryption Key : TalkBack : Disable Enable	
TalkBack : 💙 🔾 Disable 💿 Enable	
TalkBack Time : 5	 seconds
Default Callee ID	
Call Type : Group	~
Call Type : Group Destination Prefix ID :	
Destination ID : Source ID : 303	

1 Encryption	Select whether or not to enable the Encryption function. (Default: Disable)
	When you enable the function, enter an encryption key between 1 and 32767. (Default: 1)
2 TalkBack	Select whether or not to enable the TalkBack function. (Default: Enable) When the function is enabled, Select the TalkBack time. (Default: 5) • Range: 1 ~ 10 (seconds)
3 Call Type	Select a call type.(Default: Group)• Options: Individual, Group, or All
4 Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending on the system. (Default: Blank) • Range: 0 ~ 30
5 Destination ID	Enter the default ID for the EXT port between 1 and 9999999. (Default: 1)
	 (Default. 1) (Default. 1) (Default. 1) (enter an ID between 00001 and 99999 when the Destination Prefix ID (4) is entered.
6 Source ID	Enter a station's source ID between 1 and 9999999. The ID is sent to the destinations.
	(Default: EXT1=301, EXT2=302, EXT3=303, EXT4=304)

Connection Port Settings > EXT I/O (EXT)

EXT I/O Control

Edit the input/output settings of the RoIP Gateway's EXT1 ~ EXT4 ports.

These items are displayed only when "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Combined." (Connection Port Settings > EXT I/O (EXT))

(т і/о с	ontrol
	Echo Canceller : 1 💿 Disable 🔿 Enable
	Noise Canceller : 2 💿 Disable 🔿 Enable

Echo Canceller	Echo Canceller Select whether or not to enable the Echo Canceller fun function reduces echo caused by receiving more than 2		2 calls at the
2 Noise Canceller		same time. Select whether or not to enable the Noise Canceller f	
			(Default: Disable)

```
Connection Port Settings > EXT I/O (EXT)
```

EXT Input Settings

Edit the input settings of the RoIP Gateway's EXT1 ~ EXT4 ports.

EXT Input Settings		
Bridge Communication		
Encryption : 1	🔿 Disable 💿 Enable	
Encryption Key : Default Callee ID	1	
Call Type : 2	Group	~
Destination Prefix ID : 3		
Destination ID : 4	1	
Source ID : 5	353	
Input Port Settings Input Connection Port : 6	IP Network	~
Input Control : 7	Control Signal	~
Power for the Microphone : 8		
Reference Level : 9		~
Input Gain (Analog) : 🕕	0	✓ dB
Input Gain (Digital) : 🕕		✓ dB
Input Control Signal Settings		
Control Signal Type : 🔱		~
ON Timer : 📵		✓ seconds
OFF Timer : 14		✓ seconds
	Short Circuit (LOW)	~
Control Input Pull-up Setting :	○ Disable	
Voice Delay : 🛈	5 *Setting value is set in five milliseconds steps.	milliseconds

① 1 ~ 5 are displayed only when "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Separate." (Connection Port Settings > EXT I/O (EXT))

Encryption	Select whether or not to enable the Encryption function	
	When you enable the function, enter an encryption key 32767.	(Default: Disable) between 1 and (Default: 1)
2 Call Type	Select a call type.	(Default: Group)
3 Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depend system. • Range: 0 ~30	ling on the (Default: Blank)
Destination ID	Enter the default ID for the EXT port between 1 and 9	
	① Enter an ID between 00001 and 99999 when the Destination entered.	(Default: 1) ion Prefix ID (3) is
Source ID	Enter a station's source ID between 1 and 9999999. The destinations.	ne ID is sent to
	(Default: EXT1=301, EXT2=302, EXT3= (1) When EXT I/O Port Mode is set to "Separate," the default EXT1=351, EXT2=352, EXT3=353, and EXT4=354.	

Connection Port Settings > EXT I/O (EXT)

EXT Input Settings

7

Input Port Settings				
Input Connection Port : 6	IP Network			\sim
Input Control : 7				\mathbf{v}
Power for the Microphone : 8	Disable Enable			
Reference Level : 9	-10dBs			\sim
Input Gain (Analog) : 🔟	0		\mathbf{v}	dB
Input Gain (Digital) :	0		~	dB
Control Signal Type : 😢	Momentary			$\mathbf{\tilde{\mathbf{v}}}$
ON Timer : 1		~	seco	nds
OFF Timer : 14	1	~	seco	nds
Control Logic : 15	Short Circuit (LOW)			$\mathbf{\mathbf{v}}$
Control Input Pull-up Setting :	○ Disable			
Voice Delay :	5 *Setting value is set in five milliseconds steps.	milli	iseco	nds

6 Input Connection Port

Select the port which outputs the received audio signal.

(Default: IP Network)

- EXT Output:
- IP Network:
- Emergency:

to EXT1 ~ EXT4 ports. Sends the audio signal to the devices that are connected to the RoIP Gateway through the IP network.

Sends the audio signal to the devices that are connected

Sends the audio signal to the device that is specified as the emergency call destination in the

"Emergency Notification."

- (Expert Settings > Emergency Notification)
- ① Emergency communication has priority over normal communication.
- The RoIP Gateway enters the Emergency mode when the option selected in the Input Control (?) of the EXT1
 EXT4 ports are satisfied.
- ① In the Emergency mode, all ongoing communication routes, other than that for the Emergency Notice, are disconnected.
- ① To transmit the call as the Emergency Notice:
 - Confirm the "Bridge Communication Source" is set to "Emergency Notification."
 (Bridge Connection Settings > Bridge Connection > Bridge Connection > Bridge Connection Source)
 - Confirm the "Bridge Communication Destination" is set to "Custom Bridge Connection."
 (Bridge Connection Settings > Bridge Connection > Bridge Connection > Bridge Communication Destination)
 - Confirm the "Emergency Notification Equipment" is set to "Enable."

(Expert Settings > Emergency Notification > Emergency Notification > Emergency Notification Equipment)

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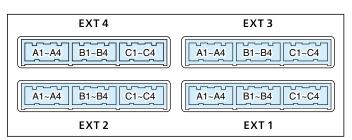
Connection Port Settings > EXT I/O (EXT)

EXT Input Settings

7

Input Port Settings				
Input Connection Port : 6	IP Network			\sim
Input Control : 7	Control Signal			\sim
Power for the Microphone : 8	● Disable ◯ Enable			
Reference Level : 9	-10dBs			\sim
Input Gain (Analog) : 🔟	0		\sim	dB
Input Gain (Digital) : U Input Control Signal Settings	0		~	dB
Control Signal Type : 😢	Momentary			\sim
ON Timer : 🔒	1	~	seco	nds
OFF Timer : 14	1	~	seco	nds
Control Logic :	Short Circuit (LOW)			\sim
Control Input Pull-up Setting :	○ Disable ● Enable			
Voice Delay :	5 *Setting value is set in five milliseconds steps.	mil	liseco	nds

⑦ Input Control	Select the contro • Always-ON:	 the control type to send the audio signal. (Default: Control ys-ON: Always sends the audio signal to the destination set in the Input Connection Port (6). When "Emergency" is selected in Input Connect (6), this option cannot be selected. 	
	• VOX:	When an audio signal is input, sends the destination selected in the Input Co	
	Control Signal:	When the control signal is input, sends the destination selected in the Input Co	5
8 Power for the Microphone		o supply the voltage to the micropho Audio input) microphone.	ne connected to (Default: Disable)
Reference Level	Select the input line A3/A4 terminal (Audio input) sensitivity.		
	Options: -10 dBs	or –40dBs	(Default: –10dBs)



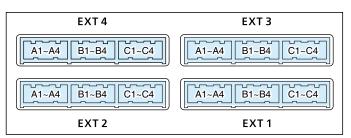
Connection Port Settings > EXT I/O (EXT)

EXT Input Settings

7

Input Port Settings				
Input Connection Port : 6	IP Network			$\mathbf{\mathbf{v}}$
Input Control : 7	Control Signal			\sim
Power for the Microphone : 8	Disable Enable			
Reference Level : 9	-10dBs			\sim
Input Gain (Analog) : 🕕	0		\sim	dB
Input Gain (Digital) : 1 Input Control Signal Settings			~	dB
Control Signal Type : 😢	Momentary			\sim
ON Timer : 🔳	1	\sim	seco	onds
OFF Timer : 14	1	\sim	seco	onds
Control Logic : 15	Short Circuit (LOW)			$\mathbf{\mathbf{v}}$
Control Input Pull-up Setting : 16 Input Control Setting	○ Disable			
Voice Delay :	5 *Setting value is set in five milliseconds steps.	mil	liseco	onds

Input Gain (Analog)	Set the analog signal input gain (A3/A4 terminal (Audio input)).
	• Range: –74 ~ +21 (dB) (Default: 0)
Input Gain (Digital)	Set the digital signal input gain (A3/A4 terminal (Audio input)). (Default: 0) • Range: –12 ~ +6 (dB)



Refer to the INSTALLATION GUIDE Section 6 for the port details.

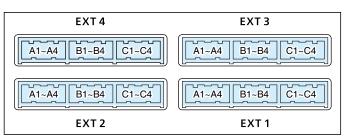
Connection Port Settings > EXT I/O (EXT)

EXT Input Settings

7

Input Port Settings				
Input Connection Port : 6	IP Network			\sim
Input Control : 7	Control Signal			\sim
Power for the Microphone : 8	• Disable			
Reference Level : 9	-10dBs			\sim
Input Gain (Analog) : 🕕	0		\sim	dB
Input Gain (Digital) : 🕕			\sim	dB
Input Control Signal Settings				
Control Signal Type : 🔱	Momentary			\sim
ON Timer : 📵	1	\sim	seco	nds
OFF Timer : 🛂		\sim	seco	nds
Control Logic : 😈	Short Circuit (LOW)			\sim
Control Input Pull-up Setting :	○ Disable			
Voice Delay : 🖤	5 *Setting value is set in five milliseconds steps.	mil	liseco	nds

Control Signal Type	Select the control • Momentary: • One-shot:	signal input type. While the control signal is input from (General control I/O), activates the When the control signal is input fro (General control I/O), continuously And deactivates with no input. The detected for the period of time, that (1). The RoIP Gateway recognized retains the type for the period of time OFF Timer (1).	port. m the B3/B4 terminal activates the port. input signal has been t is set in the ON Timer s the signal input and
¹³ ON Timer	Select the delay t • Range: 0.1 ~ 3 (s	ime until the input is detected. econds)	(Default: 1)
<pre> ④OFF Timer </pre>	Select the delay t input)) is deactiva • Range: 0.1 ~ 3 (s		l (General control (Default: 1)



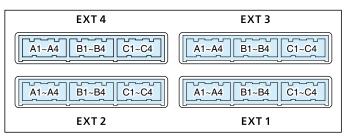
Connection Port Settings > EXT I/O (EXT)

EXT Input Settings

7

Input Port Settings		
Input Connection Port : 6	IP Network	~
Input Control : 7	Control Signal	~
Power for the Microphone : 8	Oisable O Enable	
Reference Level : 9	-10dBs	~
Input Gain (Analog) : 🕕	0	✓ dB
Input Gain (Digital) : 🕕	0	✓ dB
Input Control Signal Settings		
Control Signal Type : 😢	Momentary	~
ON Timer : 🔒		✓ seconds
OFF Timer : 🚺		✓ seconds
	Short Circuit (LOW)	~
Control Input Pull-up Setting :	◯ Disable ● Enable	
Input Control Setting Voice Delay :	5 *Setting value is set in five milliseconds steps.	milliseconds

Select the port input state of the B3/B4 terminals (General control (Control Logic input). (Default: Short Circuit (LOW)) The control signal input is detected as follows: When the "Control Input Pull-up Setting" (16) is enabled: • Short Circuit (LOW): Detects when the B3/B4 terminals are Shortened • Open Circuit (HIGH): Detects when the B3/B4 terminals are Open When the "Control Input Pull-up Setting" (6) is disabled: · Short Circuit (LOW): Detects when no voltage is applied between the B3 and B4 terminals. · Open Circuit (HIGH): Detects when any voltage is applied between the B3 and B4 terminals. 6 Control Input Pull-up Setting Select whether or not to internally pull up the B3/B4 terminal (General control input). (Default: Enable)



Connection Port Settings > EXT I/O (EXT)
--

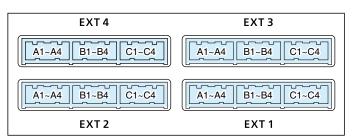
EXT Input Settings

7

Input Connection Port : 6 IP Network	~
Input Control : 7 VOX	~
Power for the Microphone : 🖲 💿 Disable ု 🔿 Enable	
Reference Level : 9 -10dBs	~
Input Gain (Analog) : 0	∨ dB
Input Gain (Digital) : 10 0	✓ dB
Input Control Setting *Setting values of Attack Time, Release Time and Voice Delay are set in five milliseconds steps.	
Attack Time : 🚺 50	milliseconds
Release Time : 19_200	milliseconds
Voice Delay : 🔟 <u>50</u>	milliseconds
VOX Threshold : 20 40	%

(1) (18, 19, and 20 are displayed when Input Control (7) is set to "VOX."

🕼 Voice Delay	Set the audio signal buffer time. (Default: when Input Control is "VOX"=50 • Range: 0 ~ 500 (milliseconds) in 5 millisecond steps), others=5)
Attack Time (Input Control: VOX)	Set the TX Attack time. It is the delay time before the VOX so ON after an audio signal is received through the network. (• Range: 5 ~ 2000 (milliseconds)	
Release Time (Input Control: VOX)	Set the RX Delay time. It is the delay time for the VOX switch OFF after no audio signal is received through the network. (D • Range: 5 ~ 2000 (milliseconds)	n to turn vefault: 200)
VOX Threshold (Input Control: VOX)	Enter the voice threshold level. (• Range: 0 ~ 100 (%)	Default: 40)



```
Connection Port Settings > EXT I/O (EXT)
```

EXT Output Settings

Edit the output settings of the RoIP Gateway's EXT1 ~ EXT4 ports.

EXT Output Settings
Bridge Communication
Encryption : 1 O Disable 💿 Enable
Encryption Key :1
Encryption : Disable Encryption Key : Source ID : 2 00303

① 1 and 2 are displayed only when "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Separate." (Connection Port Settings > EXT I/O (EXT))

Encryption	Select whether or not to enable the Encryption function. (Default: Disable) When you enable the function, enter an encryption key between 1 and 32767. (Default: 1)
2 Source ID	Enter a station's source ID between 00001 and 60000. (Default: EXT1=00301, EXT2=00302, EXT=00303, EXT4=00304)

Connection Port Settings > EXT I/O (EXT)

■ EXT Output Settings

vitching Control: Control Output Circuit
--

EXT Output Settings	
Control Circuit	
Switching Control : 1 💿 Control Output Circuit 🔿 Relay Circuit	
Control Output Logic : 2 〇 Active High 💿 Active Low	
8V Electric Supply (B2) : 3 ● Disable 🔿 Enable	
(Switching Control: Relay Circuit)	
Control Circuit	
Switching Control : 🚺 🔿 Control Output Circuit 💿 Relay Circuit	
Control Output Logic : 2 Valid Event Detection Short	~

Switching Control	 Select the control circuit type. If "Relay Circuit" is selected, the "Commuset to "Full-Duplex." (Communication Port Settings > EXT I/C Connection > Communication Control) 	O (EXT) > Transceiver
Control Output Logic Switching Control: Control Output Circuit	Select the activate state. When the Switching Control (1) is set to state. Relay output terminal (B1/B2 term When the audio signal is output, the co	ninal) is short or open circuit.
3 8V Electric Supply (B2) Switching Control: Relay Circuit	Select whether or not to supply the 8 V connected to the external output termin ① Specification: Less than 30 mA ① If "Enable" is selected, the "Communicati "Full-Duplex." (Communication Port Settings > EXT I/O Communication Control)	al. (Default: Disable) on Control" is automatically set to

Connection Port Settings > EXT I/O (EXT)

EXT Output Settings

(Client Mode: Disable)

Serial Communication		
Serial Communication : 4	O Disable Enable	
Client Mode : 5	Disable Enable	
TCP Port Number : 6	50003	
Communication Control : 7	Full-Duplex Half-Duplex	
Signal Level : (8)	±5V (RS-232C)	~
Data Mode : 🧐	○ Auto ● Manual	
Baud Rate: 10	9600	~
Data Bits : 🕕		~
Parity : 🔞		~
Stop Bits : 13		~
Flow Control : 14	None	~
Session Timer :		

The screen shows Serial Communication (4) is set to "Enable," and Client Mode (5) is set to "Disable."
 0 0 ~ 10 are displayed only when the Data Mode (9) is set to "Manual."

Client Mode: Enable		
Serial Communication :	④○ Disable	
Client Mode :	5 Disable Enable	
Server Address :	16	
Server Port Number :	1 50002	
	7 💿 Full-Duplex 🔘 Half-Duplex	
Signal Level :	8 ±5V (RS-232C)	~
Baud Rate:	<u>10</u> 9600	~
Data Bits :	1 8	~
Parity :	12 None	~
Stop Bits :		~
Flow Control :	14 None	~
Connection Status :	18 Disconnected Connect Refresh	

(1) The screen shows Serial Communication (4) and Client Mode (5) is set to "Enable."

4 Serial Communication	Select "Enable" to use serial communications. *Items 5 ~ 9 are displayed when "Enable" is selec	(Default: Disable) cted.
S Client Mode	 Select "Enable" to set the RoIP Gateway as the clie communications. ① When Enabling this the Client Mode, enter the Server Server Port number (1). 	(Default: Disable)
6 TCP Port Number	Enter a port number between 1024 and 65535. (Default: EXT1=50000, EXT2=50001, EXT3=5	0002, EXT4=50003)
Communication Control	Select the communication type. (Automatically set to "Full-Duplex" when Switching Cor "Relay Circuit."	Default: Full-Duplex) trol (1) is set to

Connection Port Settings > EXT I/O (EXT)

■ EXT Output Settings

(Client Mode: Disable)

Serial Communication		
Serial Communication : 4	O Disable	
Client Mode : 5	Disable Enable	
TCP Port Number : 6	50003	
	Full-Duplex Half-Duplex	
Signal Level : (8)	±5V (RS-232C)	~
	◯ Auto ● Manual	
Baud Rate:	9600	~
Data Bits : 🕕		~
Parity : 🚺		~
Stop Bits : 13		~
Flow Control :		~
Session Timer :		

The screen shows Serial Communication (④) is set to "Enable," and Client Mode (⑤) is set to "Disable."
① ① ~ ⑥ are displayed only when the Data Mode (⑨) is set to "Manual."

8 Signal Level	Select the serial communication line logic voltage level. (Default: ±5V(RS-2320)	C))
9 Data Mode	 Select the communication method for serial communications between device and the RoIP Gateway. (Default: Auto: Automatically starts serial communications from a Virtual Serial Perinstalled on your PC. Manual: Manually set serial communication method for a device. ① Items ¹ ~ ¹ are displayed when "Manual" is selected. 	to)
Baud Rate	Select the serial communication baud rate between a device and the RoIP Gateway. (Default: 960))0)
1) Data Bits	Select the number of bits for serial communications. (Default:	8)
12 Parity	Select the parity bit. (Default: Nor	ıe)
B Stop Bits	Select the stop bit length. (Default:	1)
Flow Control	Select the Flow control option. (Default: Nor	ıe)
Session Timer	Set the time to cut the TCP session when there is no communication from the host. (Default: 3	30)

Connection Port Settings > EXT I/O (EXT)

EXT Output Settings

Client Mode: Enable

Serial Communication	④○ Disable	
	5 Disable Enable	
Server Address :	1 6	
Server Port Number :	50002	
	7 💿 Full-Duplex 🔿 Half-Duplex	
Signal Level :	8 ±5V (RS-232C)	~
Baud Rate:	9600	~
Data Bits :	8	~
Parity :	12 None	~
Stop Bits :	B 1	~
Flow Control :	None None	~
Connection Status :	BDisconnected Connect Refresh	

① The screen shows when Serial Communication (④) and Client Mode (⑤) is set to "Enable."

6 Server Address	Enter the destination RoIP Gateway's IP address.	
Server Port Number	Enter the destination RoIP Gateway's port number between 1024 and 65535.	
	(Default: EXT1=50000, EXT2=50001, EXT3=50002, EXT4=50003)	
B Connection Status	 Click to connect or disconnect a transceiver, or to refresh the connection status. The buttons are grayed out when Connected Repeater's Address is blank. The settings cannot be changed while connection is established. Click <disconnect> before changing the settings on this screen.</disconnect> 	

Connection Port Settings > EXT I	/O (EXT)
EXT Output Settings	
Audio Output Settings	
Reference Level : 19	-20dBs 🗸
Output Gain (Analog) : 🧕	
Output Gain (Digital) : 2	
Announce Tone Delay : 22	
Fade-out : 23	1.5 seconds
Fade-in : 24	1.5 seconds
Control Output Setting *Setting values of Release Time and Voic	
Relay Control : 25	
Release Time : 20	
Voice Delay : 2	
Announce Tone	
*Not available with direct output from EXT	Input or always-on connections.
	Single Tone 1
End Tone : 2	
Announce Tone Volume : 30	
	Apply Reset
	3
Reference Level	Select the output level of A1/A2 terminal (Audio output).
	(Default: –20dBs)
	 Options: Speaker, 0dBs, or –20dBs
Output Gain (Analog)	Set the analog signal input gain (A1/A2 terminal (Audio output)). (Default: 0) Range: -43 ~ +20 (dB)
Output Gain (Digital)	Set the digital signal input gain (A1/A2 terminal (Audio output)). (Default: 0) • Range: -12 ~ +6 (dB)
Announce Tone Delay Select the delay time before the received audio is output. This delay time is set according to your sound device's specifications. The default value differs, depending on the EXT I/O Port Mode setting. (Default: Separate: 0.5 seconds) Combined: 1.5 seconds	
	Range: 0.5 ~ 3 (seconds)
	① Select "Disable" to output the audio right after the signal is received.
28 Fade-out	Set the period of time that the audio signal is muted.(Default: 1.5)• Range: Disable, or 0.5 ~ 3 (seconds)
	 The Auto Fader function is usable on the following settings. When the "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Separate." (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode) The "Input Connection Port" is set to "EXT Output." (External input and output ports are directly connected.) (Connection Port Settings > EXT I/O (EXT) > EXT Input Settings > Input Connection Port)
	 The "Priority Level" is set to "Priority" or "High Priority." (PBX Advanced Settings > Prioritization > EXT Output Port Prioritization > From Other Ports)

Connection Port Settings > EXT I/O (EXT)

■ EXT Output Settings

Audio Output Settings	
Reference Level : 19 -20dBs	~
Output Gain (Analog) : 🙍 0	✓ dB
Output Gain (Digital) : 20 0	✓ dB
Announce Tone Delay : 20 0.5 seconds	~
Fade-out: 23 1.5 seconds	~
Fade-in : 2 1.5 seconds	~
Control Output Setting *Setting values of Release Time and Voice Delay are set in five milliseconds steps.	
Relay Control : 23 By RTP	~
Release Time : 26 100	milliseconds
Voice Delay : 20 5	milliseconds
Announce Tone *Not available with direct output from EXT Input or always-on connections.	
Start Tone : 🙉 Single Tone 1	~
End Tone : 29 Not used	~
Announce Tone Volume : 🚳 0	✓ dB
	Apply Reset
	3] 32

Pade-in	Set the period of time that the audio signal mute is canceled. (Default: 1.5 seconds)	
	• Range: Disable, or 0.5 ~ 3 (seconds)	
	 The Auto Fader function is usable on the following settings. When the "Connected Unit" is set to "EXT I/O Unit," and "EXT I/O Port Mode" is set to "Separate." (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode) The "Input Connection Port" is set to "EXT Output." (External input and output ports are directly connected.) (Connection Port Settings > EXT I/O (EXT) > EXT Input Settings > Input Connection Port) The "From Other Ports" is set to "Priority" or "High Priority." (PBX Advanced Settings > Prioritization > EXT Output Port Priorits) 	
Belay Control	Displayed when Switching Control (1) is set to "Relay Circuit." Set the type of relay control. (Default: By RTP) Options: By Port Connection or By RTP	
8 Release Time	Set the RX delay time. It is the delay time for the VOX switch to turn OFF after no audio signal is received through the network. (Default: For the Control Output Circuit: 200 For the Relay Circuit: 100) • Range: For the control output circuit: 5 ~ 2000 (milliseconds) For the relay circuit: 5 ~ 15000 (milliseconds)	
Voice Delay	Enter the period of time to store the audio. (Default: 5) • Range: 0 ~ 1500 (milliseconds) in 5 millisecond steps.	

Connection Port Settings > EXT I/O (EXT)

■ EXT Output Settings

Audio Output Settings		
Reference Level :	19 -20dBs	~
Output Gain (Analog) :		✓ dB
Output Gain (Digital) :		✓ dB
Announce Tone Delay :		~
	23 1.5 seconds	~
	2 1.5 seconds	~
Control Output Setting	/oice Delay are set in five milliseconds steps.	
Relay Control :	25 By RTP	~
Release Time :		milliseconds
Voice Delay :		milliseconds
Announce Tone *Not available with direct output from E	EXT Input or always-on connections.	
	23 Single Tone 1	`
	Not used	~
Announce Tone Volume :	30 0	<u> </u>
		Apply Reset
		<u> </u>

<pre> 8 Start Tone </pre>	Select the tone which sounds before the announcement starts. (Default: Single Tone1)		
	Options: Not used, 4 Tone Notice (Up), Single Tone 1, or Single Tone 2	· · · · · · · · · · · · · · · · · · ·	
Bend Tone	Select the tone which sounds after the announcement. (Default: Not used) Options: Not used, 4 Tone Notice (Down), Single Tone 1, or Single Tone 2 		
Announce Tone Volume	Select the volume level for the announce tones. (Default: • Range: -12 ~ +6 (dB)	0)	
<pre>③<apply></apply></pre>	Click to apply the settings.		
<pre> Ø<reset> </reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>		

Emergency Notification screen

Connection Port Settings > Emergency Notification

Bridge Communication

Edit the Emergency Notification settings for the transceivers connected by Bridge Mode.

Bridge Communication
Encryption
Encryption : 1 Disable Encryption Key :
Encryption Key : 1
Default Callee ID
Default Callee ID : 2 🔾 Disable 💿 Enable
Call Type : 3 Group
Destination Prefix ID : 4
Destination ID : 5 1
Source ID : 6 1 7 8
Apply Reset

① 3 ~6 Displayed only when the Default Callee ID (2) is set to "Enable."

1 Encryption	Select whether or not to enable the Encryption function. (Default: Disable) When you enable the function, enter an encryption key between 1 and 32767. (Default: 1)	
2 Default Callee ID	Select "Enable" to add the destination ID to the transmitted signal. (Default: Disable)	
3 Call Type	Select a call type.(Default: Group)• Options: Individual, Group, or All	
4 Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending on the system. (Default: Blank) • Range: 0 ~30	
5 Destination ID	Enter an Individual or Group ID of the destination transceiver between 1 and 9999999. (Default: 1) ① Enter an ID between 00001 and 99999 when the Destination Prefix ID (④) is entered.	
6 Source ID	Enter a station's source ID between 1 and 9999999. The ID is sent to the destinations. (Default: 1)	
<pre>⑦<apply></apply></pre>	Click to apply the settings.	
8 <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>	

Connection Port Settings > Microphone (MIC)

Bridge Communication

Edit the settings of the microphone connected to the RoIP Gateway.

Bridge Communication	
Encryption : Disable Encryption Key :	
Encryption Key :	
TalkBack : 2 Disable 💿 Enable	
TalkBack Time : 5	✓ seconds
Default Callee ID	
Call Type : 3 Group	~
Destination Prefix ID : 4	
Destination ID : 5 _1	
Source ID 6 311	
Source ID : Source ID :	

Encryption	Select whether or not to enable the Encryption function. (De When you enable the function, enter an encryption key be 32767.	efault: Disable) etween 1 and (Default: 1)
2 TalkBack	Select whether or not to enable the TalkBack function.(De When the function is enabled, Select the TalkBack time. • Range: 1 ~10 (seconds)	fault: Enable) (Default: 5)
3 Call Type		Default: Group)
Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending system. • Range: 0 ~30	g on the Default: Blank)
5 Destination ID	 Enter an Individual or Group ID of the destination transcelland 99999999. ① Enter an ID between 00001 and 99999 when the Destination entered. 	(Default: 1)
Source ID	Enter a station's source ID between 1 and 9999999. The the destinations.	ID is sent to (Default: 311)

Connection Port Settings > Microphone (MIC)

Microphone Control

Edit the input/output settings of the microphone connected to the RoIP Gateway.

Microphone Control		
Communication Method : 1	⊖ Simplex ● Full-Duplex	
Echo Canceller : 2	🔿 Disable 💿 Enable	
Noise Canceller : 3	🔿 Disable 💿 Enable	
Oommunication Method	Select the communication method for the microphone (De	fault: Full-Duplex)
2 Echo Canceller	Select whether or not to enable the Echo Canceller fu function reduces echo caused while duplex communio	
3 Noise Canceller	Select whether or not to enable the Noise Canceller.	(Default: Enable)

Connection Port Settings > Microphone (MIC)

Microphone Input Control

Edit the input setting of the microphone connected to the RoIP Gateway.

licrophone Voice				
In	put Gain :	0	~	dB

Input Gain

Select the input gain for the microphone. • Range: -12 ~ +6 (dB) (Default: 0)

Connection Port Settings > Microphone (MIC)

■ Voice Output Control

Edit the voice output control settings of the microphone connected to the RoIP Gateway.

Voice Output Control		
Voice Volume		
Output Gain : 🚺	+40	✓ dB
Notice Tone Volume : 2	+30	3 4 dB
		Apply Reset

Output Gain	Select the output gain for the microphone. • Range: 0 ~ +63 (dB)	(Default: +40)
2 Notice Tone Volume	Adjust the Notice Tone volume. • Range: 0 ~ +63 (dB)	(Default: +30)
S <apply></apply>	Click to apply the settings.	
<pre>4 <reset></reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

Connection Port Settings > RoIP Gateway

RolP Gateway Mode

Set the RoIP Gateway Mode.

7

RoIP Gateway1			
-	Mode :	Transceiver	~
loIP Gateway2			
	Mode :	RoIP Gateway	~
loIP Gateway3			
	Mode :	RoIP Gateway	~
loIP Gateway4			
	Mode :	RoIP Gateway	~
loIP Gateway5		B 10 0 1	
	Mode :	RoIP Gateway	~
colP Gateway6		RoIP Gateway	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
olD Cotoway7	Mode :	Roir Galeway	`
RolP Gateway7		RoIP Gateway	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
olP Gateway8	Mode :	Non Galeway	
Uni Galewayu	Mode :	RoIP Gateway	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Mode

Select the connected device to "RoIP Gateway" or "Transceiver" for the RoIP Gateway 1 ~ 8, and then click <Apply> to set. (Default: RoIP Gateway)

Changing this setting initializes the port settings.

Connection Port Settings > RoIP Gateway

RolP Gateway

Select a RoIP gateway port to edit the settings.

RoIP Gateway		
RoIP Gateway Port :	RoIP Gateway1	~

RolP Gateway Port Select a RolP gateway port to edit the settings.

(Default: RoIP Gateway1)

```
Connection Port Settings > RoIP Gateway
```

■ RoIP Gateway Connection (Mode: RolP Gateway)

The settings for a destinations that are connected to the RoIP Gateway through the RoIP gateway connection.

Transmission Mode :	1 Multicast	~
Destination Address :		
Destination Port Number :		
Source Port Number :	4 22510	
Voice Protocol :	5 AMBE+2	
	*Voice Protocol can be set on the Bridge Connection.	
Multicast TTL :	<u>1</u>	
Connection Status :	8 Inactive Activate Refresh	

① 6 is displayed only when the Transmission Mode (●) is set to "Multicast."

1 Transmission Mode	Select the transmission mode used on the network, for devices connected to the RoIP Gateway.
Destination Address	Enter the IP address or domain of the RoIP Gateway that going to be connected. When the Transmission Mode (1) is set to "Multicast," automatically set to "239.255.255.1."
3 Destination Port Number	Enter the same port number that entered to the Source Port Number (④) of the RoIP Gateway that going to be connected. (Default for RoIP Gateway1: 24400 Default for RoIP Gateway2: 24402
	Default for RoIP Gateway3: 24404 Default for RoIP Gateway4: 24406 Default for RoIP Gateway5: 24408 Default for RoIP Gateway6: 24410 Default for RoIP Gateway7: 24412 Default for RoIP Gateway8: 24414] ① Enter the port number between 2 and 65534, in even number.
	① Do not conflict with the other port settings.

① In the Multicast mode, all the default setting are fixed to "25210."

Connection Port Settings > RoIP Gateway

■ RoIP Gateway Connection (Mode: RoIP Gateway)

Transmission Mode :	1 Multicast	~
Destination Address :		
Destination Port Number :		
Source Port Number :	4 22510	
Voice Protocol :	5 AMBE+2	
	*Voice Protocol can be set on the Bridge Connection.	
Multicast TTL :	6 <u>1</u>	
Connection Status :	7 Inactive Activate Refresh	

(1) (6) is displayed only when the Transmission Mode (1) is set to "Multicast."

Source Port Number	 Enter a port number to receive an audio signal. ① Used as a source port number for an audio signal. ① Enter a port number between 1024 and 65534, in even number. ① Do not conflict with the other port settings. ① In the Multicast mode, all the default setting are "22510." (Default for RoIP Gateway1: 24400 Default for RoIP Gateway2: 24402 Default for RoIP Gateway3: 24404 Default for RoIP Gateway4: 24406 Default for RoIP Gateway5: 24408 Default for RoIP Gateway6: 24410 Default for RoIP Gateway7: 24412 Default for RoIP Gateway8: 24414)
S Voice Protocol	Displays the Voice Protocol Selected in the "Voice Protocol (For Custom Bridge Connection)" (Bridge Connection Settings > Bridge Connection > AMBE+2 Vocoder Assignment > Voice Protocol (For Custom Bridge Connection))
6 Multicast TTL	Enter the Time to Live value (TTL). TTL is used to control the Multicast packet delivery scope. Every time the packets pass through the router, this value subtracted. When the value is "0," the packets are discarded. (Default: 1) • Range: 1 ~ 255
Connection Status	 Click to connect or disconnect the RoIP Gateway, or to refresh the connection status. ① The buttons are grayed out when Connected Repeater's Address is blank. ① The settings cannot be changed while connection is established. Click <deactivate> before changing the settings on this screen.</deactivate>

```
Connection Port Settings > RoIP Gateway
```

RolP Gateway Communication (Mode: RolP Gateway)

Edit settings for the connected RoIP Gateway to communicate.

RoIP Gateway Communication	
Encryption : ① O Disable	
TalkBack : 2 Disable 💿 Enable	
TalkBack Time : 5	 seconds
Default Callee ID	
Call Type : 3 Group	~
Destination Prefix ID : 4	
Destination ID : 5 _1	
Source ID : 6 _801	

1 Encryption	Select whether or not to enable the Encryption function. (Default: Disable)
	When you enable the function, enter an encryption key between 1 and 32767. (Default: 1)
2 TalkBack	Select whether or not to enable the TalkBack function with devices connected to the RoIP Gateway. (Default: Enable) When the function is enabled, Select the TalkBack time. (Default: 5) • Range: 1 ~10 (seconds)
3 Call Type	Select a call type.(Default: Group)• Options: Individual, Group, or All
Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending on the system. (Default: Blank) • Range: 0 ~30
5 Destination ID	Enter the default ID for the EXT port between 1 and 9999999.
	(Default: 1) (Default: 1) (D
6 Source ID	Enter a station's source ID between 1 and 9999999. The ID is sent to the destinations.
	(Default for RoIP Gateway1: 801
	Default for RoIP Gateway2: 802
	Default for RoIP Gateway3: 803
	Default for RoIP Gateway4: 804
	Default for RoIP Gateway5: 805
	Default for RoIP Gateway6: 806
	Default for RoIP Gateway7: 807
	Default for RoIP Gateway8: 808)

Connection Port Settings > RoIP Gateway

■ RoIP Gateway Control (Mode: RoIP Gateway)

Edit settings for the connected RoIP Gateway to communicate.

RoIP Gateway Control		
Release Time :	200 *Setting value is set in five milliseconds steps.	milliseconds

Release Time

Enter the period of time to detect the audio output stoppage to the RoIP Gateway. (Default: 200)

Range: 5 ~ 2000 (milliseconds) in 5 second steps

Connection Port Settings > RoIP Gateway

Transceiver Model (Mode: Transceiver)

Displayed when the RoIP Gateway Mode is set to "Transceiver" to the selected RoIP Gateway Port.

Transceiver Model		
Transceiver Model :	IC-SAT100M *All the settings on this page will be initialized if you change this setting.	~

Transceiver Model	Select the selected Transceiver Model from the list.
	(Default: IC-SAT100M)
	① As of June, 2023, Only the IC-SAT100M is selectable.

Connection Port Settings > RoIP Gateway

Transceiver Connection (Mode: Transceiver)

Displayed when the RoIP Gateway Mode is set to "Transceiver" to the selected RoIP Gateway Port.

Transceiver Connection	
Destination Address : 1	
Voice Port Number : 2	
Control Port Number : 3	
Connection Status : 4	
	Disconnected Connect Refresh
1 Destination Address	Enter the IP Address of the connected transceiver.
2 Voice Port Number	 Enter the Voice Port Number of the connected transceiver. ① Enter a port number between 2 and 65534, in even number, except some reserved port numbers. ② Denot conflict with the other set settings.
	① Do not conflict with the other port settings.
	(Default for RolP Gateway1: 51000
	Default for RolP Gateway2: 51002
	Default for RolP Gateway3: 51004
	Default for RolP Gateway4: 51006
	Default for RolP Gateway5: 51008
	Default for RoIP Gateway6: 51010
	Default for RoIP Gateway7: 51012
	Default for RoIP Gateway8: 51014)
3 Control Port Number	Enter the Control Port Number of the connected transceiver.
	 Enter a port number between 1 and 65534, except some reserved port numbers.
	① Do not conflict with the other port settings.
	(Default: 53000)
Onnection Status	Displays the connection status to the transceiver that is entered in Destination Address (1).
	Click <connect> to start connecting to the transceiver.</connect>
	While connecting and connected to the transceiver, the settings 1 ~ 3 are grayed out and cannot be edited.
	Click <refresh> to refresh the status.</refresh>
	Click <disconnect> to disconnect and edit the Transceiver Connection</disconnect>
	settings.

Connection Port Settings > RoIP Gateway

Bridge Communication (Mode: RolP Gateway)

The settings for the Bridge Communication when a Bridge Connection Destination is set to "Custom Bridge Connection." (Bridge Connection Settings > Bridge Connection > Bridge Connection > Bridge Connection Destination)

Bridge Communication	
Encryption 1 Disable Encryption Key :	
TalkBack : 2 🔼 Disable 💿 Enable	
TalkBack Time : 5	 seconds
Default Callee ID	
Call Type : 3 _Group	~
Destination Prefix ID : 4	
Destination ID : 5 1	
Source ID : 6 1	7 8
	Apply Reset

Encryption	Select whether or not to enable the Encryption function, dep the connected transceiver's setting. (Defa When you enable the function, enter an encryption key betw 32767.	ult: Disable)
2 TalkBack	Select whether or not to enable the TalkBack function with c connected to the RoIP Gateway. (Defa When the function is enabled, Select the TalkBack time. • Range: 1 ~ 10 (seconds)	levices ault: Enable) (Default: 5)
S Call Type	Select a call type.(De• Options: Individual, Group, or All	fault: Group)
4 Destination Prefix ID	Enter a destination prefix ID. The ID may differ, depending or system. • Range: 0 ~30	on the
5 Destination ID	 Enter an Individual or Group ID for the destination transceiv 1 and 99999999. ① Enter an ID between 00001 and 99999 when the Destination Prentered. 	(Default: 1)
6 Source ID	Enter the station's source ID between 1 and 99999999. Used transceivers connected to the serial port.	l for calling (Default: 1)
⑦ <apply></apply>	Click to apply the settings.	
8 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

Connection Port Settings > RoIP Gateway

Bridge Communication (Mode: Transceiver)

The settings for the Bridge Communication when a Bridge Connection Destination is set to "Custom Bridge Connection." (Bridge Connection Settings > Bridge Connection > Bridge Connection > Bridge Connection Destination)

ridge Communication	
Encryption : 1 Disable Enable Encryption Key : 1 Source ID : 2 801	
Source ID : 2 801	_

Encryption	Select whether or not to enable the Encryption function, depending on the connected transceiver's setting. (Default: Disable) When you enable the function, enter an encryption key between 1 and 32767. (Default: 1)
2 Source ID	Enter the station's source ID between 1 and 9999999. Used for calling transceivers connected to the serial port. (Default for RoIP Gateway1: 801 Default for RoIP Gateway2: 802 Default for RoIP Gateway3: 803 Default for RoIP Gateway4: 804 Default for RoIP Gateway5: 805
	Default for RoIP Gateway5: 805 Default for RoIP Gateway6: 806 Default for RoIP Gateway7: 807 Default for RoIP Gateway8: 808)

Connection Port Settings > RoIP Gateway

Transceiver Control

The control settings for the Transceiver connected to the RoIP Gateway 1 ~ 8 port. ① Displayed when the Mode of the selected RoIP Gateway port is set to "Transceiver."

Transceiver Control	
TX Volume : 1 _0	✓ dB
RX Volume : 2 0	✓ dB
Connection Notice Tone : 3 〇 Disable 💿 Enable	
Connection Notice Tone Volume : 4 0	5 6 ^{dB}
	Apply Reset

Is displayed only when Is set to Enable.

1 TX Volume	Set the transceiver's transmitting audio level. • Range: –12 (minimum) ~ +6 (maximum) (dB)	(Default: 0)
2 RX Volume	Set the transceiver's receiving audio level. • Range: –12 (minimum) ~ +6 (maximum) (dB)	(Default: 0)
3 Connection Notice Tone	Select Whether or not to notify the connection status (succe failure) to the transceiver connected to the RoIP Gateway to with a notice tone. (Defa When enabling this item, a caller can receive a notification to ringing. The RoIP Gateway alerts as a failure when: • The connection status is other than "Connected." (Connection Port Settings > RoIP Gateway > Transceiver Connec Connection Status) • The IC-SAT100M could not connect to any satellites.	the caller ult: Disable) one during
Connection Notice Tone Volume	Adjust the Connection Notice Tone audio level that is sent to transceiver. • Range: –12 ~ +6 (dB)	the source (Default: 0)
5 <apply></apply>	Click to apply the settings.	
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

DESTINATION SETTINGS

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SelCall Number Converting screen

Destination Settings > SelCall Number Converting

Save or Write the SelCall Number Converting Setting

You can load or save the converting settings.

Save or Write the SelCall Number Converting Setting	
Load Settings from File : 1	Choose File No file chosen Write A CSV format file can be written to this product. When the file is written, the current settings will be overwritten.
Save to File : 2	Save Save to idtbl_brg.csv file.

1 Load Settings from File	 You can load the saved [SelCall Number Converting file] (Extension: csv) file, and write it to the RoIP Gateway. Click <choose file="">, and select the SelCall Number Converting file</choose> (Example: idtbl_brg.csv) to load. Verify that the selected file is displayed, and then click <write>.</write> ① The content of the file is loaded to [List of SelCall Number Converting Entries]. ① When the setting file (Extension: sav) is used to restore the settings, the settings of the RoIP Gateway will be overwritten.
2 Save to File	Click to save the [List of SelCall Number Converting Entries] contents in the PC, as the "SelCall Number Converting file (Extension: csv)."

SelCall Number Converting screen

Destination Settings > SelCall Number Converting

About the SelCall Number Converting

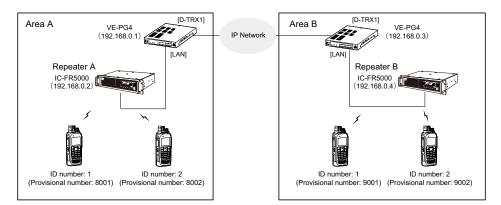
When a SelCall number is shared beyond the site, you can't call transceivers across the site due to "SelCall number duplication." The SelCall Number Convert function solves this problem by automatically converting the SelCall number.

Here is an example to show how the function works.

The transceiver (ID number: 1) in Area A is calling the transceiver (ID number: 2) in Area B using a provisionally assigned SelCall number (9002).

The provisionally assigned SelCall number is converted into the actual one (9002 to 2), according to the number conversion table. Therefore, they can talk to each other across the sites.

At the same time, the ID number of the transceiver in Area A is also converted, based on the list of SelCall Number Converting entries registered in Area A's RoIP Gateway (1 to 8001). The converted number (8001) is displayed on the transceiver in Area B.



• The conversion table for the above example. (Area A)

Index	Name	Destination			Convert Destination				
		Call Type	Prefix ID	ID	Call Type	Prefix ID	ID		
1	Destination (Area B Sales Dept)	Individual		9001	Individual		1	Edit	Delete
2	Destination (Area B Sales Dept)	Individual		9002	Individual		2	Edit	Delete
3	Destination (Area A Sales Dept)	Individual		1	Individual		8001	Edit	Delete
4	Destination (Area A Sales Dept)	Individual		2	Individual		8002	Edit	Delete

• The conversion table for the above example. (Area B)

Index	Name	Destination			Convert Destination				
		Call Type	Prefix ID	ID	Call Type	Prefix ID	ID		
1	Destination (Area A Sales Dept)	Individual		8001	Individual		1	Edit	Delete
2	Destination (Area A Sales Dept)	Individual		8002	Individual		2	Edit	Delete
3	Destination (Area B Sales Dept)	Individual		1	Individual		9001	Edit	Delete
4	Destination (Area B Sales Dept)	Individual		2	Individual		9002	Edit	Delete

① We do not recommend using duplicate individual numbers between bases.

① You need to register both entries of the destination information and the source information.

SelCall Number Converting screen

Destination Settings > SelCall Number Converting

SelCall Number Converting

Even when a SelCall number is shared in several sites, you can call a radio in a different site by using the provisionally assigned SelCall destination ID.

elCall Number Converting								
ndex 1	Name 2	Destination			Convert Destina			
		Call Type 3	Prefix ID 4	ID (5)	Call Type 6	Prefix ID 7	ID (8)	9
1 🗸		Individual 🗸			Individual 🗸			Add

1 Index	The Index assigned for the entry.(DIndex range: 1 ~ 1000	efault: 1)
2 Name	Enter a name of up to 31 characters.	
3 Call Type (Destination)	Select the type of call.(Default: In• Individual: Virtually call a specified transceiver.• Group:Virtually call all transceivers that belong to the specified• All:Call all transceivers.	,
4 Prefix ID (Destination)	Enter the SelCall prefix ID. • Range: 0 ~ 30	
ID (Destination)	Enter a provisionally assigned SelCall destination ID. ID range differs, Depending on the system mode.	
	When "All" is selected in [Call Type (Destination)] (3), This item's c changes to gray, and you cannot change the setting.	color
6 Call Type (Convert Destination)	Select the call type.(Default: In• Individual: Call only one transceiver.• Group:Call all transceivers that belong to the specified group.• All:Call all transceivers.	ndividual)
Prefix ID (Convert Destination)	Enter the SelCall destination's prefix ID. • Range: 0 ~ 30	
8 ID (Convert Destination)	Enter the ID of the SelCall destination. ID range differs, Depending on the system mode.	
	When "All" is selected in [Call Type (Convert Destination)] (⁶), this color changes to gray, and you cannot change the setting.	item's
᠑<add></add>	Click to add the entry. ① The registered contents are displayed on the [List of SelCall Number Converting Entries] screen.	er

SelCall Number Converting screen

Destination Settings > SelCall Number Converting

■ List of SelCall Number Converting Entries

Lists the SelCall Number Converting settings.

Index Name		Destination			Convert Destination				
		Call Type	Prefix ID	ID	Call Type	Prefix ID	ID	1	2
1		Individual		9001	Individual		1	Edit	Delete
2		Individual		1	Individual		8001	Edit	Delete

1 <edit></edit>	Click to edit the entry. ① The registered contents are displayed in [SelCall Number Converting].
2 <delete></delete>	Click to delete the entry. (1) You cannot restore after clicking <delete>.</delete>
3 <delete all=""></delete>	Click to delete all of the entries. You cannot restore after clicking <delete all="">.</delete>

Destination Settings > Destination Settings

Destination Settings (All)

The settings to call all the registered WLAN transceivers and IP100FS.

If necessary, you can include other bases connections, IP transceiver controllers, and transceiver ports. (Up to 22 locations, excluding the IP transceiver controller)

This screen is displayed when clicking [Edit] of [List of Destination Setting Entries (All Call)].

De	stinat	ion Settings
Des	tination	Call Type : All
		Communication Type : 1 O Simplex 💿 Full-Duplex
		All Call for Talkgroup : 2 🔿 Disabled 💿 Enable
3	Addition	nal Controller
	🗆 Ali	1(Offfice1 (Main)) 2(Office2 (Sub))
	IP Tran	sceiver Controller/Connection Port
		IP Transceiver Controller
		Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3)
		Digital Transceiver4 (D-TRX4)
		EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4)
		Emergency Notification
		Microphone (MIC)
		RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5

This is an example of setting "All" as the Call Type.

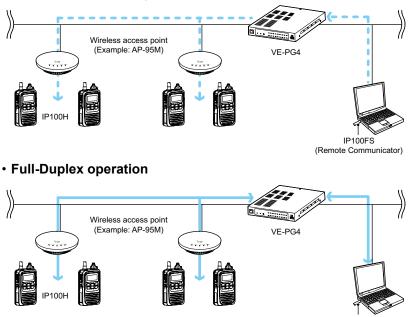
1 Communication Type

Select "Simplex" or "Full-Duplex."

(Default: Full-Duplex)

Simplex operation

When "Simplex" is selected, the called station cannot reply until the caller station stops transmitting.



IP100FS (Remote Communicator)

Destination Settings > Destination Settings

Destination Settings (All)

De	Destination Settings				
Des	tination	Call Type : All			
		Communication Type : 1 〇 Simplex 💿 Full-Duplex			
		All Call for Talkgroup : 2 🔿 Disabled 💿 Enable			
8	Additiona	al Controller			
	🗆 Ali	1(Offfice1 (Main)) 2(Office2 (Sub))			
4	IP Trans	ceiver Controller/Connection Port			
		IP Transceiver Controller			
	[Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3)			
	[Digital Transceiver4 (D-TRX4)			
	[C EXT I/O1 (EXT1) C EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4)			
	[Emergency Notification			
	[Microphone (MIC)			
	[🗆 RolP Gateway1 🗆 RolP Gateway2 🗆 RolP Gateway3 🗆 RolP Gateway4 🗆 RolP Gateway5			
	[RolP Gateway6 RolP Gateway7 RolP Gateway8			
		_ 6			
		Apply Rese			

This is an example of setting "All" as the Call Type.

2 All Call for Talkgroup Select whether or not the All call includes the WLAN transceivers and IP100FS that belong to the Talkgroup. (Default: Enable) **3** Additional Controller Select the additional controller when configuring several controllers, and the All call calls between the different controllers. ① By clicking "All," you can select or cancel all entries in the list. ① When "Sub" is selected in the [Additional Controller Settings] setting (Transceiver Controller > RoIP Settings > Additional Controller Settings), specify the master controller as the connection destination, as shown below. None Additional Controller : IP Transceiver Controller/Connection ① The other bases in [Additional Controller] (3) and [IP Transceiver Controller/ Connection Port] (4) can be connected to a total of up to 22 locations. ("IP Transceiver Controller" is not included this number of connections.) If you connect the other bases to more than 22 locations, you cannot

communicate properly.

Destination Settings > Destination Settings

Destination Settings (All)

Call Type : All Communication Type : Simplex	De	stinat	ion Settings
All Call for Talkgroup : C Disabled Enable Additional Controller I All I (Offfice1 (Main)) 2(Office2 (Sub)) IP Transceiver Controller/Connection Port I All IP Transceiver Controller Digital Transceiver 1(D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5	Des	tination	Call Type : All
3 Additional Controller All 1(Offfice1 (Main)) 2(Office2 (Sub)) 4 IP Transceiver Controller/Connection Port All IP Transceiver Controller Digital Transceiver1 (D-TRX1) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway4 RoIP Gateway5 			Communication Type : 1 〇 Simplex 💿 Full-Duplex
 All 1(Offfice1 (Main)) 2(Office2 (Sub)) IP Transceiver Controller/Connection Port All IP Transceiver Controller Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway3 RoIP Gateway4 RoIP Gateway5 			All Call for Talkgroup : 2 O Disabled 💿 Enable
4 IP Transceiver Controller/Connection Port All IP Transceiver Controller Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RolP Gateway1 RolP Gateway2 RolP Gateway4 RolP Gateway5 	3	Addition	nal Controller
 All IP Transceiver Controller Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5 		🗆 Ali	1(Offfice1 (Main)) 2(Office2 (Sub))
All IP Transceiver Controller Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway3 RoIP Gateway4 RoIP Gateway5			
Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway3 RoIP Gateway4 RoIP Gateway5	4	IP Tran	sceiver Controller/Connection Port
Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) C2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway3 RoIP Gateway4 RoIP Gateway5			IP Transceiver Controller
EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway3 RoIP Gateway4 RoIP Gateway5			Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3)
Emergency Notification Microphone (MIC) RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5			Digital Transceiver4 (D-TRX4)
Microphone (MIC) RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5			C EXT I/01 (EXT1) C EXT I/02 (EXT2) EXT I/03 (EXT3) EXT I/04 (EXT4)
RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5			Emergency Notification
			Microphone (MIC)
RolP Gateway6 RolP Gateway7 RolP Gateway8			RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5
			RolP Gateway6 RolP Gateway7 RolP Gateway8
			Apply Rese

This is an example of setting "All" as the Call Type.

IP Transceiver Controller/ Connection Port	 Select the communication devices. IP Transceiver Controller*1 Digital Transceiver1 (D-TRX1) ~ Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) ~ EXT I/O4 (EXT4)*2 Emergency Notification Microphone (MIC) RolP Gateway1 ~ RolP Gateway8 *1 Displayed when an IP Transceiver Controller is connected. *2 When [Connected Unit] is set to "EXT I/O Unit" and [EXT I/O Port Mode] is set to "Separate" in [EXT I/O Port Mode] setting (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode], "EXT Input" and "EXT Output" are displayed. When clicking "All," you can select or cancel all at once. When a speaker microphone is connected. The Audio input/output of the [MIC] port and the [EXT1] port cannot be used at the same time. The other bases in [Additional Controller] (③) and [IP Transceiver Controller/Connection Port] (④) can be connected to a total of up to 22 locations. ("IP Transceiver Controller" is not included this number of connections.) If you connect the other bases to more than 22 locations, you cannot communicate properly.
5 <apply></apply>	Click to apply the entries. () The registered contents are displayed in [List of Destination Setting Entries (All Call)].
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply></apply>

```
Destination Settings > Destination Settings
```

Destination Settings (Group)

The settings to call the registered group through the IP network or the RoIP Gateway's transceiver port. ① The displayed contents are changed according to the Call Type.

Destination Settings				
	No. : 🚺 🔟	10	~	
	Name : 2 _			
	Call Type : 3 🧕	Group	~	
	Destination ID : 4			
	Group Priority : 5			
Destination				
	Communication Type : 6	Simplex Full-Duplex		

This is an example of setting "Group" as the Call Type (3).

1 No	Select the number to register the destination Group. Up to 1990 destinations can be registered.
2 Name	Enter a destination name of up to 31 characters.
3 Call Type	Select "Group" for Group calls.
Destination ID	Enter a destination number. • Range: 00001 ~ 60000
6 Group Priority	Select "Normal" or "High" to set the priority in the Group call. (Default: Normal)
	 This item can be selected when "Group" is selected in [Call Type] (3).

Destination Settings > Destination Settings

Destination Settings (Group)

Destinati	on Settings		
	No. : 1	10	~
	Name : 2		
	Call Type : 3 .	Group	~
	Destination ID : 4		
		● Normal 🔿 High	
Destination			
	Communication Type : 6	⊖ Simplex	

This is an example of setting "Group" as the Call Type (3).

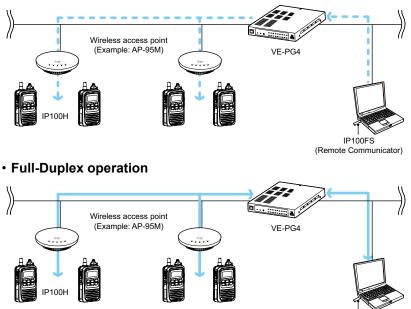
6 Communication Type

Select "Simplex" or "Full-Duplex."

(Default: Full-Duplex)

Simplex operation

When "Simplex" is selected, the called station cannot reply until the caller station stops transmitting.



IP100FS (Remote Communicator)

Destination Settings > Destination Settings

Destination Settings (Group)

_	Communication Type : O Simplex Full-Duplex
WLA	N Transceivers
	JI 00101(Sales1) 00102(Sales2) 00103(Sales3) 00050(IP100FS)
Addi	tional Controller
	II □ 1(Offfice1 (Main)) □ 2(Office2 (Sub))
IP Ti	ansceiver Controller/Connection Port
	II 🗆 Digital Transceiver1 (D-TRX1) 🗆 Digital Transceiver2 (D-TRX2) 🗆 Digital Transceiver3 (D-TRX3)
	Digital Transceiver4 (D-TRX4)
	EXT Input1 (EXT1) EXT Output1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3)
	EXT Input4 (EXT4) EXT Output4 (EXT4)
	Emergency Notification
	Microphone (MIC)
	□ RoIP Gateway1 □ RoIP Gateway2 □ RoIP Gateway3 □ RoIP Gateway4 □ RoIP Gateway5

This is an example of setting "Group" as the Call Type (3).

WLAN Transceivers	 Select the WLAN transceivers and IP100FS that belong the group from the list. The WLAN transceivers and IP100FS added in [Transceiver Registration] are displayed. By clicking "All," you can select or cancel all at once.
Additional Controller	Select an additional controller when configuring several controllers, and the Group call calls between the different controllers. (i) By clicking "All," you can select or cancel all entries in the list. (i) When "Sub" is selected in the [Additional Controller Settings] setting (Transceiver Controller > RoIP Settings > Additional Controller Settings), specify the master controller as the connection destination, as shown below. Additional Controller : IP Transceiver Controller/Connection
	 The other bases in [Additional Controller] (3) and [IP Transceiver Controller/ Connection Port] (9) can be connected to a total of up to 22 locations. ("IP Transceiver Controller" is not included in this number of connections.) If you connect other bases to more than 22 locations, you cannot communicate properly.

NOTE: When you use the Additional Controller Link function, set the other bases to be paired in the [Area Entry List] setting (Transceiver Controller > RoIP Server Settings > Area Call > Area Entry List).
For example, when the destination setting of Group 1 in the additional Controller 1 is set to additional Controller 2, the destination setting of Group 1 in the additional Controller 2 must be set to additional Controller 1.
The same applies in the case when the connection configuration between the other bases consists of the master controller and the multiple sub controllers.

Destination Settings > Destination Settings

Destination Settings (Group)

	Co	ommunication Type : O Simplex Full-Duplex
7	WLAN Trans	
	🗆 Ali 🗌	00101(Sales1) 00102(Sales2) 00103(Sales3) 00050(IP100FS)
8	Additional Co	nntroller
		□ 1(Offfice1 (Main)) □ 2(Office2 (Sub))
9	IP Transceive	er Controller/Connection Port
	🗆 Ali 🗆 D	igital Transceiver1 (D-TRX1) 🗆 Digital Transceiver2 (D-TRX2) 🗆 Digital Transceiver3 (D-TRX3)
)igital Transceiver4 (D-TRX4)
	□ E	XT Input1 (EXT1) EXT Output1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3)
	П Е	XT Input4 (EXT4) EXT Output4 (EXT4)
	ΞE	Emergency Notification
		ficrophone (MIC)
		colP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5
		CoIP Gateway6 C RoIP Gateway7 C RoIP Gateway8

This is an example of setting "Group" as the Call Type (3).

IP Transceiver Controller/

Connection Port

Select the communication devices.

- IP Transceiver Controller*1
- Digital Transceiver1 (D-TRX1) ~ Digital Transceiver4 (D-TRX4)
- EXT I/O1 (EXT1) ~ EXT I/O4 (EXT4)*2
- Emergency Notification
- Microphone (MIC)
- RolP Gateway1 ~ RolP Gateway8
- *1 Displayed when an IP Transceiver Controller is connected.
- *2 When [Connected Unit] is set to "EXT I/O Unit" and [EXT I/O Port Mode] is set to "Separate" in [EXT I/O Port Mode] setting (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode), "EXT Input" and "EXT Output" are displayed.
- ① By clicking "All," you can select or cancel all at once.
- ① When a speaker microphone is connected to the [MIC] port, the audio input/ output of the [EXT1] port is disconnected. The Audio input/output of the [MIC] port and the [EXT1] port cannot be used at the same time.
- The other bases in [Additional Controller] (3) and [IP Transceiver Controller/ Connection Port] (3) can be connected to a total of up to 22 locations. ("IP Transceiver Controller" is not included this number of connections.) If you connect the other bases to more than 22 locations, you cannot communicate properly.
- ① For the EXT port that the IC-SAT100 is connected, you can belong to only a Group or Talkgroup.

① You cannot reset after clicking <Apply>.

```
Destination Settings > Destination Settings
```

Destination Settings (Talkgroup)

The settings to call the registered Talkgroup through the IP network or the RoIP Gateway's transceiver port. ① The displayed contents are changed according to the Call Type.

No.: 1	~
Name : 2	
Call Type : 3 Talkgroup	~
Destination ID : 4 00001	
Talkgroup Type : 莬 💿 Normal 🛛 Multiplex Talkgroup	
Destination	
Communication Type : 6 O Simplex 💿 Full-Duplex	
Talkgroup Call for IP100FS : 7 🔿 Disabled 💿 Enable	
Callee ID for IP100FS : 8 All All Appointment	
Destination ID :	

This is an example of setting "Talkgroup" as the Call Type (3), and "Appointment" as the Callee ID for IP100FS (8).

Enter a destination name of up to 31 characters.
Select "Talkgroup" for Talkgroup calls.
Enter a destination number. Range: 00001 ~ 60000 (1) This number must also be registered in the [ID List] setting (Transceiver Controller > Common Settings > ID List > ID List). (2) When "Function Key (FUNC Key / Menu)" in the [Talkgroup Selection] setting (Transceiver Controller > Common Settings > Profile > Profile > Talkgroup Selection) is selected, the WLAN transceiver can call to members in the same Talkgroup. Select "OFF" on the WLAN transceiver to return to the usual standby mode screen. (Example: IP100H) Talkgroup 1001 Talkgroup is selected Talkgroup is selected Talkgroup is oFF Talkgroup is selected Talkgroup is oFF

Destination Settings > Destination Settings

Destination Settings (Talkgroup)

No. : 🚺	1	~
Name : 2		
Call Type : 3		~
Destination ID : 4		
Talkgroup Type : 5	Normal Multiplex Talkgroup	
Destination		
Communication Type : 6	○ Simplex	
Talkgroup Call for IP100FS : 7	 Disabled Enable 	
Callee ID for IP100FS : 8	🔿 All 💿 Appointment	
Destination ID :		

This is an example of setting "Talkgroup" as the Call Type (3), and "Appointment" as the Callee ID for IP100FS (8).

5 Talkgroup Type

When "Multiplex Talkgroup" is selected, you can talk to multiple Talkgroups.

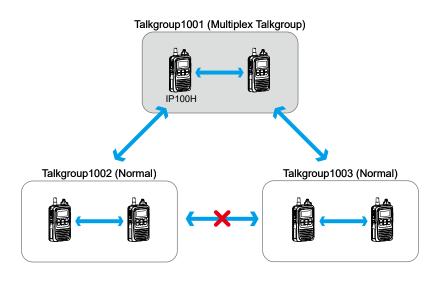
Linked Talkgroup	Talkgroup T	/pe: O Normal	Multiplex Talkgroup		
	Linked Talkgroup				
	~	~	~	~	
· · · · · · · · ·	~	~	~	~	

This setting can be selected when "Talkgroup" is selected in Call Type (3).

- \textcircled You cannot register the Multiplex Talkgroup in other Multiplex Talkgroups.
- ① The normal Talkgroup can only belong to 1 Multiplex Talkgroup.

Example: When Talkgroup1002 (Normal) and Talkgroup1003 (Normal) belong to Talkgroup1001 (Multiplex).

- •Talkgroup1001 can call to Talkgroup1001, Talkgroup1002, and Talkgroup1003.
- •Talkgroup1002 can call to Talkgroup1001 and Talkgroup1002.
- •Talkgroup1003 can call to Talkgroup1001 and Talkgroup1003.



Destination Settings > Destination Settings

Destination Settings (Talkgroup)

No.: 1	~
Name : 2	
Call Type : 3 Talkgroup	~
Destination ID : 4 00001	
Talkgroup Type : 5 💿 Normal 🛛 Multiplex Talkgroup	
Destination	
Communication Type : 6 O Simplex 💿 Full-Duplex	
Talkgroup Call for IP100FS : 7 🔿 Disabled 💿 Enable	
Callee ID for IP100FS : 8 All Appointment	
Destination ID :	

This is an example of setting "Talkgroup" as the Call Type (3), and "Appointment" as the Callee ID for IP100FS (8).

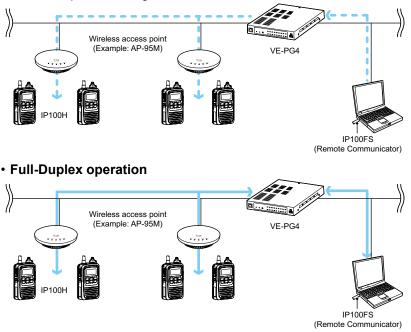
6 Communication Type

Select "Simplex" or "Full-Duplex."

(Default: Full-Duplex)

Simplex operation

When "Simplex" is selected, the called station cannot reply until the caller station stops transmitting.



7 Talkgroup Call for IP100FS...

Select whether or not the Talkgroup Call includes the IP100FS. (Default: Enable)

8 Callee ID for IP100FS

Select the IP100FS to be called when "Enable" is selected in [Talkgroup Call for IP100FS] (7). (Default: All)

- When "Appointment" is selected, you can register up to 5 IP100FS's destination IDs (4digits).
- ① This item is not displayed when "Disabled" is selected in [Talkgroup Call for IP100FS] (?).
- ① In the Multiplex Talkgroup, the settings for the IP100FS must be the same for all the Talkgroups.

Destination Settings > Destination Settings

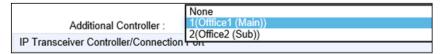
Destination Settings (Talkgroup)

\sim	
-	
Additi	onal Controller
🗆 All	□ 1(Offfice1 (Main)) □ 2(Office2 (Sub))
IP Tra	nsceiver Controller/Connection Port
	IP Transceiver Controller
	Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3)
	Digital Transceiver4 (D-TRX4)
	C EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4)
	Emergency Notification
	Microphone (MIC)
	RolP Gateway1 RolP Gateway2 RolP Gateway3 RolP Gateway4 RolP Gateway5
	RolP Gateway6 RolP Gateway7 RolP Gateway8

This is an example of setting "Talkgroup" as the Call Type (3).

Additional Controller

Select the additional controller when configuring several controllers, and the Talkgroup call calls between the different controllers. ① By clicking "All," you can select or cancel all entries in the list. ① When "Sub" is selected in the [Additional Controller Settings] setting



(Transceiver Controller > RoIP Settings > Additional Controller Settings), specify the master controller as the connection destination, as shown below.

 The other bases in [Additional Controller] ((2)) and [IP Transceiver Controller/ Connection Port] ((10)) can be connected to a total of up to 22 locations. ("IP Transceiver Controller" is not included this number of connections.) If you connect the other bases to more than 22 locations, you cannot communicate properly.

Destination Settings > Destination Settings

Destination Settings (Talkgroup)

/	
	Destination ID:
Additio	nal Controller
	□ 1(Offfice1 (Main)) □ 2(Office2 (Sub))
IP Tran	nsceiver Controller/Connection Port
All	 IP Transceiver Controller Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3) Digital Transceiver4 (D-TRX4) EXT I/O1 (EXT1) EXT I/O2 (EXT2) EXT I/O3 (EXT3) EXT I/O4 (EXT4) Emergency Notification Microphone (MIC) RoIP Gateway1 RoIP Gateway2 RoIP Gateway3 RoIP Gateway4 RoIP Gateway5 RoIP Gateway6 RoIP Gateway7 RoIP Gateway8

This is an example of setting "Talkgroup" as the Call Type (3).

10 IP Transceiver Controller/

Connection Port.....

Select the communication devices.

- IP Transceiver Controller*1
- Digital Transceiver1 (D-TRX1) ~ Digital Transceiver4 (D-TRX4)
- EXT I/O1 (EXT1) ~ EXT I/O4 (EXT4)*2
- Emergency Notification
- Microphone (MIC)
- RoIP Gateway1 ~ RoIP Gateway8
- *1 Displayed when an IP Transceiver Controller is connected.
- *2 When [Connected Unit] is set to "EXT I/O Unit" and [EXT I/O Port Mode] is set to "Separate" in [EXT I/O Port Mode] setting (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode), "EXT Input" and "EXT Output" are displayed.
- ① By clicking "All," you can select or cancel all at once.
- When a speaker microphone is connected to the [MIC] port, the audio input/ output of the [EXT1] port is disconnected.
 The Audio input/output of the [MIC] port and the [EXT1] port cannot be used at the same time.
- The other bases in [Additional Controller] (9) and [IP Transceiver Controller/ Connection Port] (10) can be connected to a total of up to 22 locations.
 ("IP Transceiver Controller" is not included this number of connections.) If you connect the other bases to more than 22 locations, you cannot communicate properly.

Destination Settings > Destination Settings

Destination Settings (Talkgroup)

	Destination ID:		
Addition	al Controller		
	□ 1(Offfice1 (Main)) □ 2(Office2 (Sub))		
IP Trans	sceiver Controller/Connection Port		
	IP Transceiver Controller		
Digital Transceiver1 (D-TRX1) Digital Transceiver2 (D-TRX2) Digital Transceiver3 (D-TRX3)			
Digital Transceiver4 (D-TRX4)			
	🗆 EXT I/O1 (EXT1) 🗆 EXT I/O2 (EXT2) 🗌 EXT I/O3 (EXT3) 🗌 EXT I/O4 (EXT4)		
1	Emergency Notification		
	Microphone (MIC)		
1	🗌 RolP Gateway1 🗌 RolP Gateway2 🗌 RolP Gateway3 🗌 RolP Gateway4 🗌 RolP Gateway5		
	RolP Gateway6 RolP Gateway7 RolP Gateway8		

This is an example of setting "Talkgroup" as the Call Type (3).

① <apply></apply>	Click to apply the entries.
	• When "Normal" is selected in the Talkgroup Type The entries are displayed in [List of Destination Setting Entries (Talkgroup Call)].
	• When "Multiplex Talkgroup" is selected in the Talkgroup Type The entries are displayed in [List of Destination Setting Entries (Multiplex Talkgroup Call)].
1 2 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

```
Destination Settings > Destination Settings
```

Destination Settings (Individual)

The settings to call the registered destination station through the IP network or the RoIP Gateway's transceiver port. ① The displayed contents are changed according to the Call Type.

Destination Settings				
No. : 🚺	1	~		
Name : 2				
Call Type : 3	Individual	~		
Destination ID : 4				
Destination				
Additional Controller/IP Transceiver 5	None	~		
Controller/Connection Port :		6 7 Apply Reset		

This is an example of setting "Individual" as the Call Type (3).

1 No	Select the number to register the destination station. Up to 1990 destinations can be registered.
2 Name	Enter a destination name of up to 31 characters.
3 Call Type	Select "Individual" for Individual calls.
Destination ID	Enter a destination number. • Range: 00001 ~ 60000

Destination Settings > Destination Settings

Destination Settings (Individual)

No. : 🚺	1	~
Name : 2		
Call Type : 3	Individual	~
Destination ID : 4		
Destination		
Additional Controller/IP Transceiver 5	None	~

This is an example of setting "Individual" as the Call Type (3).

5 Additional Controller/IP Transceiver Controller/Connection Port ...

Select the communication devices or the path.

- None
- Additional Controller*1
- IP Transceiver Controller*2
- Digital Transceiver1 (D-TRX1) ~ Digital Transceiver4 (D-TRX4)
- EXT I/O1 (EXT1) ~ EXT I/O4 (EXT4)*3
- Emergency Notification
- Microphone (MIC)
- RolP Gateway1 ~ RolP Gateway8
 - *1 The registered additional Controllers are displayed.
 - *2 Displayed when an IP Transceiver Controller is connected.
- *3 When [Connected Unit] is set to "EXT I/O Unit" and [EXT I/O Port Mode] is set to "Separate" in the [EXT I/O Port Mode] setting (Connection Port Settings > EXT I/O (EXT) > EXT I/O Port Mode), "EXT Input" and "EXT Output" are displayed.
- ① When a speaker microphone is connected to the [MIC] port, the audio input/ output of the [EXT1] port is disconnected. The Audio input/output of the [MIC] port and the [EXT1] port cannot be used at the same time.

6 < Apply> Click to apply the entries. The registered contents are displayed in [List of Destination Setting Entries (Individual Call)].

⑦ < Reset> Click to reset the settings. ③ You cannot reset after clicking < Apply>.

```
Destination Settings > Destination Settings
```

Destination Settings (Telephone)

The settings to call the registered telephone through the IP network. ① The displayed contents are changed according to the Call Type.

estination Settings				
No. : 🚺	1	~		
Name : 2				
Call Type : 3		~		
Destination Phone Number : 4		56		
Destination Phone Humber .		Apply Reset		

This is an example of setting "Telephone" as the Call Type (3).

1 No	Select the number to register the destination station. Up to 1990 destinations can be registered.
2 Name	Enter a destination name of up to 31 characters.
3 Call Type	Select "Telephone" for Telephone calls.This Call Type includes the transceivers connected by the Bridge Connection through a VE-PG4.
Oestination Phone Number	Enter a destination phone number of up to 31 digit numbers and characters (# or *).
<pre> S <apply> </apply></pre>	Click to apply the entries. ① The registered contents are displayed in [List of Destination Setting Entries (Telephone)].
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

```
Destination Settings > Destination Settings
```

List of Destination Setting Entries (All Call)

Lists the destination setting entries for All Calls. ① Click <Edit> to edit the entry.

Lis	List of Destination Setting Entries (All Call)				
	Communication Type	All Call for Talkgroup	Additional Controller	IP Transceiver Controller/Connection Port	
	Full-Duplex	Enable	-	Not Set	Edit

Destination Settings > Destination Settings

■ List of Destination Setting Entries (Group Call)

Lists the destination setting entries for Group Calls.

List of Destination Setting Entries (Group Call)									
1		No.	Name	Destination ID	Group Priority	Number of WLAN Transceivers	Additional Controller	IP Transceiver Controller/Connection Port	2 3
		2	Sales	00001	Normal	-	-	Set	Edit Delete
								4 Delete Selecter	5 d Delete All

Check Box	Click to add a check mark to delete the entry. $①$ By clicking <all>, you can select or cancel all the entries.</all>
2 <edit></edit>	Click to edit the entry.
3 <delete></delete>	Click to delete the entry. ① You cannot restore after clicking <delete>.</delete>
Oelete Selected>	Click to delete the selected entries. ① You cannot restore after clicking <delete selected="">.</delete>
5 <delete all=""></delete>	Click to delete all of the entries. ① You cannot restore after clicking <delete all="">.</delete>

Destination Settings > Destination Settings

■ List of Destination Setting Entries (Talkgroup Call)

Lists the destination setting entries for Talkgroup Calls.

ist of Destination Setting Entries (Talkgroup Call)							
	No.	Name	Destination ID	Additional Controller	IP Transceiver Controller/Connection Port	2	3
	3		01002	-	Not Set	Edit	Delete
	4		01003	-	Not Set	Edit	Delete
					4 Delete Selected	d Dele	5 ete All

1 Check Box	Click to add a check mark to delete the entry. $①$ By clicking <all>, you can select or cancel all the entries.</all>
2 <edit></edit>	Click to edit the entry.
S <delete></delete>	Click to delete the entry. ① You cannot restore after clicking <delete>.</delete>
Oelete Selected>	Click to delete the selected entries. ① You cannot restore after clicking <delete selected="">.</delete>
5 <delete all=""></delete>	Click to delete all of the entries. ① You cannot restore after clicking <delete all="">.</delete>

Destination Settings > Destination Settings

■ List of Destination Setting Entries (Multiplex Talkgroup Call)

Lists the destination setting entries for Multiplex Talkgroup Calls.

All	No.	Name	Destination ID	Talkgroup Selection	2	3
	5		01004	01002 01003	Edit	Delete

Check Box	Click to add a check mark to delete the entry. ① By clicking <all>, you can select or cancel all the entries.</all>
2 <edit></edit>	Click to edit the entry.
3 <delete></delete>	Click to delete the entry.
Oelete Selected>	Click to delete the selected entries. ① You cannot restore after clicking <delete selected="">.</delete>
5 <delete all=""></delete>	Click to delete all of the entries. ① You cannot restore after clicking <delete all="">.</delete>

Destination Settings > Destination Settings

■ List of Destination Setting Entries (Individual Call)

Lists the destination setting entries for Individual Calls.

🗆 Ali	No.	Name	Destination ID	Additional Controller/IP Transceiver Controller/Connection Port	2	3
	1970	Digital Transceiver1 (D-TRX1)	00201	Digital Transceiver1 (D-TRX1)	Edit	Delete
	1971	Digital Transceiver2 (D-TRX2)	00202	Digital Transceiver2 (D-TRX2)	Edit	Delete
	1972	Digital Transceiver3 (D-TRX3)	00203	Digital Transceiver3 (D-TRX3)	Edit	Delete
	1973	Digital Transceiver4 (D-TRX4)	00204	Digital Transceiver4 (D-TRX4)	Edit	Delete
	1974	EXT Input1 (EXT1)	00351	-	Edit	Delete
	1975	EXT Output1 (EXT1)	00301	EXT I/O1 (EXT1)	Edit	Delete
	1976	EXT Input2 (EXT2)	00352	-	Edit	Delete
	1977	EXT Output2 (EXT2)	00302	EXT I/O2 (EXT2)	Edit	Delete
	1978	EXT Input3 (EXT3)	00353	EXT Input3 (EXT3)	Edit	Delete
	1979	EXT Output3 (EXT3)	00303	EXT Output3 (EXT3)	Edit	Delete
	1980	EXT Input4 (EXT4)	00354	EXT Input4 (EXT4)	Edit	Delete
	1981	EXT Output4 (EXT4)	00304	EXT Output4 (EXT4)	Edit	Delete
	1982	Microphone (MIC)	00311	Microphone (MIC)	Edit	Delete
	1983	RoIP Gateway1	00801	RoIP Gateway1	Edit	Delete
	1984	RoIP Gateway2	00802	RoIP Gateway2	Edit	Delete
	1985	RoIP Gateway3	00803	RoIP Gateway3	Edit	Delete
	1986	RoIP Gateway4	00804	RoIP Gateway4	Edit	Delete
	1987	RoIP Gateway5	00805	RoIP Gateway5	Edit	Delete
	1988	RoIP Gateway6	00806	RoIP Gateway6	Edit	Delete
	1989	RoIP Gateway7	00807	RoIP Gateway7	Edit	Delete
	1990	RoIP Gateway8	00808	RoIP Gateway8	Edit	Delete

① The screen above shows the default settings.

Check Box	Click to add a check mark to delete the entry. ① By clicking <all>, you can select or cancel all the entries.</all>
2 <edit></edit>	Click to edit the entry.
3 <delete></delete>	Click to delete the entry. (i) You cannot restore after clicking <delete>.</delete>
Oelete Selected>	Click to delete the selected entries. Tou cannot restore after clicking <delete selected="">.</delete>
5 <delete all=""></delete>	Click to delete all of the entries.

Destination Settings > Destination Settings

■ List of Destination Setting Entries (Telephone)

Lists the destination setting entries for Telephone Calls.

_ist of Destination Setting Entries (Telephone)					
D	🗆 All	No.	Name	Destination Phone Number	2 3
		6	UT136-31	31	Edit Delete
		7	UT136-32	32	Edit Delete

Check Box	Click to add a check mark to delete the entry. ① By clicking <all>, you can select or cancel all the entries.</all>
2 <edit></edit>	Click to edit the entry.
3 <delete></delete>	Click to delete the entry. Tou cannot restore after clicking <delete>.</delete>
Oelete Selected>	Click to delete the selected entries. ① You cannot restore after clicking <delete selected="">.</delete>
5 <delete all=""></delete>	Click to delete all of the entries. ① You cannot restore after clicking <delete all="">.</delete>

Destination Settings > Destination Settings

Destination Batch Setting

In this settings, you can register the Destination IDs all at once by serial number, or copy the registered settings to other destinations.

estination Batch Setting		
Call Type : 🕦	Group	~
Destination ID : 2		Add
_	* Enter Unit ID range.	
Refer to : 3	00001	~

❶ Call Type	Select the Call Type from "Individual," "Group," or "Talkgroup."
2 Destination ID	 Enter the range of Destination ID number. <add></add> By clicking <add> after [Refer to] (3) is set, the entered Destination ID range is registered to the selected reference.</add> When the entered Destination ID number is already registered. "Override the settings" is displayed.
3 Refer to	Select the registered setting for reference.

EXPERT SETTINGS

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Emergency Notification screen

Expert Settings > Emergency Notification

Emergency Notification

Select the port to use as the emergency notice output.

Emergency Notification	
Digital Transceiver1 (D-TRX1): 1 💿 Disab	le 🔿 Enable
Digital Transceiver2 (D-TRX2): Disab 	le 🔿 Enable
Digital Transceiver3 (D-TRX3): 💿 Disab	le 🔿 Enable
Digital Transceiver4 (D-TRX4): 💿 Disab	le 🔿 Enable
EXT I/O1 (EXT1): 2 🖲 Disab	le 🔿 Enable
EXT I/O2 (EXT2): Disab 	le 🔿 Enable
EXT Output3 (EXT3): Disab 	le 🔿 Enable
EXT Output4 (EXT4): 💿 Disab	le 🔿 Enable
Emergency Notification Equipment: 3	le 🔿 Enable
Microphone(MIC): 4 💿 Disab	le 🔿 Enable
RolP Gateway 1: 👩 🖲 Disab	le 🔿 Enable
RolP Gateway 2: 💿 Disab	le 🔿 Enable
RolP Gateway 3: 💿 Disab	le 🔿 Enable
RolP Gateway 4: 💿 Disab	le 🔿 Enable
RolP Gateway 5: Disab 	le 🔿 Enable
RolP Gateway 6: 💿 Disab	le 🔿 Enable
RolP Gateway 7: 💿 Disab	le 🔿 Enable
RolP Gateway 8: 💿 Disab	ele C Enable

Digital Transceiver	Select whether or not to send an emergency notice to D-TRX1 ~ D-TRX4 ports.	the (Default: Disable)
EXT I/O / EXT Output	 Select whether or not to send an emergency notice to devices connected to the EXT I/O ports. (i) "EXT Output" is displayed when the "Connected Unit" is su Unit," and "EXT I/O Port Mode" is set to "Separate." (Connection Port Settings > EXT I/O (EXT) > Connected (Connection Port Settings > EXT I/O (EXT) > EXT I/O Po (i) Either of the [EXT1] port or the [MIC] port is usable at the a microphone is connected to the [MIC] port, the [EXT1] port 	(Default: Disable) set to "EXT I/O Unit) rt Mode) same time. When
Semergency Notification Equipment	Select whether or not to send an emergency notice to bridge-connected destination.	
Microphone (MIC)	Select whether or not to send an emergency notice to connected to the RoIP gateway.	the microphone (Default: Disable)
S RolP Gateway	Select whether or not to send an emergency notice to connected other RoIP gateways.	the bridge- (Default: Disable)
6 <apply></apply>	Click to apply the settings.	
♂ <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>	

Abnormal Condition Monitoring screen

Expert Settings > Abnormal Condition Monitoring

LAN Port Link-down

Set the monitor function for a communication error.

Monitoring : 1	Disable Enable Enable			
Control Output : 📿			~	
	*Only usable when [Conn Circuit Switching] is set to		XT I/O is set to [EXT I/O Unit] and [Control	
The screen shows when Monitor	oring (1) is set to "Er	nable."		
1 Monitoring	error. When ar screen, as sho	i error is det wn below.	etect a RoIP gateway's LAN port tected, it is displayed on the "SYS	
	(Information > SYSLOG > SYSLOG)			
			(Def	ault: Disable
	09-11 16:29:32	NOTICE	telephoned: LAN PORT LINK SUCCESS!!	
	09-11 16:29:12	NOTICE	telephoned: LAN PORT LINK ERROR!!	
2 Control Output	Select whether error detect sig	[.] or not to sl jnal.	toring (1) is set to "Enable." nort the B1/B2 terminal (+/–) to o (Def o enable the output control.	utput an ault: Disable
	Control Output :	EXT Output4 (EXT	- 4) [Connection Unit] of EXT I/O is set to [EXT I/O Unit	~

When enabling the output, confirm Switch Control of the port, that you wa
to output the error detect signal to, is set to "Relay Circuit."
(Connection Port Settings > EXT I/O (EXT) > EXT Output Settings >
Switching Control)

Abnormal Condition Monitoring screen

Expert Settings > Abnormal Condition Monitoring

PING Test

Set the monitor function for a communication error.

PING Test		_
Control Output : 2	 Disable Enable *LAN port Link-down Monitoring is also enabled. Disable *Only usable when [Connection Unit] of EXT I/O is set to [EXT I/O Unit] and [Control Circuit Switching] is set to[Relay Circuit]. 	
IP Address : 3 Monitoring Period : 4		
 2 ~ 4 are displayed only when 	Monitoring (1) is set to "Enable."	
Monitoring	Select whether or not to send PING commands to the ho the IP address. When the error is detected, the error is d "SYSLOG" screen. (Information > SYSLOG >SYSLOG)	•
	· · · · · · · · · · · · · · · · · · ·	efault: Disable)
Control Output	Select whether or not to short the B1/B2 terminal (+/–) to error detect signal. (D ① Confirm the Relay Circuit is selected. (Connection Port Settings > EXT I/O (EXT) > EXT Output Se Switching Control)	efault: Disable)
IP Address	Enter the destination IP address to send the PING comm	ands to.
Monitoring Period	Set the monitor period. • Range: 1 ~ 4320 (minutes)	(Default: 10)

Expert Settings > Abnormal Condition Monitoring

■ SIP Server Registration

Set the monitor function for the communication error.

SIP Server Registration		
Monitoring :) 🔿 Disable 💿 Enable	
Control Output :	Disable	~
	*Only usable when [Connection Unit] of EXT I/O is set to [E Circuit Switching] is set to[Relay Circuit].	XT I/O Unit] and [Control
		Apply Reset
		3 4

Monitoring	Select whether or not to detect the SIP server connect the error is detected, the error is displayed on the "S" (Information > SYSLOG > SYSLOG) (1) The [VoIP] indicator works regardless of this setting.		
 Control Output Displayed only when Monitoring (1) is set a Select whether or not to short the B1/B2 tenerror detect signal. Confirm the Relay Circuit is selected. (Connection Port Settings > EXT I/O (EXT) > Switching Control) 		ninal (+/–) to output an (Default: Disable)	
S <apply></apply>	Click to apply the settings.		
<pre>4 <reset></reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>		

IP Transceiver Status Filtering screen

Expert Settings > IP Transceiver Status Filtering

■ IP Transceiver Status Filtering

Filter settings for transceiver information output to a position information software. $\ensuremath{\textcircled{}}$ These settings are for future use.

IP Transceiver Status Filtering	
IP Transceiver Status Filtering : 🕕 💿 Disable 🛛 Enable	
Filtering Policy : 2 💿 Allow List 🔿 Deny List	3 4
	Apply Reset

IP Transceiver Status Filtering	Select whether or not to use the Filtering function. (Default: Disable)
Piltering Policy	 Select whether allow or deny outputting the transceiver information listed on the Filtering List. (Default: Allow List) Allow List: Output the listed transceiver information. Deny List: Filter the listed transceiver information.
S≤Apply>	Click to apply the settings.
<pre>4<reset></reset></pre>	Click to reset the settings. You cannot reset after clicking <apply>.</apply>

IP Transceiver Status Filtering screen

Expert Settings > IP Transceiver Status Filtering

Filtering List

Add up to 200 Unit IDs for the IP transceivers to be filtered.

Unit ID						
	 	 	 	1	2	3

<pre>1<apply></apply></pre>	Click to apply the settings.
2 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>
<pre>3<delete all=""></delete></pre>	Click to delete all of the entered contents. ① You cannot restore after clicking <delete all="">.</delete>

IP Transceiver Status Filtering screen

Expert Settings > IP Transceiver Status Filtering

■ Filtering List Batch Setting

Filtering List Batch Setting			
Range :	* Enter Unit ID range.	 [Add

Range

Enter the range of the unit IDs that you want to add to the Filtering List, and then click <Add> to add transceivers that have an ID within the range. (Example: $00004 \sim 00010$)

Connection Port Extension screen

Expert Settings > Connection Port Extension

■ VoIP Settings

Sets the audio quality for RoIP gateway or Bridge. The setting items vary, depending on the TOS Type.

VoIP Settings		
Buffering Type 1	🖲 Static 🔿 Dynamic	
Receive Buffer Size 2		✓ milliseconds
TOS Type 🕄	Not Used	5 6 [×]
		Apply Reset
TOS Type: TOS		
VoIP Settings		
Buffering Type : 1	● Static 🔿 Dynamic	
Receive Buffer Size : 2		✓ milliseconds
TOS Type : 3		~
Media (RTP) Priority Level : 4		
Media (RTP) Service Type :	0	
Media (RTP) (HEX) :	EO	Apply Reset
TOS Type: Diffserv		
VoIP Settings		
	🗋 🖲 Static 🔵 Dynamic	
Buffering Type :		 milliseconds
Buffering Type : Receive Buffer Size :	40	 Inimiseconda
Receive Buffer Size : TOS Type :	40 Diffserv	 Initiateconda
Receive Buffer Size :	40 Diffserv	

① The screens above show when the Buffering Type (1) is set to "Static."

Buffering Type	 Select the jitter buffer used to reduce speech break up due to packet fluctuations. (Default: Dynamic) Static: Buffers receive voice data for a set period of time in the Receive Buffer Size (2). Dynamic: Buffering time of the received voice data varies, according to the packet fluctuation status.
2 Receive Buffer Size	 Displayed only when Buffering Type (1) is set to "Static." Set the period of time to buffer the received voice data. (Default: 40) Range: 20 ~ 1000 (milliseconds) The shorter the time you set, the less the delay, however the more the sound will be interrupted.

Connection Port Extension screen

Expert Settings > Connection Port Extension

VoIP Settings

TOS Type: Not Used	
VoIP Settings	
Buffering Type . 1 💿 Static 🔿 Dynamic	
Receive Buffer Size 2 40	 milliseconds
TOS Type 3 Not Used	56 [×]
	Apply Reset
TOS Type: TOS	
VolP Settings	
Buffering Type : 1 💿 Static 🔿 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 TOS	~
Media (RTP) Priority Level : 47	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : E0	Apply Reset
TOS Type: Diffserv	
VolP Settings	
Buffering Type : 🕦 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 _ Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : E0	Apply Reset

① The screens above show when the Buffering Type (1) is set to "Static."

3 TOS Type	Set TOS Type. • Not Used: Does	not use the TOS function.	(Default: Not Used)	
		uts the VoIP packet to the TOS field (OS (Type Of Service) format.	(8 bit) in the IP header, in	
	 TOS format ap 	plies RFC1349.		
		s: Shows the priority.		
		Set into "Media (RTP) Priority Leve number.	el" (④) with a decimal	
	• The next 4 bits:	Shows the service type.		
		Set into "Media (RTP) Service Typ number.	e" (④) with a decimal	
		The larger number, the higher prio	prity.	
	The last 1 bits	s: Reserved and fixed to "0."	,	
	the Di	ts the VoIP packet to the TOS field (8 fserv (Differentiated Service) format.	-	
	① The Diffserv for			
	I ne former 6	bits: Shows the DSCP. Set "Media (RTP) DSCP" (④) w The larger number, the higher p		
	The next 2 bi		Shority.	

Connection Port Extension screen

Expert Settings > Connection Port Extension

VoIP Settings

TOS Type: Not Used	
VoIP Settings	
Buffering Type 1 💿 Static 🛛 Dynamic	
Receive Buffer Size 2 40	✓ milliseconds
TOS Type 3 Not Used	5 6 [∨]
	Apply Reset
TOS Type: TOS	
VoIP Settings	
Buffering Type : 🌒 🖲 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	✓ milliseconds
TOS Type : 3_TOS	~
Media (RTP) Priority Level : 47	
Media (RTP) Service Type :	
Media (RTP) (HEX) : E0	Apply Reset
TOS Type: Diffserv	
VolP Settings	
Buffering Type : 🚺 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 _ 40	✓ milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : E0	Apply Reset

① The screens above show when the Buffering Type (1) is set to "Static."

4 Media (RTP)	Setting the Priority details for the TOS or Diffserv format options.			
	Priority Level	: Set the value of the priority level for TOS. Range: 0 ~ 7 (in decimal)	(Default: 7)	
	Service Type:	Set the value of the service type for TOS. Range: 0 ~15 (in decimal)	(Default: 0)	
	• DSCP:	Set the value of DSCP (Differentiated Services Co Diffserv. Range: 0 ~ 63 (in decimal)	ode Point) for (Default: 56)	
6 <apply></apply>	Click to apply	the setting.		
6 <reset></reset>	Click to reset t ① You cannot re	he setting. eset after clicking <apply>.</apply>		

Expert Settings > Call Recording

■ Common Setting

Set for recording the audio communication between the transceivers. The audio is saved in a file in each transmitting or receiving.

Common Setting		
Silence Recording : 1 〇 Disable Silence Period to End Recording : 2 5	 Enable 	seconds
Overwriting the Oldest Files : 3	⊖ Enable	4 5 Apply Reset

Silence Recording	Select whether or not to record a communication during there is no communication. When enabling this option, the RoIP gateway continues recording for the set period of time in "Silence Period to End Recording," after the communication has been terminated. The second communication that begins while recording will be			
	continuously recorded within the same file. (Default: Enable)			
Silence Period to End Recording	Set the period of time to stop recording when there is no communication. (Default: 5) • Range: 1 ~30 seconds			
Overwriting the Oldest Files	Select whether or not to record and overwrite the older data, when the disk is full. (Default: Disable)			
4 <apply></apply>	Click to apply the settings.			
S <reset></reset>	Click to reset the settings. (1) You cannot reset after clicking <apply>.</apply>			

Expert Settings > Call Recording

Recorder Setting

Records communication audio of the linked transceivers.

Target: Disable		
Recorder Setting		
Index :	1	~
Mode :2	Recording	~
Target :3	Oisable O Enable	
Call Type : Call ID :	Group	~
Call ID :	101	
		Apply Reset

① The screens above show when the Call Type (④) is set to "Group."

Target: Enable

Target : 3 🖸 Disable 💿 Enable	
Unit ID : 00101 (Sales1)	~

1 Index		Select an index. You c	an enter up to 4 recording boxe	es. (Default: 1)
2 Mode		Select the recording/m • Disable: • Recording:	nonitor mode. Does not record or monitors comr Records the communication audic storage device.	
		• Monitor:	Outputs the specified communicat particular port.	ion audio to a
		Monitor + Recording:	Simultaneously records and monit	ors.
8 Target		When enabling this opWhen the target transsscreen, the recording	to set WLAN transceivers as re- tion, select a target WLAN trans ceiver is deleted on the Transceive settings are disabled. er > Transceiver Settings > Transce	sceiver in Unit ID. (Default: Disable) r Registration
❹ Call Tyj	De	Group: Group Call All: The All Call	Calls from or to the specified Call I Is to the specified Group.	

Expert Settings > Call Recording

Monitoring			
	Destination Address : 5	192.168.0.10	
	Destination Port Number : 6	25002	
	Source Port Number : 7	25002	
	Voice Protocol :8		9 10

① Displayed when Mode (2) is set to "Monitor" or "Monitor + Recording."

5 Destination Address	Enter the IP address of the destination to be monitored.
6 Destination Port Number	Enter the port number of the destination to be monitored. (Default: 1: 25000 2: 25002 3: 25004 4: 25006)
⑦ Source Port Number	Enter the number of the source port that is connected to the destination to be monitored. (Default: 1: 25000 2: 25002 3: 25004 4: 25006)
8 Voice Protocol	Displays the voice protocol. (Fixed to "G.711u")
Image: Second secon	Click to apply the settings.
1 < Reset >	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

```
Expert Settings > Call Recording
```

List of Recording Box Entries

Displays the recording box entries.

t of Recording Box Entries								
Index	Mode	Unit ID	Call Type	Call ID	Destination Address	Destination Port Number	Source Port Number	Voice Protocol
1	Recording	00101 (Sales1)	-	-	-	-	-	-
2	Monitor + Recording	00103 (Sales3)	-	-	192.168.0.10	25002	25002	G.711u
3	Disable	-	-	-	-	-	-	-
4	Disable	-	-	-	-	-	-	-

The example in above shows:

1: Recording the communication of the Unit ID 00101.

2: Transmitting the communication audio of the Unit ID 00103 toward the port 25002 of 192.168.0.10 while recording it.

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List of VoIP Phonebook Entries 1	10-11

IP Line screen

IP Line Settings > IP Line

■ SIP Server

Setting used for connecting the RoIP gateway to the Session Initiation Protocol (SIP) server.

	SIP Server		
	Index : 1	1 Satch Setting Screen	
	IP Phone Number : 2 _		
	SIP Server Address : 3 _		
	SIP Service Domain : 4 _		
	User ID : 🍮 _		
	Password : 🌀 _	•	
	Registration Expiration : 7		
	Registration Renewal Timer : ⑧	Normal : <u>50 %</u> Exception : <u>50 %</u> 9 Apply Reset 10	
1 Ir	ndex	 Assign the index number for each setting entry. Range: 1 ~ 100 Click <batch screen="" setting=""> if you wan to enter 2 or more SIP servers at once. Refer to the SIP Server Batch Setting. (p.10-4)</batch> 	
2 IF	P Phone Number	 Enter an IP phone number to use as a client of SIP server of up to 31 characters (0~9, #, *). ① The number must be registered in the SIP server. ① Only when Use Letters for Phone Number is set to "Allow," you can enter capital and small letters as a phone number. (PBX Advanced > Advanced Settings > SIP Settings > Use Letters for Phone Number) 	
<u>3</u> S	IP Server Address	Enter a server address or host name of up to 63 characters.	
4 S	IP Service Domain	Enter a service domain name of up to 63 characters.	
5 U	ser ID	Enter an authentication user ID of up to 63 characters. Use the IP phone number that is entered in (2).	
6 P	assword	 Enter an authentication password of up to 31 characters. The entered password is masked like as "******". You can check the entered characters by clicking the eye icon to the right. 	
🕜 R	egistration Expiration	Set the registration expiration time. The connection information stored in the SIP server is discarded after the set time has passed. (Default: 600) • Range: 60 ~ 28800 seconds.	
<mark>8</mark> R	egistration Renewal Timer	Set the registration renewal interval time to between 10 and 90%. (Default: Normal: 50, Exception: 50)	
		The interval is expressed by the ratio of the value set in Registration Expiration (7) and the period of the normal and exception condition.	
9<,	Apply>	Click to apply the settings.	
<u>10</u> <	Reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

IP Line screen

```
IP Line Settings > IP Line screen
```

■ List of SIP Server Entries

You can edit the SIP server settings on the list.

1	2	3	4	5 Reload Registe
Index	IP Phone Number	Connection Status	Calling Number Notice	7 8
100		Connecting	Notify	✓ Edit Delete
				Apply Reset Delete A

1 Index	Displays the index number.
2 IP Phone Number	Displays the IP phone number.
Connection Status	Displays the SIP server connection status as Connecting, Connection Successful, or Connection failure.
Calling Number Notice	Select whether or not to notify your IP phone number to the destination. (Default: Notify) (1) Even if this option is set to "Not notified," the IP phone number may be notified, according to the telephone or line environment.
5 <reload></reload>	Click to reload the screen.① When "Connection successful" is not displayed, check the registered settings.
6 <register></register>	Click to connect to the SIP server.
<pre>⑦<edit></edit></pre>	Click to edit the entry.
8 <delete></delete>	Click to delete the entry. (i) You cannot restore after clicking <delete>.</delete>
	Click to apply the entry.
<pre>@<reset></reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>
<pre>① <delete all=""></delete></pre>	Click to delete all entries. (i) You cannot restore after clicking <delete all="">.</delete>

IP Line screen

IP Line Settings > IP Line

■ SIP Server Batch Setting

You can add 2 or more SIP servers at same time. This screen is displayed when the "**Batch Setting Screen**" is clicked.

	Start Number : 🕕	2						
	Add Number : 2	3						
	SIP Server Address : 3							
	SIP Service Domain : egistration Expiration :	600						secon
	ation Renewal Timer :	L	Normal :	50	%	Exception :	50	
Index	IP Phone Number		User ID		Password	Calling Number	Notice	
2						Notify		~
3						Notify		~
4					<	Notify		~

Start Number	Enter the start number to add more than 2 Phone Number settings at the same time.
2 Add Number	Enter the number of SIP servers you want to add to SIP Service Domains (3).
SIP server settings	Enter the details on SIP server. ① Refer to the SIP Server Settings for each setting details.
Client settings	Enter IP Phone Number, User ID, and Password to each local SIP server (client), and select whether or not to notify the IP Phone Number to the destination.① Refer to th SIP Server Settings for each setting details.
5 <apply></apply>	Click to <apply> the entry.</apply>
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Peer to Peer screen

IP Line Settings > Peer to Peer

Peer to Peer Common Setting

You can edit the Peer to Peer call receive setting from the WAN.

Peer to Peer Common Setting					
Calling from the WAN : ① _Inhibit	2 3 ∨ Apply Reset				

1 Calling from the WAN	 Select whether or not to permit receiving the Peer to Peer call from the WAN. (Default: Inhibit) When you select "Allow," Your SIP URI has to be registered to the "SIP URI" item on the "VoIP Phonebook" screen at the caller's SIP server. (IP Line Settings > VoIP Phonebook > VoIP Phonebook Entry > SIP URI) The Callee SIP URI must be registered on the VoIP phone book to receive the call through the WAN side.
2 <apply></apply>	Click to apply the settings.
3 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Peer to Peer screen

IP Line Settings > Peer to Peer

Peer to Peer

You can edit SIP URI setting used for Peer to Peer call.

Peer to Peer	
Index : 1	2 ~
SIP URI : 2	sip : The SIP URL needs to have at least one letter, a to z, or A to Z before the @. Apply Reset 3 4
1 Index	Select the index number for each entry. • Range: 1 ~ 500
2 SIP URI	Enter the SIP URI up to 63 characters in either format as shown below. • sip: [SIP username]@[VE-PG4 IP address] • sip: [SIP username]@[Host name.domain name]
	 About the [SIP username] part: Enter an alphabet or number in the [SIP username]. ① Must include at least one alphabet. About the [Host name.domain name] part: ① When the VE-PG4 IP address is registered in your party's phonebook, enter the IP address (LAN). ① When the VE-PG4 host name is registered in the dynamic DNS or static IP address in your party's Phonebook, enter the specified host name (ex. telephone) or domain name (ex. icom.co.jp).
3 <apply></apply>	Click to apply the settings.
4 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Peer to Peer screen

IP Line Settings > Peer to Peer

■ List of Peer to Peer Entries

Displays the entered or edited Peer to Peer settings.

List of Peer to Peer Entries						
	Index 1	SIP URI 2				
	1	sip:VEPG4@telephone.icom.co.jp	Edit Delete			
			3 4			
				Delete All		
				5		

1 Index	Displays the index assigned for the entry.
2 SIP URI	Displays the SIP URI.
③ <edit></edit>	Click to edit the entry.
Oelete>	Click to delete the entry. ① You cannot restore after clicking <delete>.</delete>
5 <delete all=""></delete>	Click to delete all entries. ① You cannot restore after clicking <delete all="">.</delete>

VoIP Phonebook screen

IP Line Settings > VoIP Phonebook

■ Save or Write the VoIP Phonebook

You can save or write the entered VoIP phonebook.

r Write the VoIP Pho	
Load Settings from File	Choose File No file chosen
	Write A CSV format file can be written to this product.
	When the file is written, the current settings will be overwritten.
Save to File	2 Save Save to voiptbl.csv file.

Load Settings from File	 You can load the saved phonebook file in csv format and write it to the RoIP gateway. Click <choose file="">, and then select the phonebook file (Example: voiptbl.csv) to load. Verify that the selected file is displayed, and then click <write>.</write></choose> ① The contents of the file is overwritten to "List of VoIP Phonebook Entries." ① When the Setting file (Extension: .sav) is used to restore the setting, the VoIP phonebook will be overwritten.
2 Save to File	Click to save the "List of VoIP Phonebook" as the [List of VoIP Phonebook Entries] file (voiptbl.csv). ① You can edit the saved file on a spreadsheet. ① You can share the saved file with more than 2 RoIP gateways.

VoIP Phonebook screen

IP Line Settings > VoIP Phonebook

■ Save or Write the VoIP Phonebook

O About the rules of a CSV file for the VoIP phonebook

When editing a saved CSV file, be sure to observe the following rules. Otherwise the VoIP phonebook settings may not load properly into the RoIP gateway.

	Α	В	С	D	E	F	G
1	#	VE-PG4	VoIP telephone directory	Setting file			
2	#	Firm Ver.	CONTROL ADARD.				
3	#	File Ver.					
4	#Index	Name	Phone number	SIP URI	_	_	_
5	1	telephone1	tel:7000	sip:icom7000@telephone.voip.net	voip		
6	2	telephone2	tel:7100	sip:icom7100@telephone.voip.net	voip		
_							

Column	Title	Description	
A	Index	1 ~ 1000 Do not duplicate the number.	
В	Name	Up to 30 characters	
С	Phone Number	"tel:" and up to 31 digits (0~9, #,*)	
D	SIP URI	Enter either of the following format, up to 63 characters sip:[SIP user name]@[Destination IP address] sip:[SIP user name]@[Destination host name or domain name]	
E		Fixed to "voip"	

• The lines that begins with "#" are comments.

• Delete unnecessary lines.

VoIP Phonebook screen

IP Line Settings > VoIP Phonebook

■ VoIP Phonebook Entry

Enter the VoIP phone number to use for the Peer to Peer telephone call.

VoIP Phonebook Entry		
Index : 1 3		
Name : 2		
Phone Number : 3		
SIP URI : 4 sip :	5 6	
	Apply Rese	

1 Index	Select the index number for each entry. • Range: 1 ~1000
2 Name	Enter the callee name up to 31 characters.
3 Phone Number	 Enter the phone number. When communicating in Peer to Peer, enter the numbers and symbol (#, *). Do not use numbers for the emergency calls in your area, otherwise you cannot make an emergency call.
4 SIP URI	Enter the SIP URI up to 63 characters in either format as shown below. • sip: [SIP username]@[VE-PG4 IP address] • sip: [SIP username]@[Host name.domain name]
5 <apply></apply>	Click to apply the settings.
6 <reset></reset>	Click to reset the settings. (1) You cannot reset after clicking <apply>.</apply>

VoIP Phonebook screen

```
IP Line Settings > VoIP Phonebook
```

List of VoIP Phonebook Entries

Displays the list of VoIP phone numbers entered in "VoIP phonebook entry."

Index	Name	Phone Number	SIP URI	0 2
1	telephone	7000	sip:icom7000@telephone.voip.net	Edit Delete
2	telephone1	7100	sip:icom7100@telephone.voip.net	Edit Delete

● <edit></edit>	Click to edit the entry.
2 <delete></delete>	Click to delete the entry. ① You cannot restore after clicking <delete>.</delete>
Solution States Sta	Click to delete all entries. ① You cannot restore after clicking <delete all="">.</delete>

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Basic screen

PBX > Basic

Basic

The common setting for the telephones in the network system.

Transfer Return Time :	20	seconds
Returned Call Ring Time :		seconds
Hold Recall Time :		seconds
	Hold Music 1	~
Hold Music Volume :	5 ● 0 dB ○ +6 dB	6 7
riola Music Volume.		Apply Re

1 Transfer Return Time	Set the time period until a transferred call is return picked up in that period of time. • Range: 0 ~ 99 (seconds) ① When "0" has set, you can not turn back a transferred	(Default: 20)
Returned Call Ring Time	Set the ring time when a transferred call has retu ① Range: 1 ~ 99 (seconds)	rned. (Default: 30)
3 Hold Recall Time	 Set the period of time until Notification tone rings a held call. Range : 0 ~600 (seconds) ① When "0" has been set, you cannot receive the Notification to the set. 	(Default: 120)
4 Hold Music	Set the music on hold. • Hold Music 1: For Elise • Hold Music 2: Greensleeves • Hold Music 3: Home on the range • Hold Music 4: Canon • Hold Music 5: Minuet	(Default: Hold Music 1)
S Hold Music Volume	Set the audio volume of the music on hold • Range: 0 dB (calm) or +6 dB (loud)	(Default: 0 dB)
G <apply></apply>	Click to apply the entries.	
♂ <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

PBX > Special Number

Common Special Number

Sets the common Special Numbers that can be used by both the transceiver and telephones.

Common Special Number										
Call Pickup : 1	*81									
Group Pickup : 2	**									
Direct Pickup : 3	*80									
System Special Number : 4	*82 *98	*93 *77	*85 *87	*88	*89	*99	*84	*86	*76	*97

Call Pickup	The number to pick up a call from another extension. (Default: *81)
	(Delaut. 01)
Ø Group Pickup	 The number to pick up a call from another extension in the same Group. (Default: **) You can pick up call from a particular group, by pushing the number set in this setting and the Pickup Group No. (See the Section 13)
3 Direct Pickup	 The number to pick up a call from a particular extension. (Default: *80) You can pick up call to a particular extension, by pushing the number set in this setting, and then the extension number.
System Special Number	The Special Numbers are those for internal system management. You cannot assign these numbers as extension numbers or as other Special Numbers. (Default: *82, *93, *85, *88, *89, *99, *84,*86, *76, *97, *98, *77, *87)

PBX > Special Number

Telephone Special Number

Sets the special numbers that can be used only by the telephones. **Options:** Up to 3 digit numbers and characters (0~9, #, *)

Telephone Special Number	
Call Park : 1 *90 Unpark Call : 2 *91 Inbound Call Pickup : 3 *92 Speaker Call : 4 *83 Call Forward Always : 5 *94 Call Forward No Answer : 6 *95 Call Forward Busy : 7 *96	
Call Park	You can park a call by pushing: The number that has been set in this setting, and then the park number or the flexible button (01 ~24) that the Park function is assigned. (Default: *90)
2 Unpark Call	You can unpark a call by pushing: The number that has been set in this setting, and then the park number or the flexible button (01 ~24) that the Park function is assigned. (Default: *91)
3 Inbound Call Pickup	 The Special Number, to pick up or unpark an inbound call from an extension in the same Group. (Default: *92) To use this function, set "External Call Status" function to a flexible button (01 ~ 24) in the Button Assignment setting. (See Section 13.) To pick up an inbound call from the KX series with another telephone: Dial the number in this setting (for example: *92), and the Button number (01 ~ 24) of the inbound or parked call.
	 For example, dial "*9203" to pick up the parked call to the Button number 03. To pick up an inbound call from another telephone than the KX series: Dialing "*81" is recommended because the incoming phone cannot recognize the External Call Status Button number.
Speaker Call	You can make a speaker call to an extension by pushing: the number that has been set in this setting, and then the extension number. (Default: *83) ① This function is usable only calls to the KX series telephone.
S Call Forward Always	 The number to forward or cancel forwarding all the incoming call. (Default: *94) To set the forwarding function, dial "*94" and the destination extension number you want to forward a call. (The alarm "PiPi, PiPi" sounds.) To cancel forwarding, dial "*94." (The alarm "Pi-Pi-, Pi-Pi-" sounds.)

PBX > Special Number

■ Telephone Special Number

Telephone Special Number	
Call Park :	1*90
Call Park : Unpark Call : Inbound Call Pickup : Speaker Call : Call Forward Always : Call Forward No Answer :	2 *91
Inbound Call Pickup :	3 *92
Speaker Call :	4 *83
Call Forward Always :	5 *94
Call Forward No Answer :	6 *95
Call Forward Busy :	♥ *96

6 Call Forward No Answer	 The number to forward when an incoming call does not an certain period of time. To set the forwarding function, dial "*95" and the destination enumber you want to forward a call. (The alarm "PiPi, PiPi" sou To cancel forwarding, dial "*95." (The alarm "Pi-Pi-, Pi-Pi-" sou 	(Default: *95) extension unds.)
Call Forward Busy	 The number to forward when the extension is busy. To set the forwarding function, dial "*96" and the destination enumber you want to forward a call. (The alarm "PiPi, PiPi" sou To cancel forwarding, dial "*96." (The alarm "Pi-Pi-, Pi-Pi-" sou 	unds.)

PBX > Special Number

Transceiver Special Number

Sets the special numbers that can be used only by the transceivers. **Options:** Up to 3 digit numbers and characters (0~9, #, *)

ceiver Special Number	
OFF-hook for Dialing : 1	
OFF-hook for Answering : 2 #	
ON-hook : 3 #	
Immediate Calling : 4 None	~

1 OFF-hook for Dialing	Set the tone signal starting to dial. Hold down this key for a while, then push the number keys to call. (Default: Blank)
	 ① Only when this option is set to a 1 digit number, a transceiver enters off-hook condition by holding this key for the set period of time in OFF-hook Detect Timer, then you will be ready to dial. Also you have to enable the DTMF settings in Connection Port Settings.
2 OFF-hook for Answering	Set the tone signal to receive the telephone call on a transceiver. (Default: #)
	① Only when this option is set to a 1 digit number, a transceiver can answer a telephone call by holding this key for the set period of time in OFF-hook Detect Timer. Also you have to enable the DTMF settings in Connection Port Settings.
	① When no tone signal has set, the call is automatically received.
3 ON-hook	Set the tone signal to end (disconnect) the call. Push this key to hook the call on a transceiver. (Default: #) ① Only when this option is set to a 1 digit number, a transceiver can cancel a telephone call by holding this key for the set period of time in OFF-hook Detect Timer. Also you have to enable the DTMF settings in Connection Port Settings.
Immediate Calling	Set the DTMF code for immediately transmitting the code. (Default: None)

PBX > Special Number

Transceiver Call Prefix

Sets the prefix to call a transceiver from an extension, by dialing or using the DID (Direct Inward Dialing) function.

Options: Up to 4 digit numbers and characters (0~9, #, *)

① To make an individual call, dial the Individual Call prefix, and then dial the Individual number of the transceiver.

① To make a Group call, dial the Group Call prefix, and then dial the Group number of the transceiver.

① To make an all call, dial the All Call prefix.

Transceiver Call Prefix		
Individual Call :	*	
Group Call :	#	
All Call :	**	
		Apply Reset

PBX > Special Number

External Call Routing Number

The routing number to acquire a specific outline telephone number, other than that has set in Extension Settings. (PBX > Extension > Extension Settings)

xternal Call Routing Number				
Outside Line Phone Number	Line	Routing Number		
	IP Line			

Routing Number

Enter up to 7 digit numbers and character (# or *) for each phone number.

When dialing a routing number first, you can make an outside line call using the specified outside line telephone number.

① Be sure that the routing number does not conflict with other Special Numbers or extension numbers.

PBX > Extension

Extension

Sets each extension (IP phone) details.

* Do not duplicate the Extension Group numbers and extension numbers.

The set status is displayed on the List of Extension Group Entries.

(PBX > Extension Group > List of Extension Group Entries)

Extension	
Port Type :	1 SIP Phone (Automatic Detection)
	2 6 🗸
Name :	
Extension Number :	4
Password :	
Estancian Marchae Matter and Oatharred Oath	6 A complex password is recommended Not Notify
Extension Number Notification on Outbound Call :	
IP Line :	
Peer to Peer :	
Connection from WAN : MAC Address :	
MAC Address .	Apply Reset
Port Type: Converter Bridge)
Port Type :	Converter Bridge
Index:	3
Name :	
Peer to Peer :	No use
Default Call Destination Number :	
	Apply Reset
ort Type	Set the type of connected device (port.) (Default: SIP Phone (Automatic Detection)
ndex	Set the index of the device. • Range: 1 ~ 25 for SIP phones, 1 ~ 20 for a converter bridges
ame	Set the name of the device up to 31 characters.
xtension Number	Set the extension to a 2 to 7 digit number.
assword	Set the password to connect to the RoIP gateway up to 31 characters.

① The password is only for a SIP phone.

PBX > Extension

Extension

Port Type: SIP Phone (Automatic Detection)			
Extension			
Port Type : 🚺	SIP Phone (Automatic Detection)	~	
Index : 2	6	~	
Name : 3			
Extension Number : 4			
Password : 5	A complex password is recommended	۲	
Extension Number Notification on Outbound Call : 6		~	
IP Line : 7	No use	~	
Peer to Peer : 8	No use	~	
Connection from WAN : 9	Deny	~	
MAC Address : 10		13	
	Apply	Reset	

Port Type: Converter Bridge

Port Type :	Converter Bridge 🗸	
Index :	3 🗸 🗸 🗸	
Name :		
Peer to Peer :	No use 🗸 🗸	
Default Call Destination Number : 🕕	Apply Reset	

6 Extension Number Notification

on Outbound Call	Set whether or not to notify your extension numb an outbound call.	er to a destination on (Default: Not Notify)
	 Not Notify: Depends on the setting in the Calling Nu (IP Line settings > IP Line > List of SIP S Number Notice) Notify: Notifies the Extension Number to the dependent of the dependent of the setting of the	Server Entries > Calling
IP Line	Set an IP phone number for the preset outbound	. (Default: No use)
8 Peer to Peer	Set a SIP user name for an outbound.	(Default: No use)

PBX > Extension

Extension

Port Type: SIP Phone	(Automatic Detection)

Extension		
Port Type :	SIP Phone (Automatic Detection)	~
Index :2	6	~
Name :3		
Extension Number :		
Password :5		۲
-	A complex password is recommended Not Notify	
Extension Number Notification on Outbound Call :6	· · · · · · · · · · · · · · · · · · ·	~
IP Line : 7	No use	~
Peer to Peer : 8	No use	~
Connection from WAN :9	Deny	~
MAC Address :10		12 13
		Apply Reset

Port Type: Converter Bridge

Extension	
Port Type : Converter Bridge 3 Default Call Destination Number : 1	

Connection from WAN	Displayed only when the Port Type (1) has set to SIP phone. Set whether or not to access to the extension from WAN. (1) Be sure to set a long and complicated Password (5).
10 MAC Address	Enter the MAC Address of the Panasonic KX series SIP phone. The MAC Address is settable only when the Port Type (1) is set to other than "SIP Phone (Standard)," "SIP Phone (WLAN)," "Transceiver Controller Telephone Connection," and "Converter Bridge."
Default Call Destination Number	Displayed when the Port Type (1) has set to "Converter Bridge." Enter a destination phone number when the device connected to the Port Type (1) makes a call.
<pre> 2 <apply> </apply></pre>	Click to apply the entries.
<pre>B<reset></reset></pre>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>

PBX > Extension

■ List of Extension Entries

The List of Extension entries.

① The Extension Group List is on the Extension Group screen. (PBX > Extension Group)

Lis	st of E	xtension Settings					
1		Port Type	Index	Name	Extension Number	Advanced Settings	3 4
		SIP Phone (Automatic Detection)	1	Sales 01	11 2	Advanced	Edit Delete
		convent	2	Sal	12	<u>Ad</u> 5	cont Delete
						Delete Selec	

Extension check box	Click to select that you want to delete or copy the setting. Click "All" to check or uncheck all the items in the list.
2 <advanced></advanced>	Click to display the Extension Detail sub window.
③ <edit></edit>	Click to edit the settings in the Extension Settings.
<pre>4 <delete></delete></pre>	Click to delete an entry.
S <delete items="" selected=""></delete>	Click to delete the selected entries. ① You cannot restore after clicking <delete items="" selected="">.</delete>
6 <delete all=""></delete>	Click to delete all the entries. (i) You cannot restore after clicking <delete all="">.</delete>

PBX > Extension

Extension Batch Setting

You can register extensions by serial numbering, or copy the setting contents to another extension at once.

Extension Batch Setting	
Port Type : 1 _	
Range : 🕗	Add
	ource : SIP Phone 1(31) Copy
Copy Settings : 3	
	Copy to
	All SIP Phone 1(31) SIP Phone 2(32) SIP Phone 3(33) SIP Phone 4(34)
c	ppy Item
	Port Type
	Extension Number Notification on Outbound Call
	IP Line
	Peer to Peer
	Connection from WAN
Port Type	Select the Port Type that you want to copy the settings. (Default: SIP Pho
Port Type	
	(Default: SIP Pho Enter the start number and the end number of the extension number
Range	(Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries. Select the setting options you want to copy and then click <copy> to copy the settings.</copy></add>
Range	(Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries. Select the setting options you want to copy and then click <copy> to</copy></add>
Range	(Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries. Select the setting options you want to copy and then click <copy> to copy the settings.</copy></add>
Range	(Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries. Select the setting options you want to copy and then click <copy> to copy the settings. Copying the settings 1. Set the source extension details in the "Extension" above on t</copy></add>
Range	(Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries. Select the setting options you want to copy and then click <copy> to copy the settings. Copying the settings 1. Set the source extension details in the "Extension" above on to screen.</copy></add>
Range	 (Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries.</add> Select the setting options you want to copy and then click <copy> to copy the settings.</copy> Copying the settings Set the source extension details in the "Extension" above on to screen. Enter the range of extension numbers to those you want to copy
Range	 (Default: SIP Pho Enter the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries.</add> Select the setting options you want to copy and then click <copy> to copy the settings.</copy> Copying the settings Set the source extension details in the "Extension" above on t screen. Enter the range of extension numbers to those you want to co 3. Click <add> to add the extension numbers.</add>
Range	 (Default: SIP Photesting and the end number of the extension number range you want to copy to, and then click <add> to add the entries.</add> Select the setting options you want to copy and then click <copy> to copy the settings.</copy> Copying the settings Set the source extension details in the "Extension" above on the screen. Enter the range of extension numbers to those you want to compare the settings. Click <add> to add the extension numbers.</add> In "Source," select a source extension number that you want to compare the setting option is a source extension number option.
Range	 (Default: SIP Photes in the start number and the end number of the extension number range you want to copy to, and then click <add> to add the entries.</add> Select the setting options you want to copy and then click <copy> to copy the settings.</copy> Copying the settings Set the source extension details in the "Extension" above on the screen. Enter the range of extension numbers to those you want to copy. In "Source," select a source extension numbers.

PBX > Extension

Extension Detail

Displayed by clicking <Advanced> in "List of Extension Settings." (PBX > Extension > List of Extension Settings)

Extension Detail		
Port Type :	SIP Phone (Automatic Detection)	
Index :	1	
Name :	Sales 01	
Extension Number : Call Forward Always	31	
Call Forward Settings : 1	● Don't Forward 🔿 Target	
Call Forward Number : 2 Call Forward No Answer		
Call Forward Settings : 3 Call Forward Number : 4	Don't Forward O Target	
Call Time : 5	5	✓ seconds
Call Forward Busy		
Call Forward Settings : 6	● Don't Forward 🔘 Target	
Call Forward Number : 7 Extension Group Transfer		
Call Forward Settings : 8	● Don't Forward ○ Forward	Apply Reset

Call Forward Settings	Select whether or not to forward calls when a call call destination. (De	annot arrive at the fault: Don't Forward)
2 Call Forward Number	Set the destination phone number of up to 31 digits ① The KX series telephone automatically forwards calls t	(
3 Call Forward Settings	Select whether or not to forward calls when the external answer in the set period of time. (De	ension does not fault: Don't Forward)
Call Forward Number	Set the destination phone number of up to 31 digits	(Default: Blank)
5 Call Time	Set the delay time to start forwarding. • Range: 5 ~ 60 (seconds) in 5 second steps	(Default: 5)

11 PBX

Extension screen

PBX > Extension

Extension Detail

Extension Detail	
Port Type :	SIP Phone (Automatic Detection)
Index :	1
Name :	Sales 01
Extension Number : Call Forward Always	31
Call Forward Settings : 1	● Don't Forward O Target
Call Forward Number : 2 Call Forward No Answer	
Call Forward Settings : 3	● Don't Forward O Target
Call Forward Number : 4 Call Time : 5	5 × seconds
Call Forward Busy	
Call Forward Settings : 6	● Don't Forward O Target
Call Forward Number : 7 Extension Group Transfer	·
Call Forward Settings : 8	Don't Forward Forward Forward Porward Apply Reset

6 Call Forward Settings	Select whether or not to forward calls from another extension when the extension is busy.(Default: Don't Forward)
Call Forward Number	Set the destination phone number of up to 31 digits. (Default: Blank)
8 Call Forward Settings	Select whether or not to forward inbound calls to the Extension Group. (Default: Don't Forward)
Sector Secto	Click to apply the entries.
0 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Extension Group screen

PBX > Extension Group

You can group up to 50 extension numbers into an Extension Group. You can select the extension (SIP phone) to be incoming and the extension not to receive incoming within the set group.

Extension Group Entry

Used to newly enter an extension group number.

* Do not duplicate the Extension numbers and Extension Group numbers.

You can check the extension number and its model name on the "Extension" screen. (PBX > Extension)

(Ringing Sequence: Simultaneous)

Port Type : 1	SIP Phone	e			~
Extension Group Number : 2					
Extension Group Name : 3					
Ringing Sequence : 4	Simultane	ous			~
1st Ringing : 5		□ 31	□ 32	33	
	34	41	42	43	
	44	45			
2nd Startup Time : 6	10 second	ls			~
2nd Ringing :		31	32	33	
	34	41	42	43	
	44	45			
3rd Startup Time :	Not used				7 8∨

Port Type	Select the Port	Type that you want to copy the settings. (Default: SIP Phone)
Extension Group Number	Enter an Exter • Range: Numbe	ision Group number. er in 2 ~ 7 digits
SExtension Group Name	Enter the Exter	nsion Group name of up to 31 characters.
4 Ringing Sequence		on when a call is incoming. : In Simultaneous ringing sequence, when the primary receiver cannot respond for a certain period of time, you can change to the secondary receiver. You can set the receiver's extension from the primary to the tertiary for a call. In Sequential ringing, you can set the ringing extension group.

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Extension Group screen

PBX > Extension Group

Extension Group Entry

(Ringing Sequence: Simultaneous)

Port Type : 1	SIP Phon	е			~
Extension Group Number : 2					
Extension Group Name : 3					
Ringing Sequence : 4	Simultane	eous			~
1st Ringing : 5		31	32	33	
	34	41	42	43	
	44	45			
2nd Startup Time : 6	10 second	ds			~
2nd Ringing :		31	32	33	
	34	41	42	43	
	44	45			
3rd Startup Time :	Not used				7 8 ×

5 1st Ringing	 Check the extension numbers to Ring when a call has arrived at the Extension Group. You can also set "2nd Ringing" and "3rd Ringing" by setting the "2nd Startup Time" (6) and "3rd Startup Time."
6 2nd Startup Time	Set the period of time until the secondary ring starts when the 1st Ringing extensions do not answer. (Default: Not used) • Range: Not used, or 10 ~ 60 (seconds) in 5 second steps
⑦ <apply></apply>	Click to apply entries.
8 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

11 PBX

Extension Group screen

PBX > Extension Group

Extension Group Entry

(Ringing Sequence: Sequential)

Extension Group Entry					
Port Type :	SIP Phone				~
Extension Group Number : 2					
Extension Group Name :					
Ringing Sequence :	Sequential				~
Extension Number :5	001 31 🗸	014	~		
	002 32 🗸	015	~		
		016	~		
	013 🗸 🗸			6 Apply Re	7 set

1 Port Type	Select the Port Type that you want to copy the settings. (Default: SIP Phone))
2 Extension Group Number	Enter a phone number to an Extension Group. Range: number in 2 ~ 7 digits	
3 Extension Group Name	Enter the Extension Group name of up to 31 characters.	
4 Ringing Sequence	 Select the action when a call is incoming. Simultaneous: In simultaneous ringing sequence, when the primary receiver cannot respond for a certain period of time, you can change to the secondary receiver. You can set the receiver's extension from the primary to the tertiary for a call. Sequential: In Sequential ringing, you can set the ringing extension group. 	
5 Extension Number	Select the action when a call is incoming.	
⑥ ≺Apply>	Click to apply entries.	
⑦ <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>	

Extension Group screen

PBX > Extension Group

■ List of Extension Group Entries

Displays the list of Extension Group entries.

Port Type	Extension Group Number	Extension Group Name	Ringing Sequence	Extension Number	0 0
SIP Phone	200	Sales	Simultaneous	<1st Ringing> 31 <2nd Ringing> 10 seconds 32 <3rd Ringing> Not used	Edit Del
SIP Phone	210	Planning	Sequential	33 34	Edit Del

● <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry. ① You cannot restore after clicking <delete>.</delete>
S <delete all=""></delete>	Click to reset all the entries. ① You cannot restore after clicking <delete all="">.</delete>

Inbound Call screen

PBX > Inbound Call

■ Inbound Call

Sets the destination extension or queuing of Inbound Calls.

Phone Number	Line	Connect to 1		Ringtone 2	Queuing 3
-	IP Line	Custom 3000*101	~	Outside Tone A 🗸	OFF
100704	Peer to Peer	None	~	Inside Tone A 🗸 🗸	OFF 5

Connect to	 Set the destination extension of Inbound calls to the specified phone number (dial-in number.) (Default: None) You can set an extension number or an extension group number. If you select "Custom," you can set the Individual ID of a transceiver like an example above. To set a Dial-in number, select a DID box in the "DID Settings." (PBX Advanced Settings > DID > DID Settings)
Ringtone	 This setting is only for the KX series SIP phones. Set a Ringtone (pattern) for each phone number. (Default for IP Line: Outside Tone A, for Peer to Peer: Inside Tone A) Outside Tone A ~ C: Ringtone pattern for an external call. Inside Tone A ~ C: Ringtone pattern for an internal call. Discrimination in the number: Automatically selects a Ringtone, depending on the phone number of an incoming call.
3 Queuing	If set to ON, the Ringing Tone is returned to a caller until the destination phone number is ready to arrive the call, even when the destination phone number is busy, or another request is incoming to it. (Default: OFF)
<pre>4<apply></apply></pre>	Click to apply the entries.
5 <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>

PBX TRANSCEIVER CALL SETTINGS

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Callee ID to Phone Number screen

PBX Transceiver Call Settings > Callee ID to Phone Number

Save or Write the Callee ID to Phone Number Setting

The common setting for the telephones in the network system.

ave or Write the Callee ID to Phone Number Setting	
Load Settings from File : 1 Choose File No file chosen	
Write A CSV format file can be written to this product.	
When the file is written, the current settings will be overwritten.	
Save to File : 2 Save Save to call_tbl.csv file.	

Load Settings from File	You can load the saved Callee ID to Phone Number settings from a CSV format file. Click <choose file=""> and select the setting file (call_tbl.csv) from the displayed list, and then click <open>. Confirm the correct file is selected, and then click <write> to load the settings from the selected file. ① Note that the previous settings are deleted when the setting file is loaded.</write></open></choose>
2 Save to File	Saves the settings in the "List of Callee ID to Phone Number Entries" to a CSV format file. Click <save> and select a folder to save the file into. You can edit the saved file in a spreadsheet.</save>

Callee ID to Phone Number screen

PBX Transceiver Call Settings > Callee ID to Phone Number

■ Callee ID to Phone Number

Enter phone numbers that the RoIP gateway dials to call up SIP phones, when making calls from linked transceivers.

Ca	allee ID t	to Phone Nu	nber							
	Index 1	Name 2	Callee ID		4		Phone Number 6			
			Call Type 3		Prefix ID	Destination ID 5		7		
	1 🗸		Individual	~				Add		
	-			• Ra	ange: 1		-			
2 Nan	ne			Ent	er a na	me of up to 3	1 characters.			
3 Call	l Type .			Cal			t matches both	n of Prefix	ID (4) and Dest	ination
					oup:	: Call only a sp Call all radios Call all radios	that belong to a	specified	group.	
Pret	fix ID .					orefix ID of the (Depends on the	e destination. ne system mode)		
5 Des	tination	ו ID				D of the desti (Depends on th	nation. ne system mode)		
6 Pho	one Nun	nber		Ent	er the p	phone number	r of up to 31 di	gits.		
7 <ad< th=""><td>id></td><th></th><td></td><td>(i) T</td><td>he regi</td><td>ld the entry. stered contents Entries screen.</td><td></td><th>n the List c</th><th>of Callee ID to Phor</th><td>ne</td></ad<>	id>			(i) T	he regi	ld the entry. stered contents Entries screen.		n the List c	of Callee ID to Phor	ne

PBX Transceiver Call Settings > Callee ID to Phone Number

■ List of Callee ID to Phone Number Entries

List of the Callee ID entries.

Index	Name	Callee ID		Phone Number		
		Call Type	Prefix ID	Destination ID		0 0
1	Sales 01	Individual	1	31	31	Edit Delete

1 <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry. ① You cannot restore after clicking <delete>.</delete>
3 <delete all=""></delete>	Click to delete all the entries. You cannot restore after clicking <delete all="">.</delete>

Outbound Call Restriction screen

PBX Transceiver Call Settings > Outbound Call Restriction

Outbound Call Restriction

Set the restriction rules for making outbound calls by the client transceivers.

Outbound Call Restriction			
Restriction Type : 1 🖲	Deny 🔿 Allow	Apply Reset	
Restriction Type	Entries." (See the next pa Deny: Inhibits the liste	on on the transceivers in th ge.) ed transceivers to make pho d transceivers to make pho	(Default: Deny) one calls.
2 <apply></apply>	Click to apply the entries.		

<pre>3<reset></reset></pre>	 Click to reset the entries.
	① You cannot restore after clicking <apply>.</apply>

Outbound Call Restriction so	creen	
PBX Transceiver Call Settings > 0	Dutbound Call Restriction	
Target ID Entry		
Enter the transceivers for the Outbo	ound Call Restriction.	
Target ID Entry]
Index 1	~	
Prefix ID 😕		
I ransceiver ID 😒 🚃	Add Reset	
1 Index	The index assigned for entry. • Range: 1 ~ 1000	(Default: 1)
2 Prefix ID	Enter the prefix ID of the client transceiver. ID range: (Depends on the system mode) 	
3 Transceiver ID	Enter the ID of the client transceiver. ID range: (Depends on the system mode) 	
4 <add></add>	Click to add the entry. ① The registered contents are displayed on the [List of] screen.	arget ID Entries]
s <reset></reset>	Click to reset the entries. ① You cannot restore after clicking <reset>.</reset>	

PBX Transceiver Call Settings > Outbound Call Restriction

■ List of Target ID Entries

List of transceivers for the Outbound Call Restriction.

Index	Prefix ID	Transceiver ID	1 2
1	1	0001	Edit Delete
2	1	0002	Edit Delete

❶ <edit></edit>	Click to edit the entry. ① The registered contents are displayed on the [Target ID Entry] screen.
2 <delete></delete>	Click to delete an entry. ① You cannot restore after clicking <delete>.</delete>
S <delete all=""></delete>	Click to delete all the entries. You cannot restore after clicking <delete all="">.</delete>

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ansceiver Controller Telephone Connection screen
Transceiver Controller Telephone Connection
Communication
Control
PTT Control Setting
Call Initiation Setting
Notice Tone on the Telephone
Release Timer
onverter Bridge screen
Converter Bridge
Connection
Communication
Control
DTMF Dialing
PTT Control Setting
Call Initiation Setting
Notice Tone on the Telephone
Release Timer

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Telephone Maintenance

Assigns a Group to each extension number.

The settings for each extension detail can be edited in "List of Extension Entries" (PBX > Extension > List of Extension Entries).

31 SIP Phone (Automatic Detection) 32 SIP Phone (Automatic Detection)	Group 1 V
32 SIP Phone (Automatic Detection)	Connected Group 1 V Reboot
33 SIP Phone (Automatic Detection)	Not Connected Group 1 V Reboot
34 SIP Phone (Automatic Detection)	Not Connected Group 1 V Reboot
3000 Transceiver Controller Telephone	Connection Group 1V

Check Box	Click to select the extensions if you want to reboot one or more KX series telephones. Click "All" to select all the entries. ① The extensions where Status (④) is "Not Connected" cannot be selected.
Extension Number	Displays the extension number.
S Port Type	Displays the port type of the Extension.
4 Status	 Displays the connection status of the telephone. (1) "Not Connected" is displayed for the telephone that is not registered to the SIP server of this RoIP gateway. (1) "—" is displayed for the Converter bridge or the Transceiver Controller Telephone Connection.
6 Group	Set the setting Group of the extension.(Default: Group 1)• Options: Group 1 ~ 30① You can customize the flexible function button assignments for each Group.

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Telephone Maintenance

All 🚺	Extension Number	Port Type 3	Status 4	Group 5	6
	31	SIP Phone (Automatic Detection)	Connected	Group 1 V	Reboot
	32	SIP Phone (Automatic Detection)	Connected	Group 1 🗸	Reboot
	33	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	34	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	3000	Transceiver Controller Telephone Connection		Group 1 🗸	
				7 Reboot Se	8 lected Reboot All Apply Reset 9 10

6 <reboot></reboot>	Click to reboot the KX series telephone.
Reboot Selected>	Click to reboot the selected (with check marks) KX series telephones.
8 <reboot all=""></reboot>	Click to reboot all the KX series telephones whose Status (④) is "Connected" in the list.
Image: Second secon	Click to apply the entries.
(0 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Telephone (KX-UT Series) screen	
PBX Extension > Telephone (KX-UT Series)	
■ Telephone Group	
Edits the Group setting of the entered extension (telephone)	
Telephone Group	
Select Group Setting : Common Setting	
Select Group Setting Select the setting mode.	
Common Setting Common settings for the KX-UT Series that are com RoIP gateway, such as the tone patterns or volume I	
 Group 1 ~ Group 30 The custom settings for the KX-UT Series in the selected to the RoIP gateway, such as the assignments. 	

PBX Extension > Telephone (KX-UT Series)

■ Telephone Individual Settings (KX-UT Series) Common Setting)

The Group setting of the entered extension (telephone)

Telephone Individual Settings (K	X-UT Series)]
RX Volume : 1	0	✓ dB	
TX Volume : 2	0	✓ dB	
Echo Canceller : 3	Disable C Enable		
RX Volume	Set the telephone's receiving audio level. • Range: –6 (minimum) ~ +6 (maximum) (dB)	((Default: 0)
2 TX Volume	Set the telephone's transmitting audio level. • Range: –6 (minimum) ~ +6 (maximum) (dB)	((Default: 0)
8 Echo Canceller	Enabling this option prevents an echo when trans	•	receiving. lt: Disable)

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Dial Tone (Common Setting)

Sets the tone when off-hook.

Dial Tone											
	Frequency 1 : Frequency 2 :	D									Hz
	Frequency 2 : 44	D									Hz
	Level : 2 0									~	dB
	Repeat : 3 🔾	Disable	O Enab	le 🖲 C	ontinuous	Sound					
	Timing : 4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
		60	0								

1 Frequency 1/2	 Set the tone frequence Range: 0 (inaudible), The 350 Hz and 440 	(Default: Frequency 1: 350 / Freq	,
2 Level	Set the audio level of • Range: –24 (minimum	f the Dial tone. n) ~ +6 (maximum) (dB)	(Default: 0)
3 Repeat	• Disable: • Enable:	o repeat the set tone pattern. (Default: Contir Sounds the set pattern in Timing (④) only Continuously repeats the set pattern in Tir Continuously sounds frequencies 1 and 2	r once ming (�)
Timing	sounds for the set pe set period of time in t	(I FF": 60 ~ 16000 (milliseconds)	

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

Busy Tone Common Setting

Sets the tone when the line is busy.

Busy Tone											
	Frequency 1:	80									Hz
	Frequency 1 :1 4 Frequency 2 : 6	20									Hz
	Level :2									~	dB
	Repeat 👩 🔿 Disable 💿 Enable 🔿 Continuous Sound										
	Timing :	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
	-	60	500	440							_

1 Frequency 1/2	Set the tone frequencies of the Busy tone. (Default: Frequency 1: 480 / Frequency 2: 6 • Range: 0 (inaudible), 200 ~ 2000 (Hz) ① The 480 Hz and 620 Hz tones simultaneously sound at default.					
2 Level	Set the audio level of the Busy tone.(Default: 0)• Range: -24 (minimum) ~ +6 (maximum) (dB)					
3 Repeat	Set whether or not to repeat the set tone pattern. (Default: Enable) • Disable: Sounds the set pattern in Timing (④) only once • Enable: Continuously repeats the set pattern in Timing (④) • Continuous Sound: Continuously sounds frequencies 1 and 2 (●)					
4 Timing	Set the pattern of tone rings and mutes using up to 9 values. The tone sounds for the set period of time in the ON settings, and mutes for the set period of time in the OFF settings. (Default: 60, 500, 440) • Range of the first "OFF": 60 ~ 16000 (milliseconds) • Range of the others: 51 ~ 16000 (milliseconds)					

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Reorder Tone (Common Setting)

Sets the Reorder tone.

Reorder Tone											
F	requency 1 1	480									Hz
F	requency 1 : 1 requency 2 :	620									Hz
	Level : 2									~	dB
	Repeat : 3	O Disable	En	able 🔿	Contin	uous So	und				
	Timing :	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
		60	250	190							_

1 Frequency 1/2	Set the tone frequencies of the Reorder tone. (Default: Frequency 1: 480 / Frequency 2: • Range: 0 (inaudible), 200 ~ 2000 (Hz) ① The 480 Hz and 620 Hz tones simultaneously sound at default.					
2 Level	Set the audio level of the • Range: –24 (minimum) ~	()				
3 Repeat	Disable: Sou Enable: Cor	(Default: Enable) (Default: Enable) unds the set pattern in Timing (④) only once ntinuously repeats the set pattern in Timing (④) ntinuously sounds frequencies 1 and 2 (①)				
4 Timing		(Default: 60, 250, 190) 60 ~ 16000 (milliseconds)				

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Ring Back Tone (Common Setting)

Sets the Ringback tone.

Ring Back Tone										
Frequency 1 : 1 Frequency 2 : 44	0								H	łz
Frequency 2 : 48	0								H	łz
Level : 2 0									~ c	В
Repeat : 🕄 🔿	Disable	Ena	ble 🔿	Continu	ious Soui	nd				
Timing :	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
	60	2000	3940							

1 Frequency 1/2	Set the tone frequencies of the Ringback tone. (Default: Frequency 1: 440 / Frequency 2: • Range: 0 (inaudible), 200 ~ 2000 (Hz) ① The 440 Hz and 480 Hz tones simultaneously sound at default.					
2 Level	Set the audio level of • Range: –24 (minimun	f the Ringback tone. n) ~ +6 (maximum) (dB)	(Default: 0)			
3 Repeat	 Disable: Enable: 	o repeat the set tone pattern. (De Sounds the set pattern in Timing (④) only Continuously repeats the set pattern in T Continuously sounds frequencies 1 and 2	iming (4)			
Timing	•	(Default: 60 F": 60 ~ 16000 (milliseconds)				

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

Hold Alarm Common Setting

Sets the Hold alarm tone that sounds to alert you a second call has been held for certain period of time.

Hold Alarm										
	Frequency 1:	25								Hz
	Frequency 1 : 4									Hz
	Level : 💙 ַ)							~	dB
	Repeat : 3 C) Disable	Enable	le O C	ontinuous	Sound				
	Timing :	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
		120	14880							

1 Frequency 1/2	Set the tone freque Range: 0 (inaudible	ncies of the Hold alarm. (Default: Frequency 1: 425 / Frequency 2: 0), 200 ~ 2000 (Hz)))
2 Level	Set the audio level • Range: –24 (minimu	of the Hold alarm. (Default: 0 um) ~ +6 (maximum) (dB)))
3 Repeat	• Disable: • Enable:	to repeat the set tone pattern. (Default: Enable Sounds the set pattern in Timing (④) only once Continuously repeats the set pattern in Timing (④) : Continuously sounds frequencies 1 and 2 (1))
④ Timing		(Default: 120, 14880) DFF": 60 ~ 16000 (milliseconds)))

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Ringtone Pattern (Common Setting)

Sets the Ringtone patterns.

Ringtone Pattern								
*Unit of Ringtone set values shown are in mil	liseconds.							
Pattern 1 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	2000	4000						
Pattern 2 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	800	400	800	4000				
Pattern 3 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	400	200	400	200	800	4000		
Pattern 4 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	300	200	1000	200	300	4000		
Pattern 5 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	2000	4000						

Pattern 1 ~ 5.....

Set the pattern of tone rings and mutes using up to 8 values. The tone sounds for the set period of time in the ON settings, and mutes for the set period of time in the OFF settings.

Pattern	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Pattern 1	2000	4000	_	_	_	_	1	-
Pattern 2	800	400	800	4000	_	_	-	_
Pattern 3	400	200	400	200	800	4000	-	-
Pattern 4	300	200	1000	200	300	4000	-	_
Pattern 5	2000	4000	_	_	_	_	-	-

O The default values of Ringtone Patterns

• Range : 51 ~ 5000 (milliseconds)

① A ring pattern must end with OFF.

① The ring patterns can be assigned, according to the incoming call type. See the next item for details.

```
PBX Extension > Telephone (KX-UT Series)
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Ringtone Pattern Assignment Common Setting)

Assigns the Ringtone pattern of each incoming call group.

Outside Line A :	Pattern 1	~
Outside Line B :	Pattern 2	~
Outside Line C :	Pattern 3	~
Extension A :	Pattern 5	~
Extension B :	Pattern 4	~
Extension C :	Pattern 3	~
Extension Assignment :	Pattern 2	~
Hold Recall :	Pattern 2	~

Assign a Ringtone pattern for each incoming call type, according to the setting on the Inbound Call screen. (PBX > Inbound Call)

(i) Information

- The incoming call group depends on the notified number of incoming calls.
- The calls from the phone numbers that are entered into extensions A to C are treated as the internal calls.
- For an internal call from other than the entered extensions on the Inbound Call screen, the Ringtone pattern set in the "Extension Assignment" sounds.
- When recalling to a parked telephone, the Ringtone set in the "Hold Recall" sounds.

PBX Extension > Telephone (KX-UT Series)

■ Telephone Common Settings Group 1 ~ 30)

Sets the rules for incoming calls for each Extension Group.

Telephone Common Settings		
Pickup Group Number :	01	
Call Pickup Target :2		~
Group Pickup Target :3		~
Directed Call Pickup Target :4		~
Call Restriction :5		~

 Pickup Group Number 	Enter a pick up group numbe	r of up to 7 digits. (Default: 01 (for the Group1))
		call of another group extension by dialing the p Pickup and the Group Number of the group.
2 Call Pickup Target	Set the incoming call type the	at the group can pick up. (Default: Extension Only)
	Options: External Call/Extension	on, External Call Only, or Extension Only
3 Group Pickup Target	extension in the same Group	at you can pick up, that arrives at an (Default: External Call/Extension) ion, External Call Only, or Extension Only
Oirected Call Pickup Target	Set the type of directed call t	, , ,
	Options: External Call/Extens	(Default: External Call/Extension) ion, External Call Only, or Extension Only
5 Call Restriction	Select whether or not to restr	-
	_	(Default: Disable)
	Disable: Call Bastriction Bulls 1 - 16:	You can make external calls.
	• Call Restriction Rule 1 ~ 16.	Restricts external calls according to the rules. The rules can be set in "Outbound Call
		Restriction Rule Settings."
		(PBX Advanced Settings > Numbering Plan >
		Outbound Call Restriction Rule Settings)
	External Call Restriction:	You cannot make any external calls but you can make internal calls (including Peer to Peer calls.)

PBX Extension > Telephone (KX-UT Series)

■ Telephone Individual Settings (KX-UT Series) Group 1~30

Sets the rules for the incoming calls, and so on, to each Extension group.

Dial Waiting Time : 1 _5	✓ seconds
Accept Internal Calls while on an External Call : ${f 2}$ ${ullet}$ Refuse ${ig \bigcirc}$ Allow	
Accept External Calls without Button Assignment : 3 〇 Refuse 💿 Allow	
Holding a Call with the External Call Status Button : 🌖 💿 Refuse 🛛 Allow	
Long-Hold Watch Time : 5 180	seconds
Phonebook Sharing : 6 〇 Disable 💿 Enable	
Common Phonebook Sharing : 7 🔿 Disable 💿 Enable	
Ringtone Setting (Phonebook): 8 Ringtone 1	~
Key Click Tone 9 O Disable Enable	

1 Dial Waiting Time	The waiting time to start dialing after you finished dialing. (Default: 5)
	• Range: 1 ~ 15 (seconds)
Accept Internal Calls while on an External Call	Set whether or not to accept an incoming extension call (including a Peer to Peer call) while you are talking on an external call. (Default: Refuse) (Default: Refuse) (Default: Refuse) (Default: Refuse)
3 Accept External Calls without Button Assignment	Set whether or not to accept an inbound call to a <dn key=""> button when an <external call="" status=""> button is not assigned or all <external Call Status> buttons are busy. (Default: Allow) • Allow: Accepts an inbound call to a <dn key=""> button. • Refuse: Rejects an inbound call and returns the busy tone.</dn></external </external></dn>
Holding a Call with the External Call Status Button	When selecting "Allow," you can hold an external call using an <external call="" status=""> button.(Default: Refuse)</external>
SLong-Hold Watch Time	Sounds an alert if you hold a call for time longer than the set period of time. (Default: 180) • Range: 30 ~ 240 (seconds)

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

■ Telephone Individual Settings (KX-UT Series)

Dial Waiting Time : 0 5	 seconds
Accept Internal Calls while on an External Call : 2 💿 Refuse 🛛 Allow	
Accept External Calls without Button Assignment : 3 〇 Refuse 💿 Allow	
lolding a Call with the External Call Status Button : 4 💿 Refuse 🛛 Allow	
Long-Hold Watch Time : 5 _180	seconds
Phonebook Sharing : 6 〇 Disable 💿 Enable	
Common Phonebook Sharing : 7 🔿 Disable 💿 Enable	
Ringtone Setting (Phonebook) : 8 Ringtone 1	~
Key Click Tone : 9 O Disable	

6 Phonebook Sharing	Set whether or not to download the Phonebook data find gateway at every boot up of a KX series telephone. You can download up to 300 entries to the common plate to 100 entries to the Group phonebook.	
Common Phonebook Sharing	Displayed only when "Phonebook Sharing" (6) is ena Set whether or not to download the Common Phonebo RoIP gateway at every boot up of KX series telephone	ook data from the
8 Ringtone Setting (Phonebook)	Select a ringtone from the Ringtone 1 ~ 32. (De	efault: Ringtone 1)
Key Click Tone	Set whether or not to sound a tone when you push a latelephone.	key of a KX series (Default: Enable)

PBX Extension > Telephone (KX-UT Series)

Button Assignment

Sets the functions of the flexible buttons on the telephone.

One Touch		Button 24	
DN Key		DN Key	~
External Call Status			
Call Fwd Always Call Fwd No Answer		Button 23	
Call Fwd Busy Headset		DN Key	~
Not used			
Button 10		Button 22	
DN Key	~	DN Key	~
Button 9		Button 21	
DN Key	~	DN Key	~

Button Assignments 1 ~ 24 ...

Assign a key function to each Flexible button.

(Default: DN Key)

• One Touch:

Used as an alias to a favorite number.

You can assign a frequently used telephone number, a special number, prefix, and so on.

① You can enter an external phone number with a prefix to use a special number for a Transceiver Individual Call.

Button 24	
One Touch	~
3000*101	

DN key: (Directory Number)

Checks the line assigned to the DN button. When a call arrives on the DN button, pressing the button answers the call. Be sure to assign 2 or more DN keys.

The indicator status

- · Quickly blinks green: An external or an extension call has arrived
- Slowly blinks green: Holding on your terminal
- Lights green: The line is in use on your terminal

① The shared line is assigned to the order of the DN key button number.

 The number of sharable lines are the total number of DN keys. Also, it depends on the setting on the "External Call Limiting" screen.
 (PBX Advanced Settings > External Call Limiting)

NOTE: At least two DN keys are required, the one for incoming or talking, the other one for holding or keeping a call. Be sure to assign enough DN keys to manage the shared lines.

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

Button Assignment

One Touch	Button 24	
DN Key	DN Key	~
External Call Status		
Call Fwd Always Call Fwd No Answer	Button 23	
Call Fwd Busy Headset	DN Key	~
Not used		
Button 10	Button 22	
DN Key	V DN Key	~
D. H 0	Detter 24	
Button 9	Button 21	
DN Key	DN Key	~

Button Assignments 1 ~ 24 (Continued)

External Call Status

Checks the assigned External line (IP line) status. When a call arrives on the External Call Status button, pressing the button answers the call.

Button 12	
External Call Status	~
100 (IP)	~

The indicator status

- Blinks red: An External Call is incoming or held
- Lights red: The line is in use on another terminal
- Lights green: The line is in use on your terminal
- ① Assign the same number of External Call Status buttons as the channels you are allowed.

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

Button Assignment

One Touch		Button 24	
DN Key		DN Key	♥
External Call Status			
Call Fwd Always Call Fwd No Answer		Button 23	
Call Fwd Busy Headset		DN Key	~
Not used			
Button 10		Button 22	
DN Key	~	DN Key	~
3utton 9		Button 21	
DN Key	~	DN Key	~

Button Assignments 1 ~ 24 (Continued)

Call Fwd Always

Forwards incoming calls to the specified extension while the indicator on this key lights red. Enter the extension number (with a special number, if required) of the forwarding destination. Push the button to start or stop forwarding.

The indicator status

- Lights red: Forwards calls
- Not lit: Does not forward calls
- ① You can also start or stop forwarding by dialing the special number for "Call Forward Always" (Default: *94) and the extension number of the forwarding destination.

(PBX > Special Number > Telephone Special Number > Call Forward Always)

Call Fwd No Answer

Forwards an incoming call to the specified extension when you don't answer the call for a certain period of time, such as when you are busy on another call.

Enter the extension number (with a special number, if required) of the forwarding destination.

Push the button to start or stop forwarding.

The indicator status

- Lights red: Forwards calls
- Not lit: Does not forward calls

① You can also start or stop forwarding by dialing the special number for "Call Forward No Answer" (Default: *95) and the extension number of the forwarding destination.

(PBX > Special Number > Telephone Special Number > Call Forward No Answer)

Telephone (KX-UT Series) screen

PBX Extension > Telephone (KX-UT Series)

Button Assignment

One Touch	Button 24	
DN Key	DN Key	~
External Call Status		
Call Fwd Always Call Fwd No Answer	Button 23	
Call Fwd Busy Headset	DN Key	~
Not used		
Button 10	Button 22	
DN Key	V DN Key	~
Button 9	Button 21	
DN Key	DN Key	~

Button Assignments 1 ~ 24 (Continued)

Call Fwd Busy

Forwards an incoming call to the specified extension when you are busy on another call. Enter the extension number (with a special number, if required) of the forwarding destination. Push the button to start or stop forwarding.

The indicator status

- Lights red: Forwards calls
- Not lit: Does not forward calls
- ① You can also start or stop forwarding by dialing the special number of "Call Forward Busy" (Default: *96) and the extension number of forwarding destination.
 (DEX) = 0.1111 (Default: *0.1111)

(PBX > Special Number > Telephone Special Number > Call Forward Busy)

Headset

Assign to talk using a headset if it is connected to the KX series telephone. The indicator lights red while the headset is in use.

Not used

Does not assign any function.

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Maintenance

Assigns a Group to each extension number.

The settings for each extension detail can be edited in "List of Extension Entries" (PBX > Extension > List of Extension Entries).

1					
	31	SIP Phone (Automatic Detection)	Connected	Group 1 🗸	Reboot
	32	SIP Phone (Automatic Detection)	Connected	Group 1 🗸	Reboot
	33	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	34	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	3000	Transceiver Controller Telephone Connection		Group 1 🗸	

Check Box	Click to select the extensions if you want to reboot one or more KX series telephones. Click "All" to select all the entries. () The extensions where Status (()) is "Not Connected" cannot be selected.
2 Extension Number	Displays the extension number.
3 Port Type	Displays the port type of the telephone.
Status	 Displays the connection status of the telephone. ① "Not Connected" is displayed for the telephone that is not registered to the SIP server of this RoIP gateway. ① "—" is displayed for the Converter bridge or the Transceiver Controller Telephone Connection.
5 Group	Set the setting Group of the extension. You can customize the flexible function button assignments for each Group. (Default: Group 1) • Range: Group 1 ~ 30

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Maintenance

All 🚺	Extension Number	Port Type 3	Status 4	Group 5	6
	31	SIP Phone (Automatic Detection)	Connected	Group 1 V	Reboot
	32	SIP Phone (Automatic Detection)	Connected	Group 1 🗸	Reboot
	33	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	34	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	3000	Transceiver Controller Telephone Connection		Group 1 🗸	
				7 Reboot Se	8 lected Reboot All Apply Reset 9 10

6 <reboot></reboot>	Click to reboot the KX series telephone.
<pre> </pre>	Click to reboot the selected (with check marks) KX series telephones.
8 <reboot all=""></reboot>	Click to reboot all the KX series telephones whose Status (4) is "Connected" in the list.
Image: Second secon	Click to apply the entries.
⑩ <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Telephone (KX-HDV	Series)	screen
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PBX Extension > Telephone (KX-HDV Series)

Telephone Group

Edits the Group setting of the entered extension (telephone.)

Telephone Group			
Select Group Setting :	Common Setting	✓ Edit	

Select Group Setting

Select the setting mode, and then click <Edit>.

• The setting screen for the selected Group is displayed.

Common Setting

Common settings for the KX-HDV Series that are connected to the RoIP gateway, such as the tone patterns or volume levels.

• Group 1 ~ Group 30

The custom settings for the KX-HDV Series in the selected Group that are connected to the RoIP gateway, such as the flexible button assignments.

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Dial Tone (Common Setting)

Sets the tone when off-hook.

Г

Dial Tone											
	Frequency 1 : 135 Frequency 2 : 44	0									Hz
	Frequency 2 : 44	0									Hz
	Level : 2_0									~	dB
	Repeat : 3 🔾	Disable	O Enab	ole 💿 C	ontinuou	s Sound					
	Timing : 4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
		60	0				_		_		

1 Frequency 1/2	• Range: 0 (inaudible)	ncies of the Dial tone. (Default: Frequency 1: 350 / Fre), 200 ~ 2000 (Hz) 0 Hz tones simultaneously sound at defa	
2 Level	Set the audio level (• Range: –24 (minimu	of the Dial tone. m) ~ +6 (maximum) (dB)	(Default: 0)
3 Repeat	• Disable: • Enable:	o repeat the set tone pattern. (Default: Cor Sounds the set pattern in Timing (④) or Continuously repeats the set pattern in Continuously sounds frequencies 1 and	Timing (4)
Timing	•	FF": 60 ~ 16000 (milliseconds)	

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

Busy Tone Common Setting

Sets the tone when the line is busy.

1

Busy Tone											
	Frequency 1 :	30									Hz
	Frequency 1 :1 4	20									Hz
	Level : 2 0									~	dB
	Repeat : 3 O	Disable	En	able 🔿	Contin	uous So	und				
	Timing :	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
		60	500	440							

1 Frequency 1/2	• Range: 0 (inaudible)	ncies of the Busy tone. (Default: Frequency 1: 480 / Frequency 2: 620) , 200 ~ 2000 (Hz) 0 Hz tones simultaneously sound at default.
2 Level	Set the audio level o • Range: –24 (minimu	of the Busy tone. (Default: 0) m) ~ +6 (maximum) (dB)
3 Repeat	• Disable: • Enable:	o repeat the set tone pattern. (Default: Enable) Sounds the set pattern in Timing (4) only once Continuously repeats the set pattern in Timing (4) Continuously sounds frequencies 1 and 2
Timing		(Default: 60, 500, 440) FF": 60 ~ 16000 (milliseconds)

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

Reorder Tone Common Setting

Sets the Reorder tone.

Reorder Tone											
	Frequency 1:	480									Hz
	Frequency 1 : 1 Frequency 2 :	620									Hz
	Level :2									~	dB
	Repeat : 3	O Disable	En	able 🔿	Contin	uous So	und				
	Timing : 4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
		60	250	190							

1 Frequency 1/2	Set the tone frequencies of the Reorder tone. (Default: Frequency 1: 480 / Frequency 2: 6 • Range: 0 (inaudible), 200 ~ 2000 (Hz) ① The 480 Hz and 620 Hz tones simultaneously sound at default.			
2 Level	Set the audio level o	-	(Default: 0)	
8 Repeat	• Disable: • Enable:	Sounds the set pattern in Timing (④) or Continuously repeats the set pattern in	Timing (4)	
4 Timing	Set the pattern of tor	0	lues. The tone	
	 Range of the first "Of Range of the others: 	F": 60 ~ 16000 (milliseconds)		

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Ring Back Tone (Common Setting)

Sets the Ringback tone.

Frequency 1:04	40									Hz
Frequency 1 : 1	80									Hz
Level : 2									~	dB
Repeat : 3 C	Disable	Ena	ble 🔿	Continu	ious Sou	nd				
Timing : 4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
	60	2000	3940							

1 Frequency 1/2	Set the tone frequencies of the Ringback tone. (Default: Frequency 1: 440 / Frequency 2: 480 • Range: 0 (inaudible), 200 ~ 2000 (Hz) ① The 440 Hz and 480 Hz tones simultaneously sound at default.			
2 Level	Set the audio level o • Range: –24 (minimur	f the Ringback tone. n) ~ +6 (maximum) (dB)	(Default: 0)	
3 Repeat	Disable: Enable:	o repeat the set tone pattern Sounds the set pattern in Timir Continuously repeats the set p Continuously sounds frequenci	ng (4) only once attern in Timing (4)	
4 Timing	sounds for the set period of time in the set period of time in the Range of the first "OF	he rings and mutes using up eriod of time in the ON settin the OFF settings. (I FF": 60 ~ 16000 (millisecond 51 ~ 16000 (millisecond	ngs, and mutes for the Default: 60, 2000, 3940) Is)	

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Hold Alarm (Common Setting)

Sets the Hold alarm tone that sounds to alert you a second call has been held for certain period of time.

Hz
Hz
✓ dB

1 Frequency 1/2	Set the tone frequencies of the Hold alarm. (Default: Frequency 1: 425 / Fre • Range: 0 (inaudible), 200 ~ 2000 (Hz)	equency 2: 0)
2 Level	Set the audio level of the Hold alarm. • Range: –24 (minimum) ~ +6 (maximum) (dB)	(Default: 0)

PBX Extension > Telephone (KX-HDV Series)

■ Ringtone Pattern (Common Setting)

Sets the Ringtone patterns. The Ringtone patterns can be assigned to the

Ringtone Pattern								
*Unit of Ringtone set values shown are in mill	liseconds.							
Pattern 1 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	2000	4000						
Pattern 2 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	800	400	800	4000				
Pattern 3 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	400	200	400	200	800	4000		
Pattern 4 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	300	200	1000	200	300	4000		
Pattern 5 :	ON	OFF	ON	OFF	ON	OFF	ON	OFF
	2000	4000						

Pattern 1 ~ 5.....

Set the pattern of tone rings and mutes using up to 8 values. The tone sounds for the set period of time in the ON settings, and mutes for the set period of time in the OFF settings.

Pattern	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Pattern 1	2000	4000	_	_	_	_	-	-
Pattern 2	800	400	800	4000	_	_	_	_
Pattern 3	400	200	400	200	800	4000	-	-
Pattern 4	300	200	1000	200	300	4000	-	-
Pattern 5	2000	4000	_	_	_	_	_	_

O The default values of Ringtone Patterns

• Range : 51 ~ 5000 (milliseconds)

① A ring pattern must end with OFF.

① The ring patterns can be assigned, according to the incoming call type. See the next item for details.

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PBX Extension > Telephone (KX-HDV Series)
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Ringtone Pattern Assignment Common Setting)

Assigns the Ringtone pattern of each incoming call group.

Outside Line A :	Pattern 1	~
Outside Line B :	Pattern 2	~
Outside Line C :	Pattern 3	~
Extension A :	Pattern 5	~
Extension B :	Pattern 4	~
Extension C :	Pattern 3	~
Extension Assignment :	Pattern 2	~
Hold Recall :	Pattern 2	~

Assign a Ringtone pattern for each incoming call type according to the setting on the Inbound Call screen. (PBX > Inbound Call)

(i) Information

- The incoming call group depends on the notified number of incoming calls.
- The calls from the phone numbers that are entered into extensions A to C are treated as internal calls.
- For an internal call from other than the entered extensions on the Inbound Call screen, the Ringtone pattern set in the "Extension Assignment" sounds.
- When recalling to a parked telephone, the Ringtone set in the "Hold Recall" sounds.

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Common Settings Group 1 ~ 30)

Sets the rules for incoming calls for each Extension Group.

Telephone Common Settings		
Pickup Group Number : 1	01	
Call Pickup Target : 2	Extension Only	~
Group Pickup Target : 3		~
Directed Call Pickup Target :		~
Call Restriction : 5		~

Pickup Group Number	Enter a pick up group numbe	er of up to 7 digit. (Default: 01 (for the Group1))
		call of another group extension by dialing the p Pickup and the Group Number of the group.
2 Call Pickup Target	Set the incoming call type the	at the group can pick up. (Default: Extension Only)
	Options: Extension Only, Extension	ernal Call Only, or External Call/Extension
Group Pickup Target	extension in the same Group	at you can pick up, that arrives at an (Default: External Call/Extension) ernal Call Only, or External Call/Extension
Oirected Call Pickup Target	extension in the same Group	hat you can pick up, that arrives at an (Default: External Call/Extension) ernal Call Only, or External Call/Extension
5 Call Restriction	Select whether or not to rest	-
	Disable	(Default: Disable)
	Disable: Call Postriction Puls 1 ~ 16:	You can make external calls. Restricts external calls according to the
	• Call Restriction Rule 1 ~ 18.	rules. The rules can be set in "Outbound Call
		Restriction Rule Settings."
		(PBX Advanced Settings > Numbering Plan >
		Outbound Call Restriction Rule Settings)
	External Call Restriction:	You cannot make any external calls but you can make internal calls (including Peer to Peer calls.)

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series) Group 1 ~ 30)

Sets the rules for the incoming calls, and so on, to each Extension group.

Dial Waiting Time : 1 5	 seconds
Accept Internal Calls while on an External Call : 2 Refuse 🔿 Allow	
Accept External Calls without Button Assignment : 3 〇 Refuse 💿 Allow	
Holding a Call with the External Call Status Button : 4 $ullet$ Refuse \bigcirc Allow	
Long-Hold Watch Time : 5 180	seconds
Phonebook Sharing : 6 〇 Disable 💿 Enable	
Common Phonebook Sharing : 7 🔿 Disable 💿 Enable	

Dial Waiting Time	The waiting time to start dialing after you finished dialing. (Default: 5) • Range: 1 ~ 15 (seconds)
Accept Internal Calls while on an External Call	Set whether or not to accept an incoming extension call (including a Peer to Peer call) while you are talking on an external call. (Default: Refuse) (Default: Refuse) (Default: Refuse) (Default: Refuse)
3 Accept External Calls without Button Assignment	Set whether or not to accept an inbound call to a <dn key=""> or <not Used> button when an <external call="" status=""> button is not assigned or all <external call="" status=""> buttons are busy. (Default: Allow) • Allow: Accepts an inbound call to a <dn key=""> or a <not used=""> button. • Refuse: Rejects an inbound call and returns the busy tone.</not></dn></external></external></not </dn>
4 Holding a Call with the External Call Status Button	When selecting "Allow," you can hold an external call using an <external call="" status=""> button. (Default: Refuse)</external>
SLong-Hold Watch Time	Sounds an alert if you hold a call for time longer than the set period of time. (Default: 180) • Range: 30 ~ 240 (seconds)

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series)

Telephone Individual Settings (KX-HDV Series)	
Dial Waiting Time : 0 5	✓ seconds
Accept Internal Calls while on an External Call : 🤰 💿 Refuse 🛛 Allow	
Accept External Calls without Button Assignment : 3 〇 Refuse 💿 Allow	
Holding a Call with the External Call Status Button : 4 \odot Refuse \bigcirc Allow	
Long-Hold Watch Time : 5 180	seconds
Phonebook Sharing : 6 〇 Disable 💿 Enable	
Common Phonebook Sharing : 🕜 🔿 Disable 💿 Enable	

Phonebook Sharing	Set whether or not to download the Phonebook data from the RoIP gateway at every boot up of a KX series telephone. You can download up to 300 entries to the common phonebook and up to 100 entries to the Group phonebook. (Default: Enable) (Default: Enable) (Default: Enable) (Default: Enable) (Default: Enable)
Common Phonebook Sharing	Displayed only when "Phonebook Sharing" (6) is enabled. Set whether or not to download the Common Phonebook data from the RoIP gateway at every boot up of KX series telephones. (Default: Enable)

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series)

Telephone Individual Settings (KX-HDV Series)

- 1	rranster], [Dmmmsfer], or [Dom	Ince is selected the KX	-HDv o button Wonne con Key].		
Button Assignment (Page 1) 8					
Index	One Touch	Button Infomation	Button Label		
12	DN Key External Call Status		DN Key		
11	Call Fwd Always Call Fwd No Answer		DN Key		
10	Call Fwd Busy		DN Key		
9	Transfer Blind Transfer		DN Key		
8	Conference Not used		DN Key		
7	DN Key 🗸	_	DN Key		
6	DN Key 🗸		DN Key		
5	DN Key 🗸		DN Key		

8 Button Assignment 1 ~ 24

Assign a key function to each Flexible button.

number for an external call.

(Default: DN Key)

• One Touch:

Used as an alias to a favorite number. You can assign a frequently used telephone number, a special number, prefix, and so on. The entered Button Lavel will be displayed on the KX-HDV series telephone. ① You can enter an external phone number with a prefix to use a special

 One Touch
 V
 3000*101
 Individual 101

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series)

Telephone Individual Settings (KX-HDV Series)

	Transfer], [DramonSfer], Or [Dramonsfer]	Ince is selected the KO	K-HDV	
Button Assignment (Page 1) 8				
Index	One Touch	Button Infomation	Button Label	
12	DN Key External Call Status		DN Key	
11	Call Fwd Always Call Fwd No Answer		DN Key	
10	Call Fwd Busy		DN Key	
9	Transfer Blind Transfer		DN Key	
8	Conference Not used		DN Key	
7	DN Key 🗸		DN Key	
6	DN Key 🗸		DN Key	
5	DN Key 🗸		DN Key	

8 Button Assignment 1 ~ 24 (Continued)

• DN Key: (Directory Number)

Checks the line assigned to the DN button. When a call arrives on the DN button, pressing the button answers the call. Be sure to assign 2 or more DN keys.

The indicator status

- Quickly blinks blue: An external or an extension call has arrived
- Slowly blinks blue: Holding on your terminal
- Lights blue: The line is in use on your terminal

The shared line is assigned to the order of the DN key button number.

① The number of sharable lines are the total number of DN keys. Also it depends on the setting on the "External Call Limiting" screen.

(PBX Advanced Settings > External Call Limiting)

NOTE: At least two DN keys are required, the one for incoming or talking, the other one for holding or keeping a call. Be sure to assign enough DN keys to manage the shared lines.

External Call Status

Checks the assigned External line (IP line) status. When a call arrives on the External Call Status button, pressing the button answers the call.



The indicator status

• Blinks red: An External Call is incoming or held

- Lights red: The line is in use
- ① Assign the same number of External Call Status buttons as the channels you are allowed.

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series)

Telephone Individual Settings (KX-HDV Series)

	manster], [brander], or [brand	TTCE IS SELECTION KO	K-HDV	
Button Assignment (Page 1) 8				
Index	One Touch	Button Infomation	Button Label	
12	DN Key External Call Status		DN Key	
11	Call Fwd Always Call Fwd No Answer		DN Key	
10	Call Fwd Busy		DN Key	
9	Transfer Blind Transfer		DN Key	
8	Conference Not used		DN Key	
7	DN Key 🗸	_	DN Key	
6	DN Key 🗸	_	DN Key	
5	DN Key 🗸		DN Key	

8 Button Assignment 1 ~ 24 (Continued)

Call Fwd Always

Forwards incoming calls to the specified extension while the indicator on this key lights red. Enter the extension number (with a special number, if required) of the forwarding destination. Push the button to start or stop forwarding.

The indicator status

· Lights red: Forwards calls

- Not lit: Does not forward calls
- ① You can also start or stop forwarding by dialing the special number for "Call Forward Always" (Default: *94) and the extension number of the forwarding destination.

(PBX > Special Number > Telephone Special Number > Call Forward Always)

Call Fwd No Answer

Forwards an incoming call to the specified extension when you don't answer the call for a certain period of time, such as when you are busy on another call.

Enter the extension number (with a special number, if required) of the forwarding destination.

Push the button to start or stop forwarding.

The indicator status

- Lights red: Forwards calls
- Not lit: Does not forward calls
- ① You can also start or stop forwarding by dialing the special number for "Call Forward No Answer" (Default: *95) and the extension number of the forwarding destination.

(PBX > Special Number > Telephone Special Number > Call Forward No Answer)

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series)

Telephone Individual Settings (KX-HDV Series)

and the selection of th					
Button Assignment (Page 1) 8					
Index	One Touch	Button Infomation	Button Label		
12	DN Key External Call Status		DN Key		
11	Call Fwd Always Call Fwd No Answer		DN Key		
10	Call Fwd Busy Transfer		DN Key		
9	Blind Transfer		DN Key		
8	Conference Not used		DN Key		
7	DN Key	~	DN Key		
6	DN Key	<u>~</u>	DN Key		
5	DN Key	~	DN Key		

8 Button Assignment 1 ~ 24 (Continued)

Call Fwd Busy

Forwards an incoming call to the specified extension when you are busy on another call.

Enter the extension number (with a special number, if required) of the forwarding destination.

Push the button to start or stop forwarding.

The indicator status

- Lights red: Forwards calls
- Not lit: Does not forward calls
- ① You can also start or stop forwarding by dialing the special number of "Call Forward Busy" (Default: *96) and the extension number of forwarding destination.

(PBX > Special Number > Telephone Special Number > Call Forward Busy)

Telephone (KX-HDV Series) screen

PBX Extension > Telephone (KX-HDV Series)

■ Telephone Individual Settings (KX-HDV Series)

Telephone Individual Settings (KX-HDV Series)

Button Assignment (Page 1) 8					
ndex	One Touch	Button Infomation	Button Label		
12	DN Key External Call Status		DN Key		
11	Call Fwd Always Call Fwd No Answer		DN Key		
10	Call Fwd Busy Transfer		DN Key		
9	Blind Transfer Conference		DN Key		
8	Not used		DN Key		
7	DN Key	~	DN Key		
6	DN Key	~	DN Key		
5	DN Key	v	DN Key		

8 Button Assignment 1 ~ 24 (Continued)

Transfer

Holds and forwards a call to the specified extension. After the forwarding destination answers, push [OK] or hang up to transfer a call.

Blind Transfer

Holds and immediately forwards a call to the specified extension. Enter the extension number of the destination and hang up the telephone.

Conference

Holds a call and makes a conference call to the specified extension. Enter the extension number of the destination. After the destination answers, push the <CONF> button to start the conference call.

Not used

Does not assign any function.

Expand Unit (KX-HDV230) Expand Unit 1 ~ 5 screen

PBX Extension > Expand Unit (KX-HDV230) Expand Unit 1 ~ 5

Telephone Maintenance

Enters the common phonebook or the phonebook that is shared in the particular Group for the KX series SIP phones. The settings of each extension details can be edited in "List of Extension Entries" (PBX > Extension > List of Extension Entries).

All 🚺	Extension Number	Port Type 3	Status 4	Group 5	6
	31	SIP Phone (Automatic Detection)	Connected	Group 1 🗸	Reboot
	32	SIP Phone (Automatic Detection)	Connected	Group 1 V	Reboot
	33	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	34	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	3000	Transceiver Controller Telephone Connection		Group 1 🗸	

Oheck Box	Click to select the extensions if you want to reboot one or more KX series telephones. Click "All" to select all the entries. ① The extensions where Status (④) is "Not Connected" cannot be selected.
2 Extension Number	Displays the extension number.
3 Port Type	Displays the port type of the telephone.
Status	 Displays the connection status of the telephone. ① "Not Connected" is displayed for the telephone that is not registered to the SIP server of this RoIP gateway. ① "" is displayed for the Converter Bridge or the Transceiver Controller Telephone Connection.
5 Group	Set the line Group of the extension. You can customize the flexible function button assignments for each Group. Assign the same Group if you want to use the button functions from other telephones by dialing the special number and button number. (For example: When picking up a parked telephone call) • Range: Group 1 ~ 30

Expand Unit (KX-HDV230) Expand Unit 1 ~ 5 screen

PBX Extension > Expand Unit (KX-HDV230) Expand Unit 1 ~ 5

■ Telephone Maintenance

All 🚺	Extension Number	Port Type 3	Status 4	Group 5	6
	31	SIP Phone (Automatic Detection)	Connected	Group 1 🗸	Reboot
	32	SIP Phone (Automatic Detection)	Connected	Group 1 V	Reboot
	33	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	34	SIP Phone (Automatic Detection)	Not Connected	Group 1 🗸	Reboot
	3000	Transceiver Controller Telephone Connection		Group 1 🗸	

⊚ <reboot></reboot>	Click to reboot the KX series telephone.
Reboot Selected>	Click to reboot the selected (with check marks) KX series telephones.
<pre>8<reboot all=""></reboot></pre>	Click to reboot all the KX series telephones whose Status (④) is "Connected" in the list.
	Click to apply the entries.
<pre>0<reset></reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Expand Unit (KX-HDV230) Expand Unit 1 ~ 5 screen

PBX Extension > Expand Unit (KX-HDV230) Expand Unit 1 ~ 5

■ Telephone Group

Edits the Group setting of the entered extension (telephone)

Telephone Group				
Select Group Setting :	Group 1	~	Edit	

Select Group Setting

Select a Group from Group 1 to Group 30 that you want to edit, and then click <Edit> to enter the edit mode.

Expand Unit (KX-HDV230) Expand Unit 1 ~ 5 screen

PBX Extension > Expand Unit (KX-HDV230) Expand Unit 1 ~ 5

■ Telephone Individual Settings (KX-HDV230)

Assigns the function to each flexible button on the expand units 1 to 5.

		Button Assignment (Page	1)	
Index	Button Type	Button Infomation	Button Label	
10	DN Kev One Touch	~ _	DN Key	
9	DN Key External Call Status		DN Key	
8	Call Fwd Always Call Fwd No Answer		DN Key	
7	Call Fwd Busy		DN Key	
6	Transfer Blind Transfer		DN Key	
5	Conference Not used		DN Key	
4	DN Key	~	DN Key	
3	DN Key	✓	DN Key	
2	DN Key	✓	DN Key	
1	DN Key	~	DN Key	

Button Assignment

Expand Unit 1 (1 ~ 40) Expand Unit 2 (41 ~ 80) Expand Unit 3 (81 ~ 120) Expand Unit 4 (121 ~ 160) Expand Unit 5 (161 ~ 200) Assign a button function to each flexible button.

- The Assignable functions:
- One Touch
- DN Key (Directory Number)*
- External Call Status*
- Call Fwd Always*
- Call Fwd No Answer*
- Call Fwd Busy*
- Transfer
- Blind Transfer
- Conference
- Not used

* Assignable only to Expand unit 1 (Button 1 ~ 40)

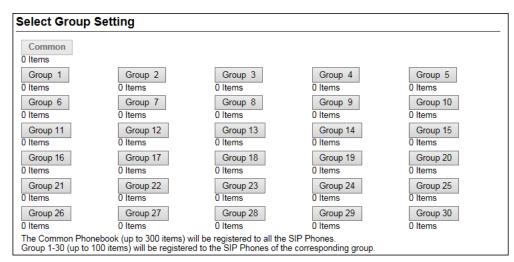
① Refer to the "Button Assignment" on pages 13-33 ~13-37 for details on each button function.

Phonebook screen

PBX Extension > Phonebook

Select Group Setting

Edits the phonebook to the Common phonebook and the Group phonebooks.



Select Group Setting

Click the button that you want to edit its phonebook.

The entries in the selected phonebook are displayed in the "List of Phonebook Entries" below on the screen. (See page 13-47.)

- ① The number of entries are displayed below the Group buttons.
- ① You can edit the Group setting in "Telephone Maintenance."
 (PBX Extension > Telephone (KX-UT Series) > Telephone Maintenance)
 (PBX Extension > Telephone (KX-HDV Series) > Telephone Maintenance)

Phonebook screen

PBX Extension > Phonebook

Save or Write the Phonebook

You can save or load the selected phonebook to or from a CSV format file.

Save or Write the Phonebook					
Load Settings from File : Choose File No file chosen Write A CSV format file can be written to this product.					
When the file is written, the current settings will be overwritten. Save to File : 2 Save Save to phonebook.csv file.					

Load Settings from File	You can load the saved phonebook from a CSV format file. Click <choose file=""> and select the setting file (phonebook.csv) from the displayed list, and then click <open>. Confirm the correct file is selected, and then click <write> to load the phonebook from the selected file.</write></open></choose>		
	① Note that the phonebook settings will be overwritten when the phonebook is loaded.		
	① The setting backup file on the "Settings Backup/Restore" includes the phonebook data. If the setting file is loaded on the "Settings Backup/Restore" screen (Management > Settings Backup/Restore > Settings Restore), the phonebook settings will be overwritten.		
	① A file that is saved by other than the following procedures may not work properly:		
	 Saved file using the <save> (2) button.</save> A CSV file in the same format as described on the next page. 		
	A CSV me in the same format as described on the next page.		
2 Save to File	Saves the settings in the "List of Phonebook Entries," on the screen, to a CSV format file.		
	Click <save> and select a folder to save the file into.</save>		
	① You can edit the saved file in a spreadsheet.		
	① The saved file name depends on the selected Group.		
	(For example: The phonebook for Group 1 is saved to phonebook01.csv)		

Phonebook screen

PBX Extension > Phonebook

■ Save or Write the Phonebook

O About the rules of a CSV file for the phonebook

When editing a saved CSV file, be sure to observe the following rules. Otherwise the phonebook settings may not load properly into the RoIP gateway.

	Α	В	С	D	Е	F	G	Н	I	J
1	#	VE-PG4	Phonebook	COI	nfig f	le				
2	#	Firm Ver.								
3	#	File Ver.								
4	#No.	Name	Phone Number	_	_	Nickname	Speed Dial	Display Type (0=Phone Number/1=Speed Dial Number)	Line Type(0=Outside call/1=Extension)	group
5	1	Sales 1	tel:0123456788			Sales 1	tel:201	0	0	1
6	2	Sales 2	tel:0123456789			Sales 2	tel:202	0	0	1
7	3	John Smith	tel:0123456790			John	tel:	0	0	1
8										

Column	Title	Description
Α	Index	1 ~ 300 for the Common phonebook, 1 ~ 100 for a Group phonebook
		Do not duplicate the number.
В	Name	Up to 30 characters
С	Phone Number	"tel:" and up to 22 digits or prefix
D	 (Reserved) 	Do not edit or delete this column.
Е	 – (Reserved) 	Do not edit or delete this column.
F	Nickname	Up to 30 characters
G	Speed Dial Number	"tel:" and up to 7 characters, leave blank if you do not use the Speed Dial
		Number.
Н	Display Type	0: Phone Number, 1: Speed Dial Number
I	Line Type	0: External line, 1: Extension
		Do not edit or delete this column.
J	group	1 ~ 10
		Do not edit or delete this column.

• The lines that begins with "#" are comments.

• Delete unnecessary lines.

Phonebook screen

PBX Extension > Phonebook

Phonebook Entry

You can enter frequently used or commonly used phone numbers into a phonebook. Refer to the Installation guide for details on using a phonebook.

	Index : 1	1	~
	Name : 2		
	Nickname : 3		
	Phone Number : 4		
Spee	d Dial Number : 5		
	Display Type : 6	Phone Number	

1 Index	 Select a number from the list. Range for the Common phonebook: 1 ~ 300 Range for the Group phonebooks: 1 ~ 100
2 Name*	Enter a destination name of up to 30 characters.
3 Nickname*	Enter a nickname of up to 30 characters.
Phone Number*	 Enter the telephone number (with a special number and prefix, if required) of the destination. ① You cannot enter an alias number of up to 22 digits with a special number or a prefix.
Speed Dial Number	 Enter an alias number of up to 7 digits. The Speed Dial Number is used when making an external call, or a Peer to Peer call (that does not go through the SIP server.) ① You cannot dial a Speed Dial Number after any special number and/or a prefix. ① A Speed Dial Number is usable on the line that is set in "Extension." ① The Speed Dial Number is usable for telephones other than the KX series. About the Speed Dial numbers Setting numbers other than the emergency telephone numbers in your area are recommended as Speed Dial numbers.

*Required to enter a phonebook.

Phonebook screen

PBX Extension > Phonebook

Phonebook Entry

Phonebook Entry		
Index : 1	1	~
Name : 2		
Nickname : 3		
Phone Number : 4		
Speed Dial Number : 5		
Display Type : 6	Phone Number	7 8 [×] _
		Apply Reset

6 Display Type	Select "Phone Number" or "Speed Dial Number phonebook on the telephone.	er" to display a (Default: Phone Number)
♂ <apply></apply>	Click to apply the entries.	
8 <reset></reset>	Click to reset the settings. (i) You cannot reset after clicking <apply>.</apply>	

Phonebook screen

PBX Extension > Phonebook

■ List of Phonebook Entries

Lists the phonebook entries.

Index	Name	Nickname	Phone Number	Speed Dial Number	Display Type	1	2
1	Sales 1	Sales 1	0101234567	201	Phone Number	Edit	Delete
2	Sales 2	Sales 2	0101234568	202	Phone Number	Edit	Delete
3	John Smith	John	0101234578		Phone Number	Edit	Delete

❶ <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry. ① You cannot restore after clicking <delete>.</delete>
3 <delete all=""></delete>	Click to delete all the entries. ① You cannot restore after clicking <delete all="">.</delete>

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Transceiver Controller Telephone Connection

Settings for communication between an IP transceiver and a SIP phone.

```
Transceiver Controller Telephone Connection
```

```
Extension Number: 3000
```

```
Extension Number .....
```

Displays the extension number of the Transceiver Controller Telephone Connection that is set in "Extension." (PBX > Extension > Extension)

PBX Extension > Transceiver Controller Telephone Connection

Communication

Settings to communicate between a SIP phone and a transceiver that belongs to a group set in the RoIP gateway.

~

1 Call Type	Set the call type to send from a SIP phone to a trar to the RoIP gateway. • Options: Individual, Group, or All	nsceiver that belongs (Default: Group)
2 Destination ID	Does not displayed when the Call Type (1) is set t Enter the Individual ID or Group ID of the destination	
	• Range: 1 ~ 60000	· · · · · · · · · · · · · · · · · · ·

PBX Extension > Transceiver Controller Telephone Connection

Control

The settings for communication control between a SIP phone and a transceiver that are linked to the RoIP gateway.

Control			
PTT Call Cancel on Call Incoming :0	◯ Disable		
Target Availability Check 📿			
Timing of Target Availability Check : Notice Tone on the Transceiver	After Call O Prior to Call		
Call Incoming :	Not used		\checkmark
Calling :5	Notice Tone 2		\checkmark
Connection Success :6			\mathbf{v}
	Notice Tone 3		\sim
Connection Failure :8	Notice Tone 3		\checkmark
Notice Tone Volume : 9		~	dB

PTT Call Cancel on Call Incoming	Select "Enable" to cancel the current call if a SIP another call from the same transceiver while a ca	•
Target Availability Check	Select whether or not to check the availability of a transceiver when a SIP phone makes a call to it. If this setting is enabled, the RoIP gateway will st a linked transceiver if the destination transceiver answer in 5 seconds.	op sending a call to
3 Timing of Target Availability Check	Set when the Target Availability Check (2) will or • After Call: Checks after a call is established	ccur. (Default: After Call)

• Prior to Call: Checks before a call is established

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Control

Control		
PTT Call Cancel on Call Incoming :0	O Disable Enable	
Target Availability Check :2	Disable Enable	
Timing of Target Availability Check :3 Notice Tone on the Transceiver	After Call O Prior to Call	
Call Inconting.	Not used	~
Calling:5	Notice Tone 2	~
Connection Success:6	Notice Tone 2	~
		~
Connection Failure :		~
Notice Tone Volume : 9	0	✓ dB

Call Incoming	 Select a Notice Tone to send to notify a transcell SIP phone has arrived. Not used: Does not send a Notice Tone (The transceiver automatically Notice Tone 1 ~ 3: Sends the selected Notice Tone (The transceiver can answer by the Notice Tones.) 	(Default: Not used) answers.) e
5 Calling	The Notice Tone to send to a transceiver while or phone.	calling a target SIP (Default: Notice Tone 2)
6 Connection Success	The Notice Tone to send to a transceiver alertin phone answered the call.	g that the target SIP (Default: Notice Tone 2)
<pre>⑦ Disconnect</pre>	The Notice Tone to send to a transceiver alertin phone has hung up the call.	g that the target SIP (Default: Notice Tone 3)
8 Connection Failure	The Notice Tone to send to a transceiver alertin arrive at the target SIP phone.	g that the call could (Default: Notice Tone 3)
Notice Tone Volume	Set the volume level of the Notice Tones (4 ~ (• Range: –12 (minimum) ~ +6 (maximum) (dB)	3). (Default: 0)

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Control

PTT Control Type		
Group Call/All Call 🕕	VOX	~
Individual Call to a Wireless LAN Transceiver 12	VOX	~
Individual Call to a IP Transceiver 1	VOX	~
Individual Call to a Digital Transceiver 🔱	VOX	~
Individual Call to an EXT (Transceiver) :15	DTMF	~
Individual Call to an EXT (EXT I/O Unit)	VOX	~
Individual Call to a Microphone 🖤	VOX	~
PTT-ON Tone 18	0	~
PTT-OFF Tone	0	~
Call Initiation Control		
Method 20	RTP	~

(1) "PTT-ON Tone" (1) and "PTT-OFF Tone" (1) are displayed only when any PTT Control Types from "Group Call/All Call" (1) to "Individual Call to a Microphone" (1) are set to "DTMF."

O PTT Control Type

Sets the type of signal that SIP phones use to communicate for each call type or destination device type. • Options: VOX (Voice signal,) DTMF (Tone signal,) or Constant Transmission during Call

When "Constant Transmission during Call" is selected, the No Voice Release Timer detects the communication status only by the signal received from the specified destination.

(PBX Extension > Transceiver Controller Telephone Connection > Release Timer) If a signal from the specified destination is not received for the set period of time, the call may be terminated because of the No Vice Release Timer function.

1 Group Call/ All Call	Set the s transceiv • VOX: • DTMF:	signal type for Group Calls and All Calls to the linked vers. (Default: VOX) When a voice signal is received from a SIP phone, the target transceiver enters the transmit mode. When a tone signal is received from a SIP phone, the target transceiver enters the transmit mode.
	Consta	nt Transmission during Call:
		As soon as the communication is established, the target transceiver enters the transmit mode.
		The No Voice Release Timer detects only the signal (VOX or RTP) received from the Converter Bridge connection destination.
Individual Call to a		
Wireless LAN Transceiver	Set the s	ignal type for Individual calls to WLAN transceivers.
		(Default: VOX)
	• VOX :	When detecting a voice signal from a SIP phone, the target Wireless LAN transceiver enters the receive mode.
	• DTMF:	When detecting a tone signal from a SIP phone, the target Wireless LAN transceiver enters the receive mode.
	Consta	nt Transmission during Call:
		As soon as the communication is established, the target Wireless
		LAN transceiver enters the receive mode.
		The No Voice Release Timer detects only the signal (VOX or RTP) received from the WLAN transceiver.

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Control

PTT Control Type		
Group Call/All Call : 🕕	VOX	~
Individual Call to a Wireless LAN Transceiver : 12	VOX	~
Individual Call to a IP Transceiver : 🔞	VOX	~
Individual Call to a Digital Transceiver : 🚺	VOX	~
Individual Call to an EXT (Transceiver) : 😈		~
Individual Call to an EXT (EXT I/O Unit) :		~
Individual Call to a Microphone : 🕧		~
PTT-ON Tone : 18		~
PTT-OFF Tone : 19	0	~
Call Initiation Control		
Method 20	RTP	~

(1) "PTT-ON Tone"
 (10) and "PTT-OFF Tone"
 (10) are displayed only when any PTT Control Types from
 "Group Call/All Call"
 (11) to "Individual Call to a Microphone"
 (12) are set to "DTMF."

Individual Call to a IP Transceiver Set the signal type for Individual calls to IP transceivers. (Default: VOX) · VOX: When detecting a voice signal from a SIP phone, the IP transceiver connected to the RoIP Gateway enters the transmit mode. • DTMF: When detecting a tone signal from a SIP phone, the target IP transceiver enters the receive mode. Constant Transmission during Call: As soon as the communication is established, the IP transceiver connected to the RoIP Gateway enters the transmit mode. The No Voice Release Timer detects only the signal (VOX or RTP) received from the IP transceiver. Individual Call to a Digital Transceiver Set the signal type for Individual Calls to digital transceivers. (Default: VOX) · VOX: When a voice signal is received from a SIP phone, the Digital Transceiver enters the transmit mode. • DTMF: When a tone signal is received from a SIP phone, the Digital Transceiver enters the transmit mode. · Constant Transmission during Call: As soon as the communication is established, the Digital Transceiver enters the receive mode. The No Voice Release Timer detects only the signal (VOX or RTP) received from the Digital Transceiver. **(b** Individual Call to an Set the signal type for Individual Calls to EXT (transceivers.) EXT (Transceiver) (Default: VOX) • VOX: When a voice signal is received from a SIP phone, the EXT (transceiver) enters the transmit mode. • DTMF: When a tone signal is received from a SIP phone, the EXT (transceiver) enters the transmit mode. Constant Transmission during Call: As soon as the communication is established, the EXT (transceiver) enters the transmit mode. The No Voice Release Timer detects only the signal (VOX or RTP) received from the EXT (transceiver.)

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Control

PTT Control Type		
Group Call/All Call : 🕕	VOX	~
Individual Call to a Wireless LAN Transceiver : 12		~
Individual Call to a IP Transceiver : 📵	VOX	~
Individual Call to a Digital Transceiver : 🚺		~
Individual Call to an EXT (Transceiver) : 15		~
Individual Call to an EXT (EXT I/O Unit) :		~
Individual Call to a Microphone : 🕧		~
PTT-ON Tone : 18		~
PTT-OFF Tone : 19		~
Call Initiation Control		
Method 20	RTP	~

① "PTT-ON Tone" (18) and "PTT-OFF Tone" (19) are displayed only when any PTT Control Types from "Group Call/All Call" (1) to "Individual Call to a Microphone" (1) are set to "DTMF."

10 Individual Call to an EXT

EXT (EXT I/O Unit)	Set the s	ignal type for Individual Calls to EXT (I/O units.)
		(Default: VOX)
	• VOX:	When a voice signal is received from a SIP phone, the EXT (I/O Unit) enters the transmit mode.
	• DTMF:	When a tone signal is received from a SIP phone, the EXT (I/O Unit) enters the transmit mode.
	Consta	nt Transmission during Call:
		As soon as communication is established, the EXT (I/O Unit) enters the transmit mode.
		The No Voice Release Timer detects only the signal (VOX or RTP) received from the EXT (I/O Unit.)
Individual Call to a		
Microphone	Set the s	ignal type for Individual Calls to a speaker microphone. (Default: VOX)
	• VOX:	When a voice signal is received from a SIP phone, the speaker microphone enters the receive mode.
	• DTMF:	When a tone signal is received from a SIP phone, the speaker

- microphone enters the receive mode.
- Constant Transmission during Call:

As soon as communication is established, the microphone enters the receive mode.

The No Voice Release Timer detects only the signal (VOX or RTP) received from the speaker microphone.

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Control

PTT Control Type		
Group Call/All Call : 🕕	VOX	~
Individual Call to a Wireless LAN Transceiver : 10		~
Individual Call to a IP Transceiver : 📵		~
		~
Individual Call to an EXT (Transceiver) : 😈	DTMF	~
Individual Call to an EXT (EXT I/O Unit) :		~
Individual Call to a Microphone : 🕧		~
PTT-ON Tone : 18		~
PTT-OFF Tone : 19		~
Call Initiation Control		
Method 20	RTP	~

(1) "PTT-ON Tone" (18) and "PTT-OFF Tone" (19) are displayed only when any PTT Control Types from "Group Call/All Call" (10) to "Individual Call to a Microphone" (10) are set to "DTMF."

PTT-ON Tone	Select the PTT-ON tone when any signal types shown above (1) ~ 1) is set to "DTMF." (Default: 0) • Range: 0 ~ 9, *, or #			
	① Dial this number on the SIP phone to make a destination device start transmitting.			
	 If you enter the same value in both the PTT-ON Tone and the PTT-OFF Tone, you can toggle the destination device status by dialing this number. 			
PTT-OFF Tone	Select the PTT-OFF tone when any signal types shown above (① ~ ⑦) is set to "DTMF." (Default: 0) • Range: 0 ~ 9, *, or #			
	① Dial this tone on the SIP phone to make the destination device to stop transmitting.			
	① If you enter the same value in both the PTT-ON Tone and PTT-OFF Tone, you can toggle the destination device status by dialing this number.			
Ø Method	Set the transmitting trigger to make a call from a transceiver controller			
	to the IP telephone system. (Default: RTP)			
	• VOX: Starts dialing when the VOX detects voice data in the voice packet that is received by the bridge interface through the RTP (Real-time Transport Protocol).			
	• RTP : Starts dialing when the RTP (voice data packet) is longer than the set period time in the Attack Time setting is received, regardless of if the RTP includes voice data or not.			

PBX Extension > Transceiver Controller Telephone Connection

PTT Control Setting

The VOX (voice operated transmission) function automatically switches the connected transceiver to transmit, when the RoIP gateway receives an audio signal through the network.

PTT Control Setting	
Setting values of Attack Time, Release Time and Voice Delay are set in five milliseconds st	teps.
Attack Time : 1 50	milliseconds
Release Time : 2 500	milliseconds
Voice Delay : 3 200	milliseconds
VOX Threshold : 4 40	%

Attack Time	Enter the TX delay time. • Range: 5 ~ 500 (milliseconds) in 5 millisecond steps	(Default: 50)
	After the continuous signal for the set period of time is rec SIP phone, the transceiver controller starts to transmit.	eived from a
2 Release Time	Select the RX delay time. • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps	(Default: 500)
	This is the delay time for the VOX to turn OFF, after no au received through the network.	dio signal is
3 Voice Delay	Set the audio signal buffer time to prevent intermittent aud	lio. (Default: 200)
	 Range: 0 ~ 1500 (milliseconds) in 5 millisecond steps 	(,
	The voice delay is the amount of time the RoIP gateway s	tores the
	transmitted audio to prevent missing the first part of the sp	beech.
4 VOX Threshold	Set the voice threshold level. • Range: 0 ~ 100 (%)	(Default: 40)
	The VOX function automatically switches between receive according to this threshold level. The lower values make the function more sensitive to the voice input.	

PBX Extension > Transceiver Controller Telephone Connection

■ Call Initiation Setting

Sets the details on voice transmission to the SIP phone when there is voice input from the transceiver controller.

Call Initiation Setting		
*Setting values of Attack Time, Release Ti	me and Voice Delay are set in five milliseconds steps.	
Attack Time : 1	1000	milliseconds
Release Time : 2	200	milliseconds
Voice Delay :		milliseconds
VOX Threshold : 4		%

1 Attack Time	Enter the TX attack time in 5 millisecond step. It is the dela the VOX switch turns ON after an audio signal is received to network. (E • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps	
Release Time	Select the RX delay time in 5 millisecond step. It is the dela the VOX switch to turn OFF after no audio signal is receive the network. • Range: 5 to 2000 (milliseconds) in 5 millisecond steps	
3 Voice Delay	Set the audio signal buffer time to prevent intermittent audi	o. (Default: 5)
	 Range: 0 ~ 500 (milliseconds) in 5 millisecond steps 	
4 VOX Threshold	 The VOX function automatically switches between receive according to this threshold level. Range: 0 ~ 100 (%) ① Lower values make the VOX function more sensitive to the automatically switches are sensitive to the automatically switches are sensitive to the automatically switches between receive according to this threshold level. 	(Default: 70)

PBX Extension > Transceiver Controller Telephone Connection

■ Notice Tone on the Telephone

Sets the details on the notification to a SIP phone, when a call has arrived on a transceiver controller from a SIP phone.

Notice Tone on the Telepho	ne	
Connection Success .	Notice Tone 1	~
		~
Notice Tone Volume 3		✓ dB

Connection Success	Select a Notice Tone to notify a SIP phone that a call has arrived on the transceiver controller and the SIP phone is ready to transmit. (Default: Notice Tone 1)		
	 Not used: Notice Tone 1 ~ 	Does not send a Notice Tone 3: Sends the selected Notice Tone	,
2 PTT Monitoring	Select a Notice	Tone to alert you to switch receiving a	and transmitting. (Default: Not used)
	 Not used: Notice Tone 1 ~ 	Does not send a Notice Tone 3: Sends the selected Notice Tone	, , , , , , , , , , , , , , , , , , ,
3 Notice Tone Volume		evel of the Notice Tones (1 ~ 2). nimum) ~ +6 (maximum) (dB)	(Default: 0)

Transceiver Controller Telephone Connection screen

PBX Extension > Transceiver Controller Telephone Connection

Release Timer

Sets the timers for canceling or disconnecting a call.

Call Cancel Timer : 1 15	seconds
No Voice Release Timer : 2 15 Forced Disconnect	seconds
Forced Disconnect Timer : 3 10	minutes

Call Cancel Timer	Enter the period of time to cancel the call. When the set time has passed without a response from the SIP phone, the call is canceled. (Default: 15)
	• Range: 0 (OFF) or 5 ~ 60 (seconds)
2 No Voice Release Timer	Enter the period of time to stop transmitting. When the set time has passed with no audio signal, transmitting is stopped. (Default: 15)
	• Range: 0 (OFF) or 5 ~ 600 (seconds)
Sorced Disconnect Timer	Enter the period of time to be forcibly stop transmitting. When the set time has passed, transmitting is stopped, even when communication is ongoing. (Default: 10) • Range: 0 (OFF) or 5 ~ 120 (minutes)

PBX Extension > Converter Bridge

Converter Bridge

Selects a extension whose settings you want to edit settings in the "Connection" item below.

Converter Bridge		
Extension Number :	(Converter Bridge1)	~

Extension Number

Displays the extension number of the Converter Bridge, if it is set in "Extension" (PBX > Extension > Extension.)

Converter Bridge screen

PBX Extension > Converter Bridge

Connection

Sets the destination device of the bridge connection that connects to the SIP phones

Connection		
Transmission Mode :	Multicast	~
Destination Address 2	239.255.255.1	
Destination Port Number :	22510	
Source Port Number	22510	
Voice Protocol :5		
•	*Voice Protocol can be set on the Bridge Connection.	
Multicast TTL :6	1	
Connection Status		

① The screen above is when the Transmission Mode (1) is set to "Multicast".

1 Transmission Mode	Set the transmissior	n mode on each	n extension (port) numb (Dei	er. fault: Unicast)
2 Destination Address	Set an appropriate I (1) setting.	P address, dep	ending on the Transmis	sion Mode
	• For Unicast: S		ss for the LAN, or the d n, that of up to 63 chara (D	
		set the same va estination.	lue as the bridge setting	,
3 Destination Port Number	 Set the same port number as the "Source Port Number" (④) setting of the VE-PG4 that works as the Converter Bridge connection Destination. Range: An even number from 2 to 65534. ① Do not duplicate other connection port settings. ○ The Default port settings in the Unicast mode 			
	PORT	DEFAULT	PORT	DEFAULT
	Converter Bridge 1	24200	Converter Bridge 11	24220
	Converter Bridge 2	24202	Converter Bridge 12	24222
	Converter Bridge 3	24204	Converter Bridge 13	24224
	Converter Bridge 4	24206	Converter Bridge 14	24226
	Converter Bridge 5	24208	Converter Bridge 15	24228
	Converter Bridge 6	24210	Converter Bridge 16	24230

24212

24214

24216

24218

Converter Bridge 17

Converter Bridge 18

Converter Bridge 19

Converter Bridge 20

24232

24234

24236

24238

Converter Bridge 7

Converter Bridge 8

Converter Bridge 9

Converter Bridge 10

Converter Bridge screen

PBX Extension > Converter Bridge

Connection

Connection		
Transmission Mode :	Multicast	~
Destination Address	239.255.255.1	
Destination Port Number	22510	
Source Port Number	22510	
Voice Protocol		
	*Voice Protocol can be set on the Bridge Connection.	
Multicast TTL :6	1	
Connection Status		

① The screen above is when the Transmission Mode (1) is set to "Multicast".

3 Destination Port Number (Continued)

O The Default port settings in the Multicast mode

PORT	DEFAULT	PORT	DEFAULT
Converter Bridge 1	22510	Converter Bridge 11	22510
Converter Bridge 2	22510	Converter Bridge 12	22510
Converter Bridge 3	22510	Converter Bridge 13	22510
Converter Bridge 4	22510	Converter Bridge 14	22510
Converter Bridge 5	22510	Converter Bridge 15	22510
Converter Bridge 6	22510	Converter Bridge 16	22510
Converter Bridge 7	22510	Converter Bridge 17	22510
Converter Bridge 8	22510	Converter Bridge 18	22510
Converter Bridge 9	22510	Converter Bridge 19	22510
Converter Bridge 10	22510	Converter Bridge 20	22510

4 Source Port Number

Set the same port number as the setting in the Converter Bridge connection destination.

Range: An even number from 2 to 65534

① Do not duplicate other connection port settings, when using in the Unicast mode.

O Th	e Default	port setting	s in the	Unicast mode
------	-----------	--------------	----------	--------------

PORT	DEFAULT	PORT	DEFAULT
Converter Bridge 1	24200	Converter Bridge 11	24220
Converter Bridge 2	24202	Converter Bridge 12	24222
Converter Bridge 3	24204	Converter Bridge 13	24224
Converter Bridge 4	24206	Converter Bridge 14	24226
Converter Bridge 5	24208	Converter Bridge 15	24228
Converter Bridge 6	24210	Converter Bridge 16	24230
Converter Bridge 7	24212	Converter Bridge 17	24232
Converter Bridge 8	24214	Converter Bridge 18	24234
Converter Bridge 9	24216	Converter Bridge 19	24236
Converter Bridge 10	24218	Converter Bridge 20	24238

Converter Bridge screen

PBX Extension > Converter Bridge

Connection

Connection		
Transmission Mode :	Multicast	~
Destination Address	239.255.255.1	
Destination Port Number :		
Source Port Number :4		
Voice Protocol		
	*Voice Protocol can be set on the Bridge Connection.	
Multicast TTL :6	1	
Connection Status		

① The screen above is when the Transmission Mode is set to "Multicast".

4 Source Port Number (Continued)

	O The Default port settings in the Multicast mode			
	PORT	DEFAULT	PORT	DEFAULT
	Converter Bridge 1	22510	Converter Bridge 11	22510
	Converter Bridge 2	22510	Converter Bridge 12	22510
	Converter Bridge 3	22510	Converter Bridge 13	22510
	Converter Bridge 4	22510	Converter Bridge 14	22510
	Converter Bridge 5	22510	Converter Bridge 15	22510
	Converter Bridge 6	22510	Converter Bridge 16	22510
	Converter Bridge 7	22510	Converter Bridge 17	22510
	Converter Bridge 8	22510	Converter Bridge 18	22510
	Converter Bridge 9	22510	Converter Bridge 19	22510
	Converter Bridge 10	22510	Converter Bridge 20	22510
S Voice Protocol	Assignment" setting.		col in the "AMBE+2 Vo	
❺ Multicast TTL	Displayed only when Transmission Mode (1) is set to "Multicast." For the expiration data of the voice packet, set the TTL (Time To Live) until the voice packet reaches the communication destination. (Default: • Range: 1 ~ 255			ïme To Live)
Connection Status	to reload the status, o	r <activate></activate>	r Bridge connection. C to activate the set devi , the button changes to "	ces.

○ The Default port settings in the Multicast mode

PBX Extension > Converter Bridge

Communication

The settings to communicate between the RoIP gateway and a converter bridge connection destination.

Communication	
Encryption :1 Disable Encryption Key : 1	
TalkBack : 📿 🔼 Disable 💿 Enable	
TalkBack Time : 5	 seconds
Default Callee ID	
Call Type : 3 Individual	~
Destination Prefix ID : 4	
Destination ID : 5 1	
Source ID : 6 1	

 \textcircled The screen shows when both Encryption and Talkback are enabled.

Encryption	 Select "Enable" to encrypt the communication. (Defau When you select "Enable," enter the appropriate key in "Encr Key." Range: 1 ~ 32767 This setting takes effect when the AMBE+2 codec is used. 	ılt: Disable) yption
2 TalkBack	Commonly used by the transceivers that belong to a group so the RoIP Gateway. Set the period of time from when the tran- finishes transmitting until the screen returns to the standby m • Range: 1 ~ 10 (seconds)	sceiver
3 Call Type	Set the call type to send from a SIP phone to a transceiver th to the Converter Bridge connection destination. (Defa • Options: Individual, Group, or All	at belongs ault: Group)
Destination Prefix ID	 Enter the prefix ID of the destination. (Def Range: Blank or 0 ~ 30 The range differs, depending on the system settings 	ault: Blank)
5 Destination ID	 Does not displayed when the Call Type (3) is set to "All." Enter an Individual ID or Group ID of the destination transcei entered into the Converter Bridge connection destination. Range: When the Prefix is not set: 1 ~ 9999999 When the Prefix is set: 1 ~ 999999 	ver, that is (Default: 1)
6 Source ID	Enter an Individual ID or Group ID of the caller. This ID will be announced at the call destination. • Range: 1 ~ 9999999	(Default: 1)

Converter Bridge screen

```
PBX Extension > Converter Bridge
```

Control

The settings for the communication control between the RoIP gateway and a Converter Bridge connection destination.

Control		
Prioritized Receive :	◯ Disable	
PTT Call Cancel on Call Incoming : 2	● Disable 🔘 Enable	
Target Availability Check : 3	🔿 Disable 💿 Enable	
Timing of Target Availability Check : 4	After Call Prior to Call	
Call Incoming : 5	Not used	~
	Not used	~
Calling : 7	Notice Tone 2	~
Connection Success : 8		~
Disconnect : 9	Notice Tone 3	~
Connection Failure : 🕕		~
Notice Tone Volume : 🕕	0	✓ dB

1 Prioritized Receive	Select "Enable" to inhibit a SIP phone from transmittin while it is receiving an RTP signal from a Converter Bu destination.	
PTT Call Cancel on Call Incoming	Select "Enable" to cancel the current call if a SIP phor another call from the same Converter Bridge connecti while a call is incoming.	
3 Target Availability Check	Displayed only when the voice protocol setting on the is set to "Bridge Protocol" or "Protocol for Transceiver connection" in the "AMBE+2 Vocoder Assignment." (B Settings > Bridge Connection > AMBE+2 Vocoder Assi Converter Bridge 1 ~ 20) Select whether or not to check the availability of a Con connection destination when a device such as SIP pho RoIP gateway makes a call (excluding an emergency If this setting is enabled, the RoIP gateway will stop se linked transceiver when the destination transceiver is not answer in 5 seconds.	and SIP Phone sridge Connection signment > nverter Bridge one linked to this call) to it. ending a call to a
Timing of Target Availability Check	Set when the Target Availability Check (3) will occur. (• After Call: Checks after a call is established • Prior to Call: Checks before a call is established	Default: After Call)

Converter Bridge screen

PBX Extension > Converter Bridge

Control

Control			
Prioritized Receive : 1	🔿 Disable 💿 Enable		
PTT Call Cancel on Call Incoming : 2	Oisable O Enable		
Target Availability Check : 3	🔿 Disable 💿 Enable		
Timing of Target Availability Check : 4 Notice Tone on the Transceiver	After Call O Prior to Call		
Call Incoming : 5	Not used		\sim
Dialing Notice Tone on the Transceiver : 6	Not used		$\mathbf{\tilde{\mathbf{v}}}$
Calling : 7	Notice Tone 2		\sim
Connection Success : 8	Notice Tone 2		\sim
Disconnect : 9	Notice Tone 3		\sim
Connection Failure : 🕕			\sim
Notice Tone Volume : 🕕	0	~	dB

S Call Incoming	 Select a Notice Tone to send to notify a client transfrom a SIP phone has arrived. Not used: Does not send a Notice Tone (The transceiver automatically a Notice Tone 1 ~ 3: Sends the selected Notice Tone (The transceiver can answer by the Notice Tone) 	(Default: Not used) answers.)
	the Notice Tones.)	
6 Dialing Notice Tone on the Transceiver	Displayed when the "DTMF Dialing" (p.13-69) is	enabled. (Default: Not used)
⑦ Calling	The Notice Tone to send to a caller transceiver a SIP phone answered the call.	lerting that the target (Default: Notice Tone 2)
8 Connection Success	The Notice Tone to send to a caller transceiver a SIP phone has hung up the call.	lerting that the target (Default: Notice Tone 2)
Disconnect	The Notice Tone to send to a caller transceiver a could arrive at the target SIP phone.	lerting that the call (Default: Notice Tone 3)
Connection Failure	The Notice Tone to send to a caller transceiver a could arrive at the target SIP phone.	lerting that the call (Default: Notice Tone 3)
Notice Tone Volume	Set the volume level of the Notice Tones (5 ~ 0 • Range: –12 (minimum) ~ +6 (maximum) (dB)). (Default: 0)

Converter Bridge screen

PBX Extension > Converter Bridge

Control

Control	the Volume		\sim
PTT Control Type			
	PTT Control Type : 1	DTMF	~
	PTT-ON Tone : 13	0	~
	PTT-OFF Tone : 14		~
Call Initiation Control			
	Method : 🚺	RTP	~

① "PTT-ON Tone" (13) and "PTT-OFF Tone" (13) are displayed only when "PTT Control Type" (12) is set to "DTMF."

PTT Control Type	Sets the type of signal that SIP phones use to communicate for each call type or destination device type. (Default: VOX) • VOX: When a voice signal is received from a SIP phone, the target transceiver enters the transmit mode.		
	• DTMF : When a tone signal is received from a SIP phone, the target transceiver enters the transmit mode.		
	Constant Transmission during Call:		
	As soon as communication is established, the target transceiver enters the transmit mode.		
	The No Voice Release Timer detects only the signal (VOX or RTP) received from the Converter Bridge connection destination.		
	① When "Constant Transmission during Call" is selected, the No Voice Release Timer detects the communication status only by the received signal from the specified destination.		
	(PBX Extension > Transceiver Controller Telephone Connection > Release Timer)		
	If a signal from the specified destination is not received for the set period of time, the call may be terminated because of the No Voice Release Timer function.		
PTT-ON Tone	Select the PTT-ON tone when the either the signal types shown above (12) is set to "DTMF." (Default: 0) • Range: 0 ~ 9, *, or #		
	 Dial this number on the SIP phone to make a destination device start transmitting. 		
	① If you enter the same value to both the PTT-ON Tone and the PTT-OFF		

 If you enter the same value to both the PTT-ON Tone and the PTT-OFF Tone, you can toggle the destination device status by dialing this number.

Converter Bridge screen

PBX Extension > Converter Bridge

Control

Control	one Volume	\sim	
PTT Control Type			
	PTT Control Type : 🔱	DTMF	~
	PTT-ON Tone : 13	0	\sim
	PTT-OFF Tone : 🚺		~
Call Initiation Control			
	Method : 🕕	RTP	~

(1) "PTT-ON Tone" (13) and "PTT-OFF Tone" (13) are displayed only when "PTT Control Type" (12) is set to "DTMF."

PTT-OFF Tone	 Select the PTT-OFF tone when the PTT Control Tone (12) is set to "DTMF." (Default: 0) Range: 0 ~ 9, *, or # ① Dial this tone on the SIP phone to make the destination device stop transmitting. 			
	① If you enter the same value to both the PTT-ON Tone and PTT-OFF Tone, you can toggle the destination device status by dialing this number.			
(5) Method	 Set the transmitting trigger to make a call from a bridge to the IP telephone system. (Default: RTP) VOX: Starts dialing when the VOX detects voice data in the voice packet that is received by the bridge interface through RTP (Real-time Transport Protocol). RTP: Starts dialing when RTP (voice data packet) is received later than the set period time in the Attack Time setting, regardless of if the RTP includes voice data or not. 			

Converter Bridge screen

PBX Extension > Converter Bridge

■ DTMF Dialing

Set details on DTMF Dialing through a Converter Bridge connection port.

DTMF	Dialing		
Timer	DTMF Dialing :	O Disable	
	Permissible Tone Gap : 2	5	~
	OFF-hook Detect Timer :		 milliseconds
		*Applied only if the OFF-hook settings in [Special Number] are se one digit.	t to values with
	ON-hook Detect Timer :	400	 milliseconds
		*Applied only if the ON-hook setting in [Special Number] is set to a digit.	a value with one

① The screen above shows when "DTMF Dialing" (1) is set to "Enable."

1 DTMF Dialing	Select "Enable" to use DTMF signaling. If enabled, set the details in the timer.	(Default: Disable)
2 Permissible Tone Gap	 Set the period of time to detect that the last digit has l Range: 1 ~ 10 (seconds) ① Applied only when a 1 digit number is set to the OFF-hoo Special Number screen. 	(Default: 5)
3 OFF-hook Detect Timer	 Set the period of time to detect the OFF-hook control s Range: 0 ~ 2000 (milliseconds) ① Applied only when a 1 digit number is set to the OFF-hoo Special Number screen. 	(Default: 400)
ON-hook Detect Timer	Select the period of time to detect the ON-hook controlRange: 0 ~ 2000 (milliseconds)	ol signal. (Default: 400)

PBX Extension > Converter Bridge

PTT Control Setting

The VOX (voice operated transmission) function automatically switches the connected transceiver to transmit, when the RoIP gateway receives an audio signal to the Converter Bridge connection destination device.

PTT Control Setting				
Setting values of Attack Time, Release Time and Voice Delay are set in five milliseconds steps	ð.			
Attack Time : 0 50	milliseconds			
Release Time : 2 500	milliseconds			
Voice Delay : 3 200	milliseconds			
VOX Threshold : 40	%			

1 Attack Time	Enter the TX delay time. • Range: 5 ~ 500 (milliseconds) in 5 millisecond steps	(Default: 50)
	 After the continuous signal for the set period of time is receive phone, the transceiver controller starts to transmit. 	ed from a SIP
2 Release Time	Select the RX delay time. • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps	(Default: 500)
	This is the delay time for the VOX to turn OFF, after no at received through the network.	udio signal is
3 Voice Delay	Set the audio signal buffer time to prevent intermittent au	dio. (Default: 200)
	 Range: 0 ~ 500 (milliseconds) in 5 millisecond steps 	(Delault. 200)
	The voice delay is the amount of time the RoIP gateway s transmitted audio to prevent missing the first part of the s	
4 VOX Threshold	Set the voice threshold level. • Range: 0 ~ 100 (%)	(Default: 40)
	The VOX function automatically switches between receiv according to this threshold level. The lower values make function more sensitive to the voice input.	

PBX Extension > Converter Bridge

■ Call Initiation Setting

The VOX (voice operated transmission) function automatically switches the connected transceiver to receive, when the RoIP gateway receives the audio signal from the bridge connection destination device.

Call Initiation Setting				
*Setting values of Attack Time, Release Time and Voice Delay are set in five milliseconds steps.				
Attack Time : 1 1000	milliseconds			
Release Time : 2 200	milliseconds			
Voice Delay : 3 5	milliseconds			
VOX Threshold : 4 70	%			

Attack Time	Enter the TX attack time. It is the delay time before the VO turns ON after an audio signal is received through the netw (D • Range: 5 ~ 2000 (milliseconds) in 5 millisecond steps	
2 Release Time	Select the RX delay time in 5 millisecond step. It is the dela the VOX switch to turn OFF after no audio signal is receive the network. (• Range: 5 to 2000 (milliseconds) in 5 millisecond steps	
3 Voice Delay	Set the audio signal buffer time to prevent intermittent audi	o. (Default: 5)
	 Range: 0 ~ 500 (milliseconds) in 5 millisecond steps 	
4 VOX Threshold	Set the voice threshold level. The audio signal is output to a according to this threshold level. • Range: 0 ~ 100 (%) ① The lower values make the VOX function more sensitive to the	(Default: 70)

PBX Extension > Converter Bridge

■ Notice Tone on the Telephone

Sets the details on the notification to SIP phones when a call has arrived on a Converter Bridge port of the RoIP gateway.

Notice Tone on the Telephone		
Connection Success : 1 Notice Tone 1	~	
PTT Monitoring : 2 Not used	~	
Notice Tone Volume : 3 0	✓ dB	

Connection Success			ne to notify a SIP phone that a ler, and the SIP phone is read	
		 Not used: 	Does not send a Notice Tone	· · · · · · · · · · · · · · · · · · ·
		Notice Tone 1 ~ 3:	Sends the selected Notice Tone	
2 PTT Monitoring		Select a Notice To	ne to alert you to switch receiv	ving and transmitting. (Default: Not used)
		Not used:	Does not send a Notice Tone	, ,
		Notice Tone 1 ~ 3:	Sends the selected Notice Tone	9
3 Notice Tone Volume			el of the Notice Tones (1 ~ 2 num) ~ +6 (maximum) (dB)). (Default: 0)

Converter Bridge screen

PBX Extension > Converter Bridge

Release Timer

Sets the timers for canceling or disconnecting a call.

Release Timer		
Call Cancel Timer : 👤	15	seconds
Call Cancel Timer : No Voice Release Timer : orced Disconnect	15	seconds
Forced Disconnect Timer : 3	10	minutes
		Apply Reset

Call Cancel Timer	Enter the period of time to cancel the call. When the set time has passed without a response from the SIP phone, the call is canceled. (Default: 1	5)
	• Range: 0 (OFF) or 5 ~ 60 (seconds)	,
2 No Voice Release Timer	Enter the period of time to stop transmitting. When the set time has passed with no audio signal, transmitting is stopped.	- \
	Range: 0 (OFF) or 5 ~ 600 (seconds)	ວ)
Sorced Disconnect Timer	Enter the period of time to be forcibly stop transmitting. When the set time has passed, transmitting is stopped, even when the communication is ongoing. (Default: 1 • Range: 0 (OFF) or 5 ~ 120 (minutes)	0)
<pre>4<apply></apply></pre>	Click to apply the setting.	
5 <reset></reset>	Click to reset the setting. ① You cannot reset after clicking <apply>.</apply>	

PBX ADVANCED SETTINGS

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PBX Advanced Settings > Advanced Settings

■ SIP Settings

The common settings for the terminals to the RoIP gateway.

Extension Domain :	LAN IP address
Domain :	
SIP 183 Support : 2	• Disable
Relay SIP Response : 3	🔿 Disable 💿 Enable
Relay Internal Response : 4	• Disable
Caller ID Relay on Call Forwarding : 5	◯ Not relay ● Relay
Preferred Inbound Call Setting :	IP Line O Peer to Peer
Use Letters for Phone Number : 7	● Inhibit 🔿 Allow

1 Extension Domain	You can enter a SIP service domain name of up to 63 characters, to commonly use between the local SIP server and its client SIP phones. (Default: LAN IP address)	
	 Enter a unique Extension Domain in an IP telephone network. The IP address of the RoIP gateway is recommended for your Extension Domain name to prevent a conflict in domain names. Enter this value in the "SIP service domain" setting in the client telephone settings. 	
2 SIP 183 Support	Enable this option if you want to use the 183 Session Progress. (Default: Disable)	
	 The 183 Session Progress response indicates that information about the call state is present in the message body media information (SDP). ① When this option is enabled, the 183 session progress is transferred to a client SIP phone. 	
8 Relay SIP Response	 Set whether or not to relay an error message received from an upstream SIP server when a call is outgoing. (Default: Enable) Enable: Relays an error response (4xx ~ 6xx) from the SIP server. Disable: Translates an error response (4xx ~ 6xx) into a 486 response and relays it. Translet this setting if you want to use a slide outgoing function by connecting 	
	another SIP server to this RoIP gateway as a simple relay client device.	

PBX Advanced Settings > Advanced Settings

SIP Settings		
Extension Domain : 1 🖲 L	AN IP address O Specify	
Domain :		
SIP 183 Support : 2 💿 🛙	bisable 🔿 Enable	
Relay SIP Response : 3 O	isable Enable	
Relay Internal Response : 4 💿 🛛	Disable 🔿 Enable	
Caller ID Relay on Call Forwarding : 5 O N	lot relay 💿 Relay	
Preferred Inbound Call Setting : 6	P Line O Peer to Peer	
Use Letters for Phone Number : 🕜 💿 🛙	hibit 🔿 Allow	
	 phone, when a call is incoming. Enable: Relays an error response (4xx ~ 6xx) from the S Disable: Translates an error response (4xx ~ 6xx) into a 	
	relays it.	486 response and
-	relays it.	
•		of a forwarded ca (Default: Relay ation.
Caller ID Relay on Call Forwarding Preferred Inbound Call Setting	relays it. Set whether or not to relay the original caller number by using the Blind Transfer function. • Not relay: Your number is shown at the forwarded destina	of a forwarded ca (Default: Relay ation. /arded destination.

PBX Advanced Settings > Advanced Settings

VoIP Settings

Sets the audio quality for SIP phones. The setting items vary, depending on the TOS Type.

(TOS Type: Not Used)	
VoIP Settings	
Buffering Type : 1	✓ milliseconds
TOS Type : 3 Not Used	6 7 Apply Reset

TOS Type: TOS

VoIP Settings	
Buffering Type : 1) 💿 Static 🔿 Dynamic	
Receive Buffer Size : 2 _ 40	✓ milliseconds
TOS Type : 3 TOS	~
Media (RTP) Priority Level : 4 7	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) Priority Level : 5	
Signaling (SIP) Service Type : 0	
Signaling (SIP) (HEX) : C0	6 7
_	Apply Reset

(TOS Type: Diffserv)

ngs	
Buffering Type : 1 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) (HEX) : E0	
Signaling (SIP) DSCP : 6 48	
Signaling (SIP) (HEX) : C0	6 Apply Reset
	Receive Buffer Size : 2 40 TOS Type : 3 Diffserv Media (RTP) DSCP : 4 56

① The screens above show when the Buffering Type (1) is set to "Static"

 Buffering Type
 Select the jitter buffer used to reduce speech break up due to packet fluctuations.

 (Default: Dynamic)

- Static: Buffers receive voice data for a set period of time in the Receive Buffer Size (2).
- **Dynamic**: Buffering time of the received voice data varies, according to the packet fluctuation status.

PBX Advanced Settings > Advanced Settings

VoIP Settings

(TOS Type: Not Used)

VoIP Settings	
Buffering Type : 1 💿 Static 🔿 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 Not Used	<u> </u>
	Apply Reset

TOS Type: TOS

	 millisecond
	×
	6 6

(TOS Type: Diffserv)

Buffering Type : 1	
Receive Buffer Size : 2 40	✓ milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : E0	
Signaling (SIP) DSCP : 5 48	
Signaling (SIP) DSCP : 5 48 Signaling (SIP) (HEX) : C0	6 7

① The screens above show when the Buffering Type (1) is set to "Static"

2 Receive Buffer Size

Displayed only when Buffering Type (1) is set to "Static."

Set the period of time to buffer the received voice data. (Default: 40) • Range: 20 ~ 1000 (milliseconds)

The shorter the time you set, the less the delay, however the more the sound will be interrupted.

PBX Advanced Settings > Advanced Settings

VoIP Settings

(TOS Type: Not Used)

/oIP Settings		
Buffering Type :	Static O Dynamic	
Receive Buffer Size :2	40	➤ milliseconds
TOS Type :		6 7 [×]
		Apply Reset

(TOS Type: TOS)

	🖲 Static Dynamic	Buffering Type : 🚺 🖲
✓ millisec	40	Receive Buffer Size : 2 4
	TOS	TOS Type : 3
	7	Media (RTP) Priority Level : 4
	_	Media (RTP) Service Type :
	<u>E</u> 0	Media (RTP) (HEX) : <u>E</u> 0
	6	Signaling (SIP) Priority Level :5 6
	0	Signaling (SIP) Service Type : 0
6	C0	Signaling (SIP) (HEX) : C0

(TOS Type: Diffserv)

Buffering Type : 🕦 💿 Static 🛛 🔿 Dynamic	
Receive Buffer Size : 2 _40	 milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) DSCP : 5 48	
Signaling (SIP) (HEX) : C0	6 7

① The screens above show when the Buffering Type (1) is set to "Static"

3 TOS Type

Set TOS Type.

(Default: TOS)

- Not Used: Does not use the TOS function.
 TOS: Outputs the VoIP packet to the TOS field (8 bit) in the IP header, in the TOS (Type Of Service) format.
- ① TOS format applies RFC1349.
 - The first 3 bits: Shows the priority. Set into "Media (RTP) Priority Level" (4) with a decimal number.
- The next 4 bits: Shows the service type.

Set into "Media (RTP) Service Type" (④) with a decimal number. The larger number, the higher priority.

• The last 1 bits: Reserved and fixed to "0."

PBX Advanced Settings > Advanced Settings

VoIP Settings

(TOS Type: Not Used)

/oIP Settings		
Buffering Type :	Static O Dynamic	
Receive Buffer Size : 2	40	 milliseconds
TOS Type :		<u> </u>
		Apply Reset

TOS Type: TOS

Buffering Type : 🕦 💿 Static 🛛 Dynamic	
Receive Buffer Size :2 40	 milliseconds
TOS Type 3 TOS	~
Media (RTP) Priority Level :	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) Priority Level : 5 6	
Signaling (SIP) Service Type : 0	
Signaling (SIP) (HEX) : C0	6 7
	Apply Rese

TOS Type: Diffserv

Buffering Type : 1 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : E0	
Signaling (SIP) DSCP : 5 48 Signaling (SIP) (HEX) : C0	
Signaling (SIP) (HEX) : C0	6 7

① The screens above show when the Buffering Type (1) is set to "Static"

3 TOS Type (Continued)

Diffserv: Outputs the VoIP packet to the TOS field (8 bit) in the IP header, in the Diffserv (Differentiated Service) format.

- ① The Diffserv format details:
 - The former 6 bits: Shows the DSCP.
 - Set "Media (RTP) DSCP" (④) with a decimal number. The larger number, the higher priority.
 - The next 2 bits: Reserved and fixed to "0."

PBX Advanced Settings > Advanced Settings

VoIP Settings

(TOS Type: Not Used)

/oIP Settings	
Buffering Type : 🌖 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 Not Used	6 7 ⊻
	Apply Reset

TOS Type: TOS

/oIP Settings	
Buffering Type : 🚺 💿 Static 🛛 Dynamic	
Receive Buffer Size 2 40	 milliseconds
TOS Type 3 TOS	~
Media (RTP) Priority Level :	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) Priority Level : 6	
Signaling (SIP) Service Type : 0	
Signaling (SIP) (HEX) : C0	6 7
_	Apply Reset

TOS Type: Diffserv

Buffering Type : 1 Static O Dynamic	
Receive Buffer Size : 2 40	✓ milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : E0	
Signaling (SIP) DSCP : 5 48	
Signaling (SIP) (HEX) : C0	6 7

① The screens above show when the Buffering Type (1) is set to "Static"

4 Media (RTP).....

Setting the Priority details for the TOS or Diffserv format options.

- **Priority Level**: Set the value of the priority level for TOS. (Default: 7) Range: 0 ~ 7 (in decimal)
- Service Type: Set the value of the service type for TOS. (Default: 0) Range: 0 ~15 (in decimal)
- DSCP: Set the value of DSCP (Differentiated Services Code Point) for Diffserv. (Default: 56) Range: 0 ~ 63 (in decimal)

PBX Advanced Settings > Advanced Settings

VoIP Settings

(TOS Type: Not Used)

/oIP Settings		
Buffering Type :	Static O Dynamic	
Receive Buffer Size	40	 milliseconds
TOS Type :		6 7 [×]
		Apply Reset

(TOS Type: TOS)

Buffering Type : 1 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 TOS	~
Media (RTP) Priority Level : 4	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) Priority Level : 6	
Signaling (SIP) Service Type : 0	
Signaling (SIP) (HEX) : C0	6 7
-	Apply Reset

TOS Type: Diffserv

Buffering Type : 🚺 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 _40	 milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : E0	
Signaling (SIP) DSCP : 5 48	
Signaling (SIP) (HEX) : C0	6 6

① The screens above show when the Buffering Type (1) is set to "Static"

Signaling (SIP)	Setting the Priority options for VoIP packets that are output to the TOS field.		
	Priority Level	: Set the value of the priority level for TOS. Range: 0 ~ 7 (in decimal) The larger number, the higher priority.	(Default: 6)
	Service Type:	Set the value of the service type for TOS. Range: 0 ~15 (in decimal)	(Default: 0)
	• DSCP:	Set the value of DSCP (Differentiated Services Code Point) for Diffserv. (Default: 48 Range: 0 ~ 63 (in decimal)	

PBX Advanced Settings > Advanced Settings

VoIP Settings

(TOS Type: Not Used)

/oIP Settings	
Buffering Type : 1 💿 Static 🔿 Dynamic	
Receive Buffer Size : 2 _40	✓ milliseconds
TOS Type : Not Used	6 7
	Apply Reset

TOS Type: TOS

VoIP Settings	
Buffering Type : 🕦 💿 Static 🛛 Dynamic	
Receive Buffer Size :2 40	 milliseconds
TOS Type 3 TOS	~
Media (RTP) Priority Level :	
Media (RTP) Service Type : 0	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) Priority Level :6	
Signaling (SIP) Service Type : 0	
Signaling (SIP) (HEX) : C0	6 7
_	Apply Reset

TOS Type: Diffserv

Buffering Type : 🕦 💿 Static 🛛 Dynamic	
Receive Buffer Size : 2 40	 milliseconds
TOS Type : 3 Diffserv	~
Media (RTP) DSCP : 4 56	
Media (RTP) (HEX) : <u>E</u> 0	
Signaling (SIP) DSCP : 5 48 Signaling (SIP) (HEX) : C0	
Signaling (SIP) (HEX) : C0	6 7

① The screens above show when the Buffering Type (1) is set to "Static"

6 <apply></apply>	 Click to apply the setting.
⑦ < Reset >	 Click to reset the setting. ① You cannot reset after clicking <apply>.</apply>

PBX Advanced Settings > Prioritization

EXT Output Port Prioritization

Set the priority of incoming calls from SIP phones or external devices.

EXT Output Port Prioritizatio	n	
From Other Ports : 1	Normal	~
From Own Input Port : 2		~
	*This setting is only valid when EXT I/O mode is set to [Separate mode].	
	Apply 3	Reset

From Other Ports	Set the priority of Incoming calls arrived at other ports than the EXT I/O(1 ~ 4) ports.(Default: Normal)• Options: Normal, Priority, or High Priority
Prom Own Input Port	Set the priority of Incoming calls from the devices those are connected to the EXT I/O (1 ~ 4) ports on this RoIP Gateway. (Default: Normal) This setting is only valid when EXT I/O mode is set to "Separate mode." • Options: Normal, Priority, or High Priority
S≤ <apply></apply>	Click to apply the entries.
<pre>4 <reset></reset></pre>	Click to reset the entries. ① You cannot reset after clicking <apply>.</apply>

PBX Advanced Settings > Prioritization

Caller Prioritization

Set the priority of incoming calls from SIP phones or external devices. When a call from the specified SIP phone has arrived while you are talking on another call, the RoIP gateway terminates the current call to catch the arrived call.

The priority of calls from other than the specified SIP phone depends on the Priority Level (5) setting.

Called via: SIP Server		
Caller Prioritization		
Index : 1	1	~
Name : 2		
	SIP Server	
Phone Number : 4)	
Priority Level : 6	Normal	7 8 Add Reset

Called via: Peer to Peer

Caller Prioritization	
Index : 1	2 ~
Name : 2	
	SIP Server
SIP URI : 6	
Priority Level : 5 N	Normal 78 Add Reset

1 Index	Select a number. • Range: 1 ~20
2 Name	Enter a caller's name of up to 31 characters.
3 Called via	 Select the line type of an incoming call. SIP Server: Through an IP line. Peer to Peer: Peer to Peer
Phone Number	Displayed when Called via (③) is set to "SIP Server." Enter a caller's Phone Number of up to 31 digits.

PBX Advanced Settings > Prioritization

Caller Prioritization

Called via: SIP Server

Caller Prioritization	
Index : 1	~
Name : 2	
Called via : 3 🖲 SIP Server 🔿 Peer to Peer	
Phone Number : 4	
Priority Level : 5 Normal	~
	Add Reset

Called via: Peer to Peer

Caller Prioritization		
Index :	2	~
Name : 2		
Called via :	SIP Server	
SIP URI : 6	sip :	
Priority Level : 5	Normal	~
		Add Reset

S Priority Level	 Set the priority of the destination. Options: Normal, Priority, or High Priority When a call from the prior IP phone has been arrived wh on another call, the current call is terminated and a Ring alert you a prior call is incoming. When a call from the same priority as the current call, the stay connected. An emergency call has priority over all other calls. 	Tone will ring to
6 SIP URI	Displayed when Called via (3) is set to "Peer to Peer Enter the caller's SIP URI of up to 63 characters.	³⁷
⑦ <add></add>	Click to add the entries.	
8 <reset></reset>	Click to reset the entries. (1) You cannot reset after clicking <apply>.</apply>	

```
PBX Advanced Settings > Prioritization
```

■ List of Caller Prioritization Entries

The list of the entries into the Caller Prioritization.

ndex Name Phone Number / SIP URI Prio	prity Level	2
1 Sales John Smith 010123456789 Norr	rmal Edit	Delete

● <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry.
Solution States Sta	Click to delete all the entries. ① You cannot restore after clicking <delete all="">.</delete>

PBX Advanced Settings > Numbering Plan

■ Phone Number Routing Settings

Set the Routing rules.

hone Nun	nber	Routing Se	ettings		
Index 1		Prefix 2	Outbound Phone Number	Outbound IP Line	6
1	~			~	Add

1 Index	Enter an index number of the Routing rule up to 400 entries.
2 Prefix	 Enter a Prefix of the phone number of up to 7 digits. The entered prefix will be deleted when the RoIP gateway dials outbound using the Outbound IP Line (④). ① You can also set the prefix of the phone number in the "External Call Routing Number" (PBX > Special Number > External Call Routing Number)
Outbound Phone Number	Enter the specified phone number of up to 15 digits. When a phone number that starts with the specified number is dialed, the RoIP gateway will call outbound using the Outbound IP Line (④).
Outbound IP Line	Select from the phone numbers that are entered in the "IP Line" screen.
5 <add></add>	Click to add the entry.

```
PBX Advanced Settings > Numbering Plan
```

■ List of Phone Number Routing Settings

Displays the list of entries into the Phone Number Routing Settings.

t of Pho	ne Number R	outing Settings		
Index	Prefix	Outbound Phone Number	Outbound IP Line	1 2
1		800	1234567890	Edit Delete
				3 Delete

❶ <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry.
3 <delete all=""></delete>	Click to delete all the entries. ① You cannot restore after clicking <delete all="">.</delete>

```
PBX Advanced Settings > Numbering Plan
```

Exception Outbound Phone Number

Enter external phone numbers to exclude from applying Outbound Call Restriction Rule or Phone Number Reformatting rule.

Exception Outbound Phone Number	
Outbound Phone Numbers the ①	Apply
	2 3

1 Outbound Phone Numbers the following

rules are not applied	Enter up to 5 special numbers. When an external phone number, that starts with either of these numbers, is dialed, the digits of the special number are excluded from applying the Outbound Call Restriction Rule or Phone Number Reformatting rule.
2 <apply></apply>	Click to apply the entries.
Seset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

PBX Advanced Settings > Numbering Plan

Outbound Phone Number Reformatting Settings

Enter external phone numbers that apply or do not apply the phone number reformatting rules. The Reformatting rules are applied only for outbound calls.

			Reformatting Setti	4	6			
Index	0	Reformat 2	Outbound Phone Number	Delete Digits	5 Added Number	6		
	~	Apply 🗸		Don't delete 🗸		Add		
			Range: Set whet is dialed. Apply: Excepti	her or not to Reformat on :Does not	reformat th s the number reformat the	e dialed n according number.	to the rule.	
3 Outboun	d Pho	one Numbe	r Enter the When an	• •	of a outboun	id phone r er that sta	number of arts with th	up to 15 digits. e specified number
Delete D	gits		beginning	umber of dig g of the diale Don't delete,	ed number.	ant to dele		ed digits at the efault: Don't delete)
Added N	umbe	r		umber that to f up to 15 d	•	add at the	e beginnin	g of the dialed (Default: Blank)
<add></add>			Click to a	dd the entri	es.			

Number Reformatting	g examples:		
O Example 1		O Example 2	
Outbound Phone Nu	mber (3): 987	 Outbound Phone Nur 	nber (3): 0006
• Delete Digits (4) :	Don't delete	 Delete Digits (4) : 	3
Added Number (5) :	800	Added Number (5):	800987
Dialed number:	98765432	Dialed number:	00065432
Reformatted to:	80098765432	Reformatted to:	80098765432

```
PBX Advanced Settings > Numbering Plan
```

■ List of Outbound Phone Number Reformatting Settings

The list of entered rules into Outbound Phone Number Reformatting Settings.

ndex	Reformat	Outbound Phone Number	Delete Digits	Added Number	0	2
1	Apply	987	Don't delete	800	Edit	Delete
2	Exception	0800			Edit	Delete
3	Apply	080	3	090	Edit	Delete
4	Apply	0006	3	800987	Edit	Delete

❶ <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry.
3 <delete all=""></delete>	Click to delete all the entries. ① You cannot restore after clicking <delete all="">.</delete>

PBX Advanced Settings > Numbering Plan

Outbound Call Restriction Rule Settings

Enter destination phone numbers to restrict or to apply to call.

tbound Call Restriction	Rule Settings	_
Rule Index :	Add	
Restricted Phone Numbers :	2 Starting with	
	010	_
		-
		-
		_
Exceptions to the Restricted Phone Numbers :	Starting with	
Numbers :	011	-
		-
		-
		=
		-

 Rule Index You can set restriction rules to each Extension Group (PBX > Extension Group.) Select a group to apply the restriction rules. (Default: Common) · Common: Applies all the groups. • 1 ~ 16: Applies individual groups. Click <Add> to add the entered rule to the List of Extension Group Entries. 2 Restricted Phone Numbers Enter external phone numbers of up to 15 digits to restrict to outbound calls when the dialed number matches them. (Default: Blank) You can enter up to 20 numbers to each Rule Index (1). Exceptions to the **Restricted Phone Numbers** Enter external phone numbers of up to 15 digits to apply to outbound (Default: Blank) calls when the dialed number matches them. You can enter up to 20 numbers to each Rule Index (1).

```
PBX Advanced Settings > Numbering Plan
```

■ List of Outbound Call Restriction Rule Settings

The list of entered rules into Outbound Call Restriction Rule Settings.

	Outbound Phone Number		
	Restricted	Exception	1 2
Common	0	01	Edit Delete
	123 550		Edit Delete

● <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry.
3 <delete all=""></delete>	Click to delete all the entries. ① You cannot restore after clicking <delete all="">.</delete>

Outside Line Regulation screen

PBX Advanced Settings > Outside Line Regulation

■ Outside Line Regulation

Set the External line. The outbound call management rules can be applied to this setting.

Outside Line Phone Number	Line	Call Restriction 1		Number Reforma	atting 2
00	IP Line	Disable	~	Disable	~

Call Restriction	Restricts outbound calls for the selected phone line (number). (Default: Disable)		
	 Disable: Call Restriction Rule 1 ~ 16 	Does not restrict outbound calls. Restricts outbound calls according to the selected rule that is set in "Outbound Call Restriction Rule Settings" in addition to the "Call Restriction" setting in the "Telephone Common Settings".	
	External Call Restriction:	Restricts outbound calls, excluding Peer to Peer calls.	
2 Number Reformatting	rules set in "Outbound Phon	umbers are reformatted, according to the le Number Reformatting Settings." (PBX ering Plan > List of Outbound Phone	
③ ≺Apply>	Click to apply the entries.		
4 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking	ng <apply>.</apply>	

External Call Limiting screen

PBX Advanced Settings > External Call Limiting

Overall Limitation

Set the limit number of the usable outside lines (phone numbers) simultaneously, according to the whole lines connected to the RoIP gateway.

Overall Limitation			
Maximum Number of Simultaneous	50	~	
Maximum Number of Simultaneous calls on the Priority Outside Lines :	0	~	
Simultaneous Ringing Restriction : 3	🔿 Disable 💿 Enable		

1 Maximum Number of Simultaneous calls

on the whole Outside Lines

Set the maximum number of external lines that can simultaneously make. If more calls are inbound or outbound than the value of this setting, they will be busy. (Default: 50) • Range: 1 ~ 50

2 Maximum Number of Simultaneous calls

on the Priority Outside Lines Set the maximum number of lines to reserved for priority calls.

(Default: 0)

- Range: 0 ~ 50
- ① The number of Normal Outside Lines (non-priority lines) is the value obtained by subtracting the number of Priority Outside Line from the total number of external lines.

3 Simultaneous Ringing

Restriction	Leave as default for the normal use.	e.		
	You can temporarily restrict incoming calls when there	e is a		
	concentration of incoming calls.	(Default: Enable)		

External Call Limiting screen

PBX Advanced Settings > External Call Limiting

■ Limitation for each Outside Line

Set the limitation and prioritization settings for each outside line (phone number).

nitation for each Out	tside Line		
Outside Line Phone Number	Line 2	Multiple Call Limitation 3	Prioritization 4
100	IP Line	No limit 🗸	Normal Outside Line 🗸
			5 6 Apply Res

 Outside Line Phone Number 	Displays the phone numbers in "List of SIP Server Entries."
2 Line	Displays the type of phone line.
3 Multiple Call Limitation	Sets the maximum number of calls you can simultaneously make on the phone line. (Default: No limit) • Range: No limit, or 1 ~ 50
4 Prioritization	 Select the Prioritization of the line. Priority Outside Line means reserved for priority calls. (Default: Normal Outside Line) The number of Normal Outside Lines (non-priority lines) is the value obtained by subtracting the number of Priority Outside Line from the total number of external phone lines.
5 <apply></apply>	Click to apply the entries.
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

IP Authenticated Extension screen

PBX Advanced Settings > IP Authenticated Extension

■ IP Authenticated Extension (Pre-registered Extension)

Setting for the gateway connection of the RoIP gateway.

① This settings are for only the special system environment. Leave as default for the normal use.

Extension Number : 0	33(Sales 03)	~
Activation Status : 2	Inactive	~
Accept Multiple SIP Clients : 3		~
SIP Client Identifier : 4		~
Use Domain to Call the SIP Client : 5	OFF	~
SIP Client Authenticated IP Address : 6		
SIP Domain : 7		

Extension Number	Select an Extension number to use the gateway connection.		
2 Activation Status	Enables the Gateway Connection function of the RoIP gateway. If enabled, an extension can communicate without registering to the RoIP gateway under the special condition. (Default: Inactive)		
Output State St	Enables to use the multiple gateway connections.	(Default: Disable)	
4 SIP Client Identifier	Select how to identify the SIP Client. Options: SIP URI or Display Name 	(Default: SIP URI)	
5 Use Domain to Call the SIP Client	Set whether or not to use a specified domain to make a call through the gateway connection. (Default: OFF) When using the IP address of this RoIP gateway, set this item to "OFF."		
6 SIP Client Authenticated IP Address	Enter the IP address of the target device when you u connections.	ise the gateway	
7 SIP Domain	Enter the domain name of up to 63 characters or the the target device, that are used to authenticate the c gateway connection.		
8 <apply></apply>	Click to apply the entries.		
<pre> 9<reset> </reset></pre>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>		

IP Authenticated Extension screen

PBX Advanced Settings > IP Authenticated Extension

List of IP Authenticated Extension

The list of entered IP Authenticated Extension.

t of IP Authenticated Extension					
Index	Name	Extension Number	IP Authenticated Extension	SIP Client Authenticated IP Address	SIP Domain
1	Sales 01	31	Enable	102 102 1	-
2	Sales 02	32	Enable	100 100 0	-
3	Sales 03	33	Disable		
4	Sales 04	34	Disable		

• Select an Extension Number in the "IP Authenticated Extension (Pre-registered Extension)" to edit the entry.

Caller Number Reformatting screen

PBX Advanced Settings > Caller Number Reformatting

■ Source Line Settings

Set the rules to reformatting Caller IDs of incoming call.

	Reformatting 1	Phone Number	Line
~	Disabled	100	IP Line
~	Disabled	VEPG4	Peer to Peer
~	Disabled	-	Extension
26			
		-	Extension

Reformatting	Set whether or not to reformat for each Caller Number. (Default: Disabled) The "Extension" rule is applied for incoming call from extensions that are registered to the same SIP server (VE-PG4).		
2 <apply></apply>	Click to apply the entries.		
③ <reset></reset>	Click to reset the settings. You cannot reset after clicking <apply>.</apply>		

Caller Number Reformatting screen

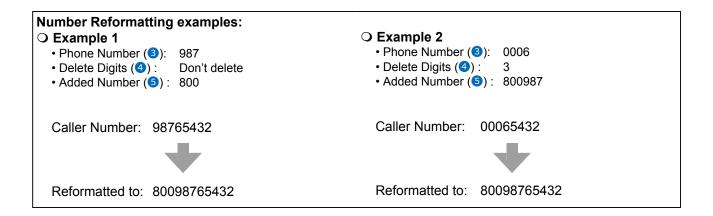
PBX Advanced Settings > Caller Number Reformatting

Caller Number Reformatting Settings

Set the Caller IDs that are applied the reformatting rules.

Index 1		Reformat 2		Phone Number 3	Delete Digits	Added Number 5	
		Reiomat		Filone Number		Added Number	6
5	~	Apply	~		Don't delete 🗸		Add

1 Index	Enter the order for the Caller Number Reformatting operation. • Range: 1 ~ 100	
Reformat	 Set the whether or not to reformat the Caller Number if number is received. Apply: Reformats the number according to the rule. Exception: Does not reformat the number. The "Exception" rules are prior to the "Apply" rules. 	a matched (Default: Apply)
3 Phone Number	Enter the number of up to 15 digits. When the entered number matches at the beginning of Number, the reformatting rule is applied.	(Default: Blank) the Caller
Delete Digits	Enter a number of digits if you want to delete specified beginning of the Caller Number. (Defa • Range: Don't delete, or 1 ~ 15	digits at the ault: Don't delete)
5 Added Number	Enter a number if you want to add up to 15 digits to the Caller Number.	beginning of the (Default: Blank)
6 <add></add>	Click to add the entries.	



Caller Number Reformatting screen

PBX Advanced Settings > Caller Number Reformatting

■ List of Caller Number Reformatting Settings

The list of entered Caller Number Reformatting Settings.

ndex	Reformat	Phone Number	Delete Digits	Added Number	1 2
1	Apply	987	Don't delete	800	Edit Delete
2	Exception	0800			Edit Delete
3	Apply	080	3	090	Edit Delete
4	Apply	4567	4	1234	Edit Delete

● <edit></edit>	Click to edit an entry.
2 <delete></delete>	Click to delete an entry.
Solution 3 ≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤	Click to delete all the entries. ① You cannot restore after clicking <delete all="">.</delete>

DID screen

PBX Advanced Settings > DID

DID Allocation

DID Allocation		
100(IP)	Don't Select	~
		Apply Reset

DID Allocation

Set the DID you use for External lines.

(Default: Don't Select)

- Range: Don't Select or DID 1 ~ 10
- When selecting a DID, the IP line number (phone number) that is entered in the SIP Server Entries is displayed.
- ① When selecting a DID, the "Connect to" is set to the selected DID.

DID screen

```
PBX Advanced Settings > DID
```

DID Settings

Sets the details when using the DID (Direct Inward Dialing) function.

DID Settings	
Index : 1 DID 1	~
Response Time : 2_4	✓ seconds
Dial Tone : 3 Type 1	~
DID Timeout Action : ④ ◯ Clear Down	
Default Call Destination Number : 5	
Timer : 6 10	seconds
	Apply Reset

① The above screen shows when Action (④) is set to "Call Default Destination."

1 Index	Select a DID that you wa	nt to edit its settings.	(Default: DID 1)
Response Time	Set the delay time to sour arrived. • Range: 0 ~ 10 (seconds)	nd a Dial Tone (3) since an int	oound call has (Default: 4)
3 Dial Tone	Selects the tone pattern • Options: Type 1 ~ 3	that sounds on an IP phone. (Default: Type 1)
Action	period of time (ⓒ) has pa • Clear Down:	of the RoIP gateway when the assed without receiving any DT (Defai Cancels the call without calling the transceiver. Makes a call to the Default Call Do Number (⑤).	MF signal. ult: Clear Down) e client
Default Call Destination Number	Displayed only when Act the Destination phone nu	ion (④) is set to "Call Default D imber.	estination." Set
6 Timer			(Default: 10) ^r k.
♂ <apply></apply>	Click to apply the entries		
8 <reset></reset>	Click to reset the settings (i) You cannot reset after cli		

About the DID operation

After the set period of time in Timer (6) has passed without any operation since starting the Dial Tone, the DID starts the Action (4).

 \textcircled You can immediately dial by pushing "#" without waiting for 5 seconds of digit interval timer.

When dialing an incomplete phone number that does not include a DID number, the call will be canceled after the Busy Tone sounds.

DID screen

PBX Advanced Settings > DID

■ List of DID settings

Displays the DID list.

Index	Response Time Dial Tone		DID Timeout		
			Action	Default Call Destination Number	Timer
DID 1	4	Type 1	Call Default Destination	3000*101	10
DID 2	4	Type 1	Clear Down	-	10
DID 3	4	Type 1	Clear Down	-	10
DID 4	4	Type 1	Clear Down	-	10
DID 5	4	Type 1	Clear Down	-	10
DID 6	4	Type 1	Clear Down	-	10
DID 7	4	Type 1	Clear Down	-	10
DID 8	4	Type 1	Clear Down	-	10
DID 9	4	Type 1	Clear Down	-	10
DID 10	4	Type 1	Clear Down	-	10

① When a DID is set, the IP line setting in Inbound Call is changed to DID. (PBX > Inbound Call)

Phone Number	Line	Connect to		Ringtone	Queuing	
100	IP Line	DID 1	~	Outside Tone A 🗸	OFF	~
VEPG4	Peer to Peer	None	~	Inside Tone A 🗸 🗸	OFF	~

MANAGEMENT

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Administrator screen

Management > Administrator

Administrator Password

Set a password for accessing the setting screen.

Username : 🚺 admin	
Current Password : 2	۲
New Password : 3	٠
New Password (Confirm) : 4	۲

1 Username	Displays the administrator login ID ("admin"). ① You cannot change the Username.
2 Current Password	 Enter the current password, when you change it. (Default: admin) The entered characters are displayed as an * (asterisk) or a • (dot). You can check the entered characters by clicking the eye icon to the right.
③ New Password	 Enter a new password of up to 31 characters. The entered characters are displayed as an * (asterisk) or a • (dot). You can check the entered characters by clicking the eye icon to the right.
4 New Password (Confirm)	Enter the new password again.
S <apply></apply>	Click to apply the entries.
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

CAUTION: If you have forgotten the password, you cannot access the RoIP Gateway's setting screen. In this case, you have to initialize the RoIP Gateway. See the Section 5 of the Installation guide for details.

To prevent unauthorized access

You must be careful when choosing your password.

- Choose one that is not easy to guess.
- Use numbers, characters, and letters (both upper and lower case).

Management Tools screen

Management > Management Tools

∎ USB

Settings for USB flash drives that will be connected to the USB ports.

	USB	
	USB Flash Drive 👤 🔿 I	Disable Enable
	USB Access Permission 2 🗹 F	Firmware Update
	S 2 2	Settings Backup/Restore
	USB Authentication Key 3	•
	Write USB Authentication Key 4	ite
1 L	ISB Flash Drive	Select "Enable" to use a USB flash drive. (Default: Enable) () If you use the Automatic firmware update function, or Automatic Setting Load function, select "Enable."
21	ISB Access Permission …	 Select the USB flash drive access option. (Default: Firmware Update ✓ Settings Backup/Restore) Firmware Update (p.15-22) Settings Backup/Restore (p.15-19)
3 L	ISB Authentication Key	Enter a USB Authentication Key of up to 64 characters to import to and export from the USB flash drive.
		 This Key can restrict access to the Firmware Update function and Settings Backup/Restore function. After entering the characters, click <apply> in the Management Tools.</apply> If you set the USB Authentication Key, the RoIP Gateway can verify the USB authentication key written in the USB flash drive.

15 MANAGEMENT

Management Tools screen

Management > Management Tools

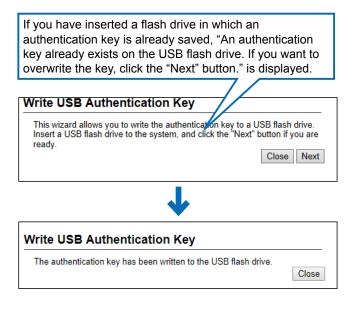
USB

USB		
USB Flash Drive 👤	O Disable Enable	
USB Access Permission 2	🗹 Firmware Update	
	Settings Backup/Restore	
USB Authentication Key 3		۲
Write USB Authentication Key 4	Write	

4Write USB Authentication Key

Click to write the USB Authentication Key to the USB flash drive that is inserted in the [USB] port.

Click <Write>, then continue as shown below.



When the "The USB Authentication Key has been changed. Write the key after saving it by pushing the Apply button." window is displayed, click <OK> and then click <Apply> in the Management Tools screen.

	×	
This site says		
The USB authentication key has Write the key after saving it wit	-	
	ОК	

15 MANAGEMENT

Management Tools screen

Management > Management Tools

HTTP/HTTPS

HTTP and HTTPS are the protocols to access from a web browser.

① When you set HTTP settings and HTTPS settings to "Enable," you can not access the setting screen using a browser.

HTTP/HTTPS		
HT	HTTP : O Disable	Enable
	HTTPS : 3 Disable PS Port : 4 443	⊖ Enable

1 HTTP	Select whether to allow access using the HTTP proto	ocol.
		(Default: Enable)
2 HTTP Port	Enter the HTTP Port number • Range: 80, or 1024 ~ 65535. • Some of the RoIP Gateway's ports cannot access HTTP. ① Enter a different port number from HTTPS, Telnet or SS	
3 HTTPS	 Select whether to allow access using the HTTPS pro HTTPS access is more secure than Telnet or HTTP acc 	(Default: Disable)
	passwords and data are encrypted.	
HTTPS Port	 Enter the HTTPS Port number. Range: 443, or 1024 ~ 65535. Some the RoIP Gateway's ports cannot access HTTPS. ① Enter a port number different from HTTP, Telnet or SSH 	(Default: 443)

Management Tools screen

Management > Management Tools

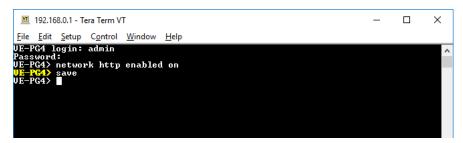
If you cannot access the setting screen

Access Telnet or SSH (Example:192.168.0.1).

- See the INSTALLATION GUIDE Section 6 for details.
- Set to default, the RoIP Gateway can not be accessed from a Telnet client because the Telnet setting is set to "Disable." (Management > Management Tools > Telnet/SSH > Telnet) (See page 15-7.)

After entering "VE-PG4>," enter the letters written in bold as follows, and then press [Enter].

- 1. Enter "network http enabled on," and then press [Enter].
- 2. Enter "save," and then press [Enter].
- The setting is applied.
- 3. Check if you can access the setting screen.



Management Tools screen

Management > Management Tools

■ Telnet/SSH

Set for accessing the RoIP Gateway using Telnet or SSH.

Telnet/SSH		
Telnet 1 Telnet Port 2	Disable O Enable 23	
SSH 3	O Disable	
SSH Authentication Method 4 SSH Port 5		~
SSH Public Key 6		
		/i

1 Telnet	Select whether or Telnet.	not to allow access to the RoIP Gat	eway using (Default: Disable)
2 Telnet Port	Some the RoIP G	Port number. ween 1024 and 65535. ateway's ports cannot access Telnet. port number different than HTTP, HTTPS	(Default: 23) S, or SSH.
3 SSH	By using SSH, ye program.	allow to access by the SSH protoco ou can encrypt the contents to be set us ports only the SSH protocol Version 2. client to use SSH.	. ,
4 SSH Authentication Method		uthentication Method to access the I I Settings to "Enable." ([Authenticating with the password. Authenticating with the Public Key. Automatically authenticating with the pa Public Key.	Default: Automatic)
5 SSH Port	 Some of the RoIP 	rt number. ween 1024 and 65535. Gateway's ports cannot access SSH. ber that is different from HTTP, Telnet, o	(Default: 22) or HTTPS.
6 SSH Public Key	Set the Public Key for accessing. ① Displayed only when the SSH setting is set to "Enable" and SSH Authentication Method is set to "Public" or "Automatic."		

Management Tools screen

Management > Management Tools

Unit ID Confirmation

You can know which VE-PG4 is the current RoIP Gateway by the blinking lights on it.

Unit ID Confirmation		
Check Status 1 S Confirmation State 2	Stop Start	Apply Reset
Check Status	Display the sta	5 1 1
	• Stop:	Does not check.
Confirmation State	 [PWR] blinks While checkin This function a 	to start checking. red. Ig, the <start> button changes to the <stop> button. automatically stops in 2 minutes, but you can also manually stop clicking <stop>.</stop></stop></start>
S≤Apply>	Click to apply	the entries set on the Management Tool screen.
	"Management	the settings, when you change the settings on the Tools" screen. eset after clicking <apply>.</apply>

Date and Time screen

Management > Date and Time

Date and Time

You can set the RoIP Gateway internal clock time. (See Section 3 for details.)

Date and Time	
Current Time Manually Set Time	
Ourrent Time	Displays the current time.
2 Manually Set Time	Displays the time when you opened this screen. ① Refresh the browser screen to refresh the time.
3 <set></set>	Click to set the internal clock to the time displayed in the "Manually Set Time"(2). ① Before clicking <set>, refresh the browser screen.</set>

15 MANAGEMENT

Date and Time screen

Management > Date and Time

■ Time Zone

Select the appropriate Time Zone.

Time Zone :	1 UTC	~
Use Daylight Savings Time :	2 🔿 Disable 💿 Enable	
Time Zone	Select the appropriate Time Zone.	(Default: UTC)
Use Daylight Savings Time	Select "Disable" if not necessary.	(Default: Enable)
	① If "Enable" is selected, the RolP Gateway autor according to your time zone.	5
	 If Daylight Savings Time is not used in your are 	ea, set to "Disable."

Date and Time screen

```
Management > Date and Time
```

■ NTP

The Automatic Clock Synchronize function automatically synchronizes the internal clock with the time server (NTP).

① To use this function, an Internet connection and default gateway settings are necessary.

NTP	
	Disable NTP LTE
NTP Server 1 : 2	210.173.160.27
NTP Server 2 : 3	210.173.160.57
Status : 4	Not synchronized

1 NTP Client	Select whether or not to use the Automatic Clock Synchronize function. (Default: Disable)
	 Disable: Not used. NTP: Set to the internal clock automatically by accessing the NTP. LTE: Set to the internal clock automatically by accessing the LTE Module.
2 NTP Server 1	Enter the time management server's IP address. (Default: 210.173.160.27)
	If the RoIP Gateway cannot access this address, the address set in the [NTP Server 2] (3) item is used.
3 NTP Server 2	Enter the second time management server's IP address. (Default: 210.173.160.57)
4 Status	Displays the status whether or not to synchronize with the NTP Server or the transceiver module.

CAUTION: When you select NTP Client as NTP, you must set the Interface for the NTP server. (Network Settings > IP Address > IP Address > Default Gateway) (Network Settings > Static Routing > Static Routing)

TIP: The Automatic Clock Synchronize function

When you connect to the SIM card,

• Set the Automatic Clock Synchronize function to LTE, to synchronize the current time to the transceiver module.

Set the Automatic Clock Synchronize function to NTP, to synchronize the current time to the NTP server.
After inserting the SIM card, the RoIP Gateway is automatically set to the Automatic Clock Synchronize

function.

Date and Time screen

Management > Date and Time

SNTP Server

The SNTP server is for other RoIP devices that have no route to an external Time server (NTP). ① To use this function, an Internet connection and default gateway settings are necessary.

SNTP Server	
	Disable Enable The SNTP server is for our RoIP devices which have no route to an external NTP server. Apply Reset 3
SNTP Server	 Select "Enable" to use the SNTP function. (Default: Enable) When you select 'Enable', the RoIP devices function as an NTP server and set the internal clock time of the RoIP Gateway. This function can be used only for Icom RoIP devices, which cannot set the route to the external NTP server. Set the Date and Time screen before using this function.
2 <apply></apply>	Click to apply the entries set on Time Zone, NTP, and SNTP Server.
3 <reset></reset>	Click to reset the settings when you change the settings on Time Zone, NTP, and SNTP Server. ① You cannot reset after clicking <apply>.</apply>

SYSLOG screen

Management > SYSLOG

SYSLOG

Select the information to be saved to the SYSLOG host.

SYSLOG		
DEBUG 🚺 🖲 Disa	able 🔿 Enable	
INFO 2 🔿 Disa	able 🔘 Enable	
NOTICE 3 O Disa	able 🖲 Enable	
Host IP Address .4		Apply Reset

1 DEBUG	Select "Enable" to display the debug information in Host IP Address (④). (Default: Disable)
2 INFO	Select "Enable" to display the INFO messages in Host IP Address (④). (Default: Enable)
	Select "Enable" to display the NOTICE messages in Host IP Address (④). (Default: Enable)
Host IP Address	Enter the SYSLOG host's address. ① The host device must have the SYSLOG server function.
5 <apply></apply>	Click to apply the entries.
6 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

SNMP screen

Management > SNMP

■ SNMP

Configure the SNMP function, that is information on the RoIP Gateway for being collected by each host in the IP network for their network management.

SNMP				
Syst	SNMP 0 Disal Name (GET) 2 public em Location 3 tem Contact 4	ible Enable	5 6 Apply Reset	-
OSNMP		t "Enable" to manage the se gement tool.	•	SNMP Default: Enable)
Community Name (GET)		the Community name to get aracters)	t the SNMP community	y string. (Up to (Default: public)
3 System Location	Location Enter the SNMP system location. (Up to 127 characters))
System Contact	Enter	the SNMP system contact.	(Up to 127 characters)	
S <apply></apply>	Click	to apply the entries.		
6 <reset></reset>		to reset the settings. J cannot reset after clicking <ap< td=""><td>oply>.</td><td></td></ap<>	oply>.	

Network Test screen

Management > Network Test

Ping Test

Verifies that a particular IP address exists and can accept requests.

Ping Test		
Host :	0	
Number of times :	2 4	~
Packet Size :		✓ bytes
Timeout :		✓ milliseconds
		Ping 5

1 Host	Enter the IP address or Domain Name of up to 64 characters to send the Ping packets to.		
2 Number of Times	Select the number of times to send. • Options: 1, 2, 4, 8	(Default: 4)	
3 Packet Size	Select the size of the packet's data. (Default: 6 • Options: 32, 64, 128, 256, 512, 1024, 1448, 1500, 2048 (bytes)		
4 Timeout	Select the Ping response time. (Default: 1000) Note: If there is no response within the selected time, a time out error is returned. • Options: 500, 1000, 5000 (milliseconds)		
s <ping></ping>	Click to run the Ping test. ① The test result is displayed as shown below. Ping Result		
	<pre>PING 192.168.100.1 (192.168.100.1) 56(84) bytes of data. 64 bytes from 192.168.100.1: icmp_req=1 ttl=59 time=9.82 ms 64 bytes from 192.168.100.1: icmp_req=2 ttl=59 time=7.00 ms 64 bytes from 192.168.100.1: icmp_req=2 ttl=59 time=5.09 ms 64 bytes from 192.168.100.1: icmp_req=4 ttl=59 time=6.62 ms 192.168.100.1 ping statistics 4 packets transmitted, 4 received, 0% packet loss, time 3010ms rtt min/avg/max/mdev = 5.909/7.342/9.824/1.486 ms</pre>		

① Click <Save> to save the result to a PC as a text file (extension: "txt").

Save Back

Note: The file is saved as "ping_host's address.txt."

① Click <Back> to return to the Ping Test screen.

Network Test screen

Management > Network Test

Traceroute Test

Executes a traceroute test against a particular node.

aceroute Test	
Node : 1	
Maximum Hop Count : 2 16	~
Timeout : 3 3	✓ seconds
DNS Lookup : 4 O Disable 🔘 Enable	5
	Traceroute

1 Node	Enter the node's (device's) IP address or Domain Name of up to 64 characters.		
2 Maximum Hop Count	Select the maximum hop number. • Options: 4, 8, 16, 32	(Default: 16)	
3 Timeout	Select the response time. Note: If there is no response within the selected time, a tir returned. • Options: 1, 3, 5 (seconds)	(Default: 3) ne out error is	
④ DNS Lookup	Select "Enable" to convert the node's (device's) IP address into the host name. (DNS name resolution) (Default: Enable)		
5 <traceroute></traceroute>	Click to run the traceroute test.		
	The test result is displayed as shown below.		
	Traceroute Result traceroute to 192.168.100.1 (192.168.100.1), 16 hops max, 38 byte packets 1 1.885 ms 2.101 ms 2.248 ms 2 20.590 ms 32.736 ms 5.745 ms 3 192.168.54.1 17.774 ms 4.630 ms 4.497 ms 4 192.168.53.4 5.841 ms 4.537 ms 7.152 ms 5 192.168.100.3 10.4446 ms 8.165 ms 8.240 ms 6 192.168.100.1 10.473 ms 8.243 ms 8.037 ms		
		Save Back	

- Click to save the result to a PC as a text file (extension: "txt").
- The file is saved as "tracert_node's address.txt."
- Click <Back> to return to the Traceroute Test screen.

Management LTE Module screen

Management > Management LTE Module

Management LTE Network

The settings and status for connecting to a LTE network.

Management LTE Network			
Network Selection : Network Search : Network Operator : RSSI Level :	Search		
Network Selection	Set to automatica or enable the Use • Auto:	ally select the LTE Network, select the last accessed, er to select. (Default: Auto) Automatically selects the network that the LTE module can connect to. LTE is selected prior to 3G if both of them are usable.	
	Last accessed:	 When turning on the RoIP Gateway, the same connection way as before is attempted. If the previous LTE Network Operator (PLMN) is not saved, 'Auto' is selected, and saves the LTE Network Operator (PLMN) when the network is able to connect. The RoIP Gateway works as the same way as the "Auto" setting, if it could not connect to the last accessed LTE Network Operator (PLMN.) 	
	• User select:	You can select the network from LTE or 3G after searching. If the selected network cannot be found, the RoIP Gateway cannot connect to the network.	
2 Network Search	Click <search>, a of the LTE Netwo connect to.</search>	er select," the Network Search setting is displayed. and <ok> on the displayed dialog, to display the list ork Operators (PLMN) that this RoIP Gateway can ke a few minutes or more.</ok>	
3 Network Operator	Displays the con	nected LTE Network Operator (PLMN).	
BRSSI Level	Displays the RSS	SI (Received Signal Strength Indicator) level (dBm).	
5 <apply></apply>	Click to apply the	entries.	
o⊂Reset>	Click to reset the (i) You cannot rese	settings. et after clicking <apply>.</apply>	

Reboot screen

Management > Reboot

Reboot

Click <Reboot> to reboot the RoIP Gateway.

Reboot Now : Reboot

Settings Backup/Restore screen

Management > Settings Backup/Restore

Settings Backup

Save the RoIP Gateway's settings to a PC as a backup.

Settings Backup	
Save to Fi	le : Backup
Save to File	Click <backup> to save the settings to a PC as a backup fi</backup>

Click <Backup> to save the settings to a PC as a backup file (Extension: sav). See the topic below to load the saved file into the RoIP Gateway.

Management > Settings Backup/Restore

Settings Restore

Load the setting file (Extension: "sav") into the RoIP Gateway. ① Loading takes a few minutes.

Settings Restore	
	Choose File No file chosen
Load Settings File	Click <choose file=""> to select the setting file.</choose>
2 Restore	Click <restore> to load the setting into the RoIP Gateway. ① The RoIP Gateway's settings are overwritten.</restore>

① After loading, the RoIP Gateway automatically reboots.

CAUTION: Do not modify the settings other than the VE-PG4.

Settings Backup/Restore screen

Management > Settings Backup/Restore screen

List of Settings

Click <Show> to display the changed settings, and click <Hide> to hide them. Note: The list is cleared when the RoIP Gateway is initialized.

List of Settings Hide	
brg_bridge port mode 1 radio	
brg_bridge port rtp_release_time 1 2000	
digital port hc_time 1 90	
digital port hc_time 2 90	
digital port proto 1 2	
digital port proto 2 2	
ext port extvox_delay 1 5	
ext port in_timing 1 sw	
ext port out_voice_delay 1 0	
ext port pw_detect 1 on	
ext port pw_detect 2 on	
ext port radio_model 1 icsat100	
ext port radio_model 2 icf5060_f6060sql	
ext port radio_receive_mode 1 pccmd	
ext port rxgain_offset 1 12	
ext port rxgain_offset 2 -2	
ext port serial_level 1 lg_3v	
ext port sql_detlogic 2 negative	
ext port txgain_offset 1 -3	
ext port txgain_offset 2 15	
ext port vcom baudrate 1 19200	
ext port vcom enabled 1 on	
ext port vcom pccmd enabled 1 on	
ext port vcom pccmd mode 1 sat	
ext port vcom simple_mode 1 on	
ipradio call_tbl call_id 1 1	-

(This is only an example.)

Factory Defaults screen

Management > Factory Defaults

Factory Defaults

You can reload the RoIP Gateway settings to the factory defaults. ① If you forget the IP address and the Administrator's password, see Section 5 in the Installation guide.

Factory Defaults		
All Settings : 1 C Restore all settings to factory defaults. V/RoIP Settings : 2 Restore to factory defaults without [Network Settings], [Router Settings], [Management]. Restore		
All Settings	 Select to return all settings to the factory defaults. ① After the RoIP Gateway is initialized, the IP address is returned to the default (192.168.0.1). ① If the network part of the PC IP address is different from that of the RoIP Gateway, you cannot access the RoIP Gateway setting screen. In such case, change the PC IP address according to your network environment. 	
V/RoIP Settings	Select to return the settings to the factory defaults except for the Network Settings, the Router Settings, and the Management Settings.	
Restore	Click to restore the settings.	

Management > Firmware Update

NOTE:

- NEVER turn OFF the power until the update has been completed. Otherwise, the RoIP Gateway may be damaged.
- While updating, all connections are temporarily disabled.
- ① Ask your dealer for updated function or specification details.

■ Firmware Status

Displays the firmware version.

Firmware Status				
	Version :	VE-PG4 Ver.	Copyright	Icom Inc.

Management > Firmware Update

Online Update

Downloads the firmware through the Internet, and automatically updates it.

NOTE: To use this function, an Internet connection, or LTE(4G/3G) is required.

Online Update		
Check for Updates :	Check	

Check for Updates

Click <Check> to access the update management server. When the RoIP Gateway has successfully accessed the server, the latest firmware version is displayed, as shown below.

Online Firmware Update			
mware Informati	lon		
Status	Succeeded in gathering information.		
Version			

About the firmware information:

- When there is a new firmware update available, the <Update Firmware> button is displayed.
- When there is no firmware update, "Firmware already up-to-date" is displayed.
- When an error message is displayed, check the network connection so that you can access the update management server, as follows:

When a SIM card is installed:

• Confirm that the antennas are attached properly to the [ANT1] and [ANT2] connectors.

When a SIM card is not installed:

- Confirm that the default gateway and DNS server address are properly set to the RoIP Gateway. (Network Settings > IP Address)
- Ask your network administrator if a web transmission from the RoIP Gateway is blocked.

Management > Firmware Update

Automatic Update

The firmware can be automatically downloaded and updated. ① When a SIM card is inserted, the Automatic Update Setting is not displayed.

Automatic Update	
Automatic Update : 1 〇	Disable Enable
Automatic Update	Select "Enable" to use the Automatic Update function. (Default: Enable) ① Select "Disable" if you do not want to automatically update the firmware.
2 <apply></apply>	Click to apply the entries.
3 <reset></reset>	Click to reset the settings. ① You cannot reset after clicking <apply>.</apply>

Manual Update

The firmware can be updated using the saved firmware.

Manual Update	
Select the update file 1 Choose File No file chosen	-
Firmware Update 2 Update	

Select the update file	Click <choose file=""> to select the firmware file (extension: "dat"). ① The selected file appears in the "Update Firmware using File" item.</choose>
Pirmware Update	Click <update> to update the firmware. Note: After updating, the RoIP Gateway automatically reboots.</update>

15 MANAGEMENT

Firmware Update screen

Management > Transceiver Firmware Update

NOTE:

- NEVER turn OFF the power until the update has been completed. Otherwise, the RoIP Gateway and the transceivers may be damaged.
- While updating, all connections are temporarily disabled.
- ① Ask your dealer for updated function or specification details.

■ Transceiver Firmware Status

Displays the built-in firmware for the WLAN transceiver. The model name and the version of the firmware are listed.

Transceiver Firmware Status				
	Transceiver Model	Version		
	IP110H			

Management > Transceiver Firmware Update

Online Update

Downloads the built-in firmware for the WLAN transceivers through the Internet, and automatically updates it.

NOTE: To use this function, an Internet connection is required.

Online Update			
Transceiver Model : 1 Check for Updates : 2 C	► v		
Transceiver Model	Select the model name that you want to update the firmware. in the RoIP Gateway.		
Check for Updates	 ① As of June 2023, only the IP110H is selectable. Click <check> to connect to the update management server.</check> When the RoIP Gateway has successfully connected, the latest firmware status is displayed, as shown below. 		
Online Tra	ansceiver Firmware Update		
	Firmware Status		
Status Version	Succeeded in gathering information.		
Changes	New Territory with		
	Refresh Update Firmware		

About the firmware information:

- When there is a new firmware update available, the <Update Firmware> button is displayed.
- When there is no firmware update, "Firmware already up-to-date" is displayed.
- When an error message is displayed, check the network connection so that you can access the update management server, as follows:
 - Confirm that the default gateway and DNS server address are properly set to the RoIP Gateway. (Network Settings > IP Address)
 - Ask your network administrator if a web transmission from the RoIP Gateway is blocked.

How the World Communicates