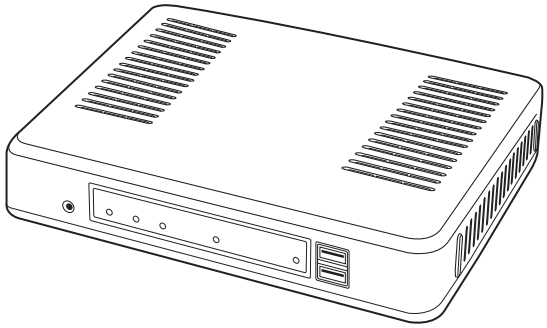
ICOM

INSTRUCTION MANUAL

IP ADVANCED RADIO SYSTEM CONTROLLER

IP1000C



Icom Inc.

INTRODUCTION

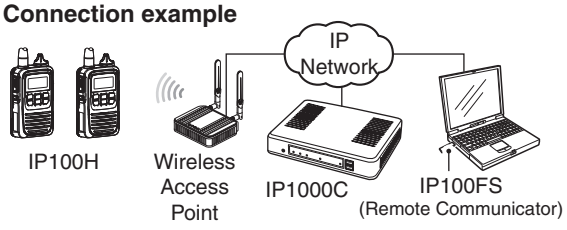
Thank you for purchasing this Icom product. The IP1000C IP ADVANCED RADIO SYSTEM CONTROLLER is designed and built with Icom's IP network technology.
We hope you agree with Icom's philosophy of "technology first." Many hours of research and development went into the design of your IP1000C.

INTRODUCTION

FEATURES

• The IP1000C enables you to communicate through IP networks by using the IP1000C as a controller for the IP100H.
 - A wireless access point is required.

Connection example



• A total of up to 100 IP100Hs IP COMMUNICATION TERMINAL and IP100FSs REMOTE COMMUNICATOR can be registered and used in the IP1000C system. (Depending on the IP1000C versions, only the 20 terminals can be registered.)
 - IP100FS enables you to remotely communicate with IP communication terminals connected to your IP1000C from a PC through an IP network.
• The IP1000C has two methods of communications (Simplex and Full-Duplex.)
 - The Simplex is for communications where receptions and transmissions are done alternately one by one, and the Full-Duplex is for simultaneous receptions and transmissions as a telephone call.
• The call types are All Call, Group Call, Individual Call, and Telephone Call.
• In the All Call and Group Call, you can assign the simplex or full-duplex mode to the each calls.
• The Area Calls can be operated by limiting to a certain area.
• If you connect in bridge port with Icom's VE-PG3 (ver. 1.13 or later), you will be able to communicate with certain types of our transceivers and also, using the VoIP router enables you make extension phone calls and outline phone calls.
 - Only the VE-PG3's bridge ports that are set as the converter mode are connectable.
• A total of up to 50 ID list and 10 messages can be programmed to each setting group.
• Status settings can be programmed to send the status information (Example: Away from the desk) from the IP100H.
 - Up to 10 statuses can be programmed.
• The settings configured with the IP1000C is automatically set when the IP100H is turned ON.
• Automatic firmware updates for the IP100H can be done using the IP1000C.
• The LAN ports automatically select from 10BASE-T, 100BASE-TX or 1000BASE-T, and detect the port polarity type between MDI (straight) and MDI-X (crossover), depending on the connected devices.
• The [LAN] port is equipped with 4-port switching HUB.
• Supports SNMP as the network management.
• Automatic Restore using a USB flash drive.

INTRODUCTION

OPTIONS

As of Feburary 2014

OPC-1402A
Maintenance cable

IP100FS
Remote communicator

IP100FS enables you to remotely communicate with IP communication terminals connected to your IP1000C from a PC through an IP network.

NOTE:

Approved Icom optional equipment is designed for optimal performance when used with an Icom transceiver.
Icom is not responsible for the destruction or damage to an Icom device in the event the Icom device is used with equipment that is not manufactured or approved by Icom.

NETWORK AND SYSTEM DEFAULT SETTINGS

Menu Item	Setting Window	Setting Item	Item Name	Value
Network Settings	IP Address	IP Address	IP Address	192.168.0.1
			Subnet Mask	255.255.255.0
	DHCP Server	DHCP Server	DHCP Server	Disable
Management	Administrator	Administrator	Username	admin (fixed)
			Current Password:	admin (lower case)
	Date and Time	NTP	NTP Client	Enable
		SNTP Server	SNTP Server	Enable
	USB	USB	USB Flash Drive	Enable
			USB Access Permission	✓ Firmware Update
				✓ Backup/Restore
	Firmware Update	Automatic Update	Automatic Update	Enable

• See the Section 4 for more details on above settings.
• The Administrator's Username (admin) cannot be changed.

To prevent unauthorized access

You must be careful when choosing your password, and change it occasionally.
• Choose one that is not easy to guess.
• Use numbers, characters and letters (both lower and upper case).

INTRODUCTION

SETTING PROCEDURE

Set up the IP1000C, following the procedure below.

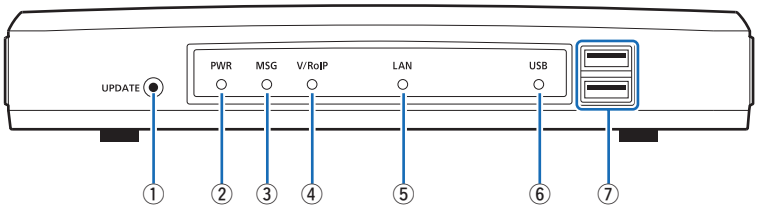
Step.1	Connect to a PC and turn ON the power	**CONNECTION GUIDE**
Step.2	Access the setting screen	**CONNECTION GUIDE/Section 2**
Step.3	Configure the network connection	**pp. 4-11, 4-12**
Step.4	Registering the terminals	**pp. 2-5, 2-6**
Step.5	Configure the settings for each terminals	**p. 2-7**
Step.6	Registering the terminals to a group	**p. 2-8**
Step.7	Configure the settings for groups	**pp. 2-9 to 2-12**

BEFORE USING THE IP1000C

Section 1

1. Panel description

■ Front panel



①[UPDATE] button ..... When [MSG] lights green, a firmware update is ready.
To download and install the new firmware, hold down this button until [MSG] blinks.
• To use the Firmware Update function, an internet connection, DNS and default gateway settings are necessary.

②[PWR]..... ● No light: Power is OFF
● Lights green: Power is ON*1
☼ Blinks green: Booting*1*2
● Lights orange: Booting*1
☼ Blinks orange: Booting*1*2

*1 After the power is ON:
Blinks green > lights orange > blinks orange > lights green
*2 After [INIT] is pushed until the default resets are completed:
Blinks orange and green alternately.

③[MSG]..... ● Lights green: A firmware update is ready (Online update)
☼ Blinks green: Downloading new firmware (Online update)

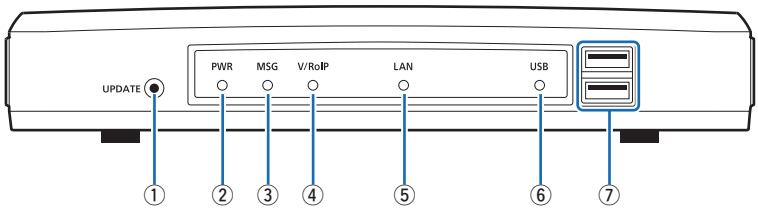
④[V/RoIP] ..... ● No light: No registration
● Lights green: IP communication terminal registered
(More than 1 registration)

⑤[LAN]*3*4..... ● No light: Not connected
● Lights green: LAN connected: All connections (1000BASE-T)
● Lights orange: LAN connected: More than 1 connection
(10BASE-T/100BASE-TX)

*3 When 1000BASE-T/10BASE-T/100BASE-TX are mixed, the [LAN] LED lights orange.
*4 The data communication status for each [LAN] port can be checked with the [LAN] LED on the rear panel. (p. 1-4)

1. Panel description

■ Front panel (continued)



⑥[USB] .....

- Lights green: Inserting an USB flash drive.
- Blinks green: Accessing the USB flash drive*5
- Blinks orange: Accessing the USB flash drive*5

*5 While accessing (resetting or firmware updating) the USB flash drive, this LED alternately blinks green and orange.

⑦[USB] ports (USB2.0×2) .....

If you insert the USB flash drive, the automatic load function for setting data can be used. When using the USB flash drive, detach the supplied AC adapter, and then securely insert the USB flash drive into the [USB] port.

• Icom is not responsible for all the devices used with the USB flash drive.

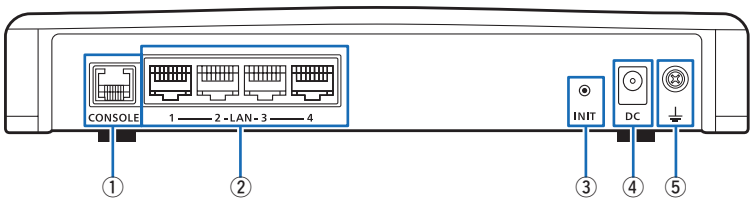
Using the Automatic Setting data upload with a USB flash drive

Insert a USB flash drive (purchase separately) to recover the configuration or to update the firmware. (p. 5-9)

- Turn OFF the IP1000C's power before inserting or removing the USB flash drive, to prevent data corruption.
- Either one of the USB slots accepts a USB flash drive, but insert only one drive at a time.
- Securely insert the USB flash drive.
- NEVER remove the USB flash drive or turn OFF the IP1000C's power, while transferring data. It will cause data corruption, or damage the USB flash drive.
- After the firmware updating is completed, check the firmware version on the setting window to verify that the update was correctly done.
- When importing setting data from the USB flash drive to the IP1000C, the originally programmed setting data is automatically saved as "bakdata.sav" on the USB flash drive, as a backup.
- A USB flash drive such as one with biometric authentication, or one with password protection is not supported.

1. Panel description (continued)

■ Rear panel



①[CONSOLE] port ..... (RJ-11 type)

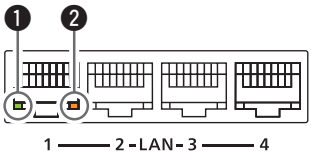
Connect an RS-232C serial communication interface to externally configure the IP1000C. (Optional OPC-1402A is required.)

②[LAN] ports .....

(RJ-45 type×4)

Connect the network devices such as a HUB.

[LED indication]



Lights: LAN connected
Blinks: LAN data communicating
❶ Green : 1000BASE-T
❷ Orange : 10BASE-T/100BASE-TX

③[INIT] button .....

If you forget its IP address and you cannot access to the IP1000C setting screen, you can initialize (reset) the IP1000C by pushing [INIT] on the rear panel. (p. 5-4)

- See the “PRECAUTIONS” leaflet for details.
- Initializing resets all settings to the factory defaults.

④DC jack .....

Connect the supplied AC adapter.

⑤Ground terminal .....

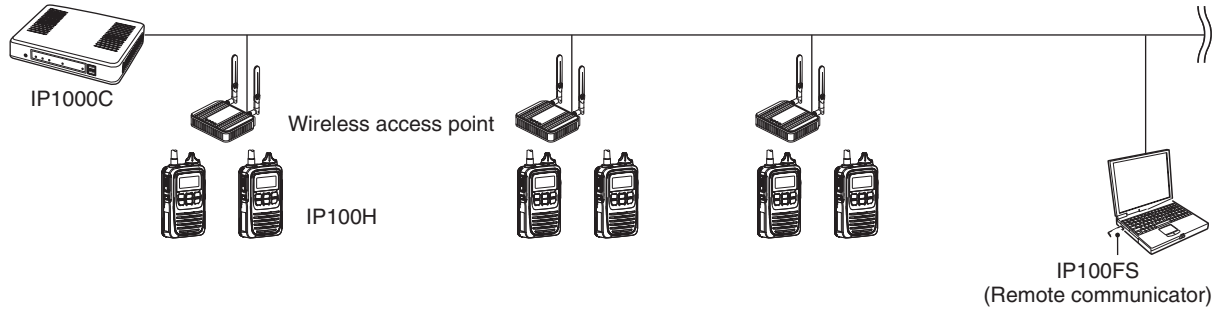
Connect to the ground.

2. Feature description

■ About the basic connection

The IP1000C enables you to communicate through IP networks by using the IP1000C as a controller for the IP100H.

• A wireless access point is required



IP100H (IP communication terminal)

IP100H enables you to communicate using the IP1000C and a wireless access point through IP networks.

• Verify the appropriate system formation according to the environment used, and then the IP communication terminal confirmation, wireless LAN settings and server settings using the CS-IP100H are required.

• See the IP100H instruction manual for more details.

IP100FS (Remote communicator)

The IP100FS enables you to remotely communicate with IP communication terminals connected to your IP1000C from a PC through IP networks.

• See the IP100FS help file for more details.

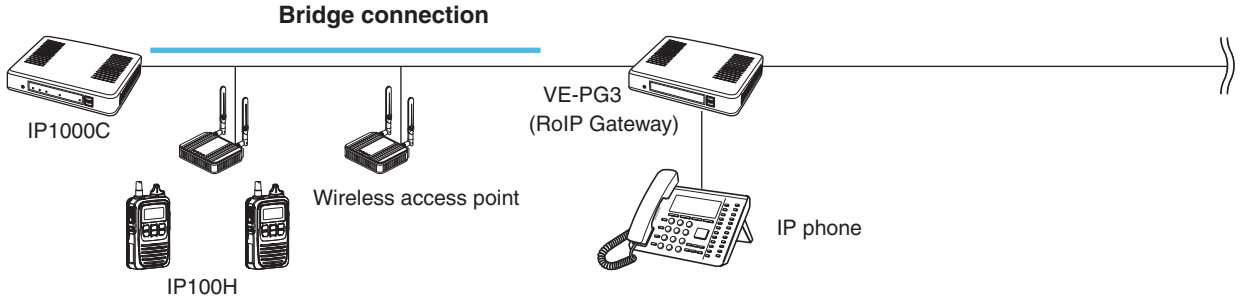
CS-IP100H (Cloning software)

The CS-IP100H cloning software is designed to be used for data entry, setting and programming for the IP100H from a PC. (You can download the free software from the Icom's web site)

• Connect the cloning cables correctly according to the CS-IP100H instruction manual uploaded on the Icom's website. Read the instruction carefully and completely.

■ Connecting a telephone

If you connect in bridge connection with Icom's VE-PG3 (ver. 1.13 or later), you will be able to communicate with certain types of our transceivers and also, using the VoIP router enables you make extension phone calls and outline phone calls.



* Only the VE-PG3's bridge ports that are set as the converter mode are connectable.

2. Feature description (continued)

■ Simplex and Full-Duplex

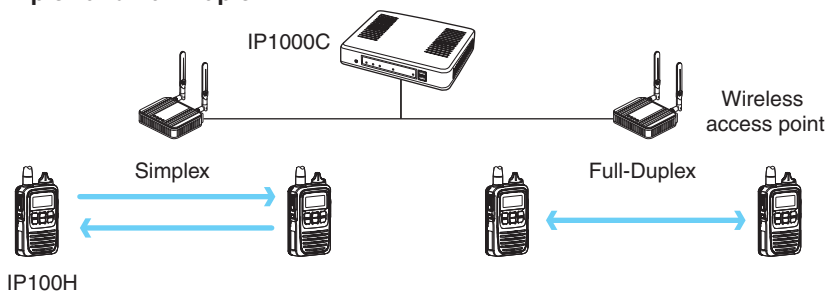
The IP1000C has two methods of communications (Simplex and Full-Duplex.)

The Simplex is for communications where receptions and transmissions are done alternately one by one, and the Full-Duplex is for simultaneous receptions and transmissions as a telephone call.

Set the Communication Method in “Transceiver Settings” for each IP communication terminal registered to the IP1000C.

- The Full-Duplex communications are done by connecting a microphone (purchase separately) to the IP100H.
- If no microphone is connected to the IP100H, the communication method is automatically set as Simplex.

Simplex and Full-Duplex

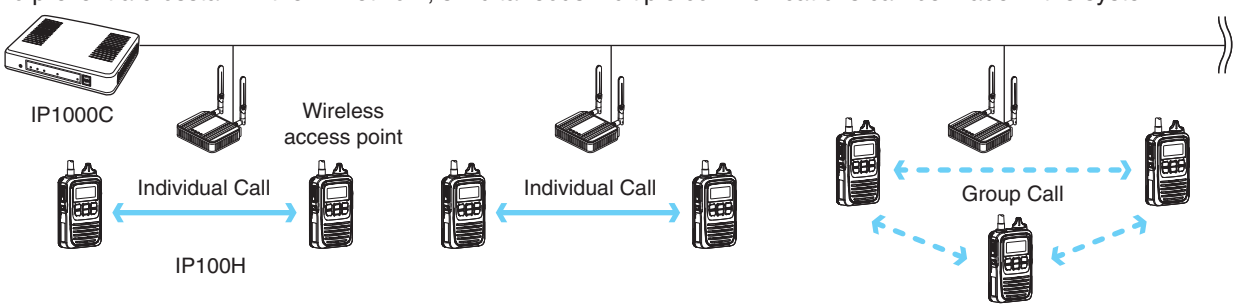


		Connection cables	Full-Duplex		Simplex	IP100H VOX function*1 (Set in the IP1000C)
			Hands free	PTT operation		
HM-153	EARPHONE MICROPHONE	OPC-2144		✓	✓	—
HM-153LS	EARPHONE MICROPHONE	—		✓	✓	—
HM-166	EARPHONE MICROPHONE	OPC-2144		✓	✓	—
HM-166LS	EARPHONE MICROPHONE	—		✓	✓	—
HM-186LS	SPEAKER MICROPHONE	—			✓	—
HS-85	VOX UNIT	OPC-2144	✓	✓	✓	Disable*2
HS-94	HEADSET	OPC-2006LS	✓		✓	Enable
		OPC-2328*3		✓	✓	—
HS-95	HEADSET	OPC-2006LS	✓		✓	Enable
		OPC-2328*3		✓	✓	—
HS-97	THROAT MICROPHONE	OPC-2006LS	✓		✓	Enable
		OPC-2328*3		✓	✓	—

*1 When a headset that supports the VOX function is connected, the communication mode automatically changes between reception and transmission by verifying the communication voice.
*2 Select [VOX] on the HS-85.
*3 Receive by using the OPC-2328.

■ Multi communication

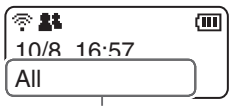
To prevent a crosstalk in the IP network, simultaneous multiple communications can be made in the system



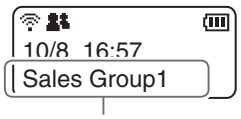
2. Feature description (continued)

■ All Call and Group Call

Communication type Simplex or Full-Duplex can be set for the All Call and Group Call.



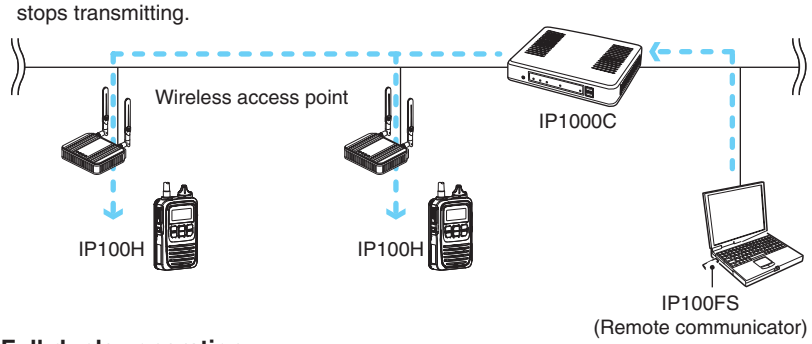
Selecting All Call



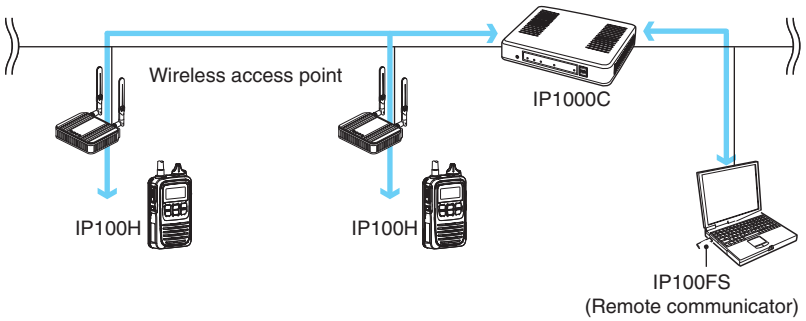
Selecting Group Call

Simplex operation

• When the Simpex is selected, the called station cannot reply until the caller station stops transmitting.



Full-duplex operation



About All Calls

The All Call function is used to call all the IP100H and IP100FS that are registered in the Transceiver Registration window in the IP1000C.

About Group Calls

The Group Call function is used to call the desired group selected from the address book.

- It is required to divide the registered IP100H and IP100FS in the [Transceiver Registration] screen into groups in the [Destination Settings] screen.
- The address book and the destination settings set in the IP1000C are commonly used in the each group where the IP100H and IP100FS belong to.

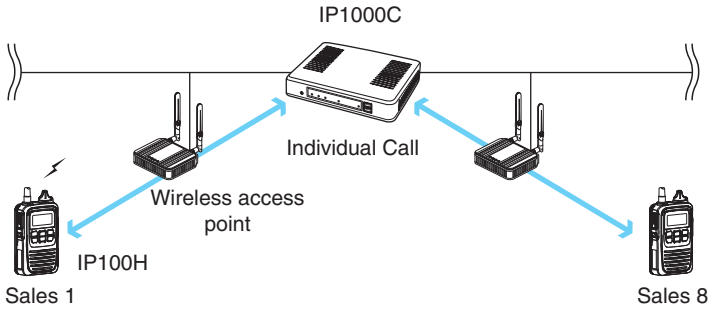
2. Feature description (continued)

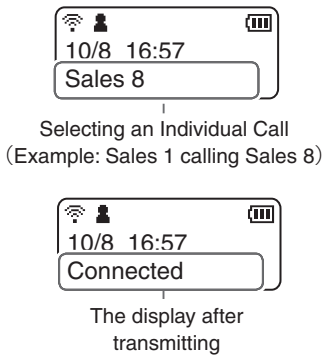
■Individual Call

Individual Call is when you talk to a desired transceiver 1 on 1.

When an individual call is made, the IP100H displays the connection result. (Connected, Busy, or No response)

- If the IP100H that you are calling is out of range, “No response” is displayed.
- If desired, set the Receive Notification Tone in the [Common Settings] Screen in the [Common Settings] menu to notify a Call is received.

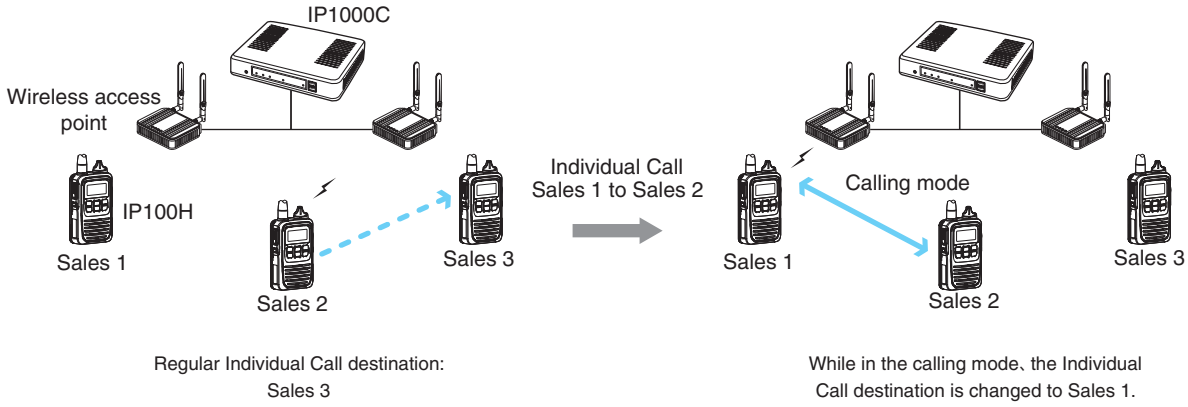




■Calling mode

When you are receiving or transmitting, the transceiver is in the calling mode.

While in the calling mode, only the transmitting operation is needed to communicate with the transceiver you are calling.



Regular Individual Call destination: Sales 3

While in the calling mode, the Individual Call destination is changed to Sales 1.

About TalkBack Timer

The TalkBack timer starts when the calling transceiver finishes transmitting until the screen returns to the standby mode. (Default: 5 seconds)

About blocking the communications while in the TalkBack Timer

If there are new calls while in the TalkBack Timer, it is set to receive the calls in the priority order. (p. 4-66)

- A call cannot be received if it has an equal or lower priority than the call you are now making. Calls will be received after the TalkBack Timer.
- The TalkBack Timer that are commonly used by the IP100Hs belonged to the setting group is set in the IP1000C.

2. Feature description (continued)

■ Priority Call and its priority

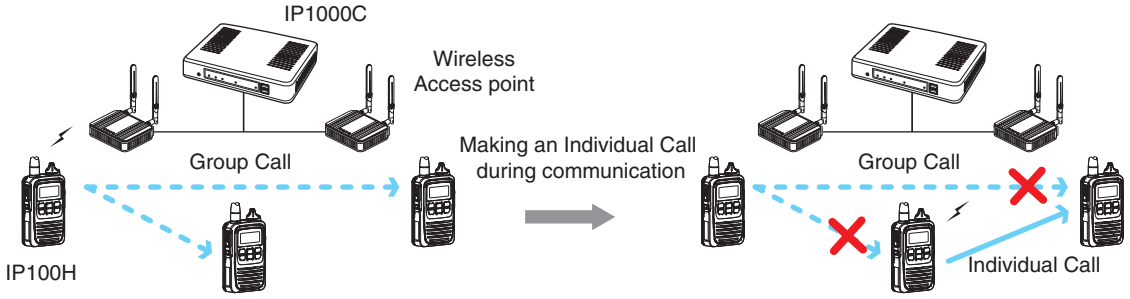
The Priority Call function is set to “Disable” in the default setting.

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

Priority level	Call type	Priority Call	Remarks
High	Telephone	—	For telephone communication
↑	All Call	Enable	Includes the Area Call or calling from an IP100FS
	Individual Call	Enable	Includes from an IP100FS
	Group Call	Enable	Includes the Area Call or calling from an IP100FS
	All Call	Disable	Includes the Area Call
	Individual Call	—	
Low ↓	Group Call	Disable	Includes the Area Call

• The priority is given to the first call between calls with the same priority level.

Change the target during communication with the Priority Call function enabled



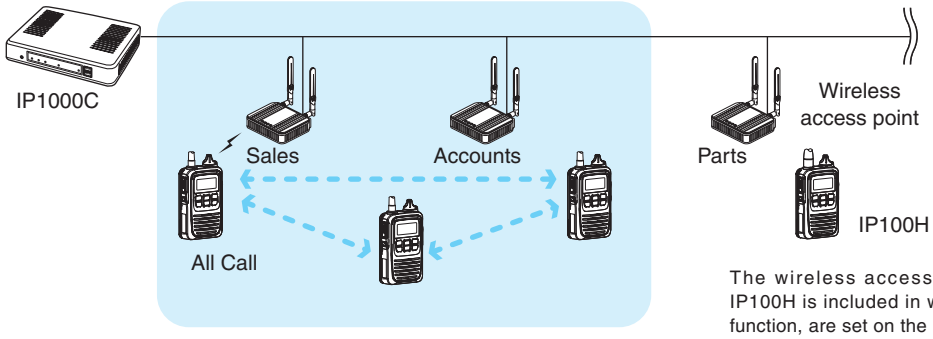
2. Feature description (continued)

■ Area Call

This function is used when operating by limiting to a certain area. (Default: Disable)

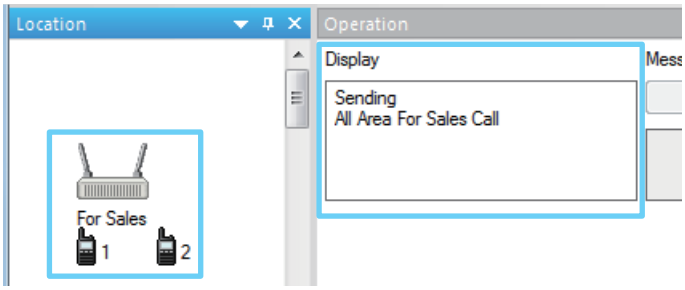
If you make an All Call or Group Call when Area Call in the IP100H is set to ON, the IP100H and IP100FS that are in the same area with the IP100H connected to the wireless access point are called.

IP100H makes an All Call with the Area Call function



The wireless access points that the IP100H 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)

IP100FS calls the All Call with the Area Call function



When the IP100FS uses the Area Call function, can call IP100Hs that are in the communication range of the access points assigned to the Area Call.
Select the access point in the [Location], the Call type (Individual, Group, All, Area or Telephone) and names are displayed

To use Area Call, it is required to enable the [Area Call] for each IP100H in the [Transceiver Settings] screen, and then register the area's wireless access point (BSSID) in the [Area Entry List].

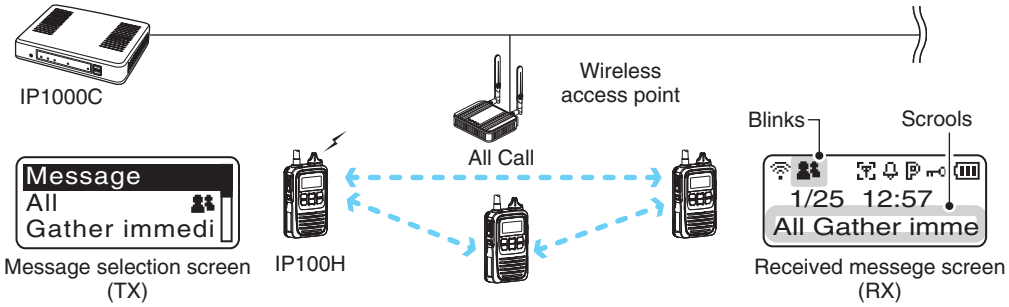
2. Feature description (continued)

■ Messages

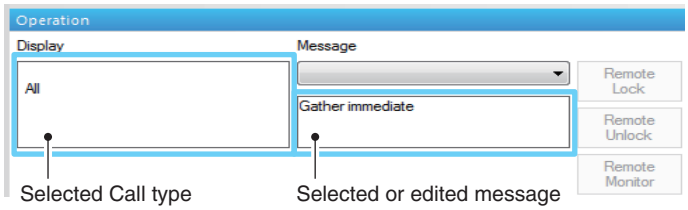
Set this function to send a message with the IP100H and IP100FS. (Default: Disable)

The fixed messages of up to 32 characters to send can be set in the [Messages] screen of the [Common Setting] Menu. Up to 10 messages can be registered.

IP100H calls transmits a message



IP100FS trasmits a message



The IP100FS can store up to 100 messages in the each Site.
You can edit the storeed messages.

- To use this function, requires to enable the [Message] item in the [Transceiver Settings] screen for each IP100H.
- The messages that are registered to the IP1000C are commonly used by the IP100Hs belonged to the setting group.

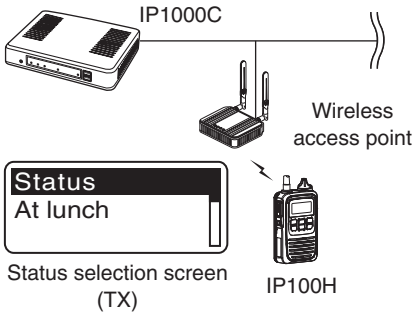
2. Feature description (continued)

■ About Status Settings

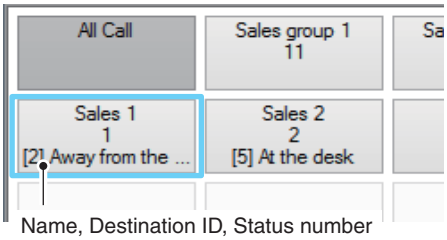
Set the Status to send the status information (Example: Away from the desk) from the IP100H. (Default: Disable)

- The status information of up to 32 characters can be programmed in the [Status] screen on the [Common Settings] menu. Up to 10 status can be programmed.
- The status information sent using the IP100H can be displayed in the One-Touch Button screen or in the [Transceiver Status] screen on the [Transceiver Settings] menu.

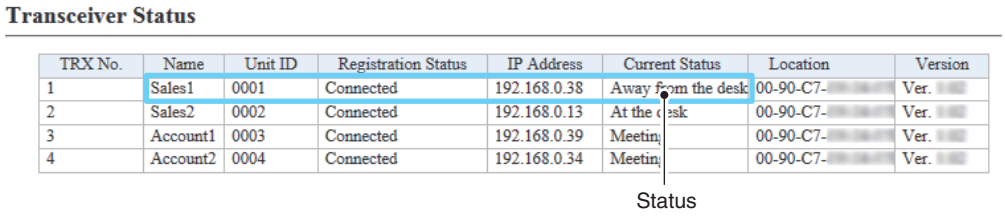
IP100H sends the Status



IP100FS One-Touch button



IP1000C Transceiver Status screen



To use this function, requires to enable the [Status] item in the [Transceiver Settings] screen for each IP100H.

SETTING UP THE IP1000C SYSTEM

Section 2

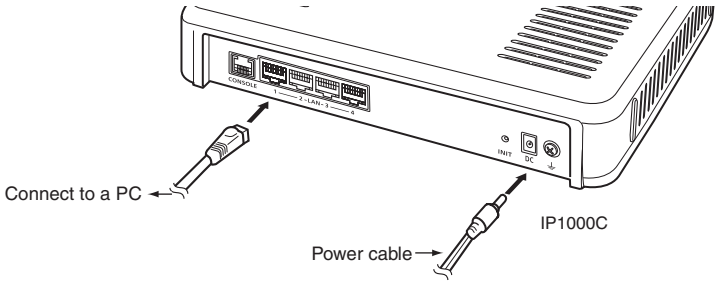
1. Flow using IP100H

■ Prepare for connection and settings

This is an explanation of the flow from connecting with PC to accessing to the Setting screen.

1. Connect to a PC and turn ON the power **See the CONNECTION GUIDE (Separated) for details**

Connect a PC to the IP1000C's [LAN] port, and insert the power cable into the [DC] jack.



2. Access the setting screen **See the CONNECTION GUIDE (Separated) for details**

① Open your web browser, then enter the IP address of the IP1000C into the address bar.
- The default IP address is "192.168.0.1." (http://192.168.0.1/)

② Push the [Enter] key.
- The Login Authentication screen will appear.

③ Enter "admin" (fixed username) and "admin" (default password) in their respective input fields on the Login Authentication screen, and then click [OK].

1. Flow using IP100H (continued)

■ About the Setting procedures

This is a flow that the setting procedures of the IP100H using the IP1000C setting screen.
This manual explains after completing the wireless access point settings that the IP100Hs connect to.

1. Network Settings (pp. 4-10, 4-12)

Enter an IP address (default: 192.168.0.1) on the [IP Address] screen, and a DHCP server setting (default: Disable) on the [DHCP Server] screen, according to your system environment.

2. Transceiver presettings

Register the IP100H or IP100FS to use into this IP1000C.

[Transceiver Registration] screen (pp. 2-5, 4-28)
Enter the Transceiver model, Name and Unit ID, Password and Setting group.
- The default password is “iptrx,” and you can change it for security.
  This password is also used when setting up the IP100H by using CS-IP100H cloning software.
- The common settings that are used by the group, are set in the [Common Settings] menu.

Setting by the CS-IP100H cloning software (p. 2-6)
After IP100Hs are registered to the IP1000C, set the wireless LAN setting, antenna setting (internal or external), provisioning server setting (IP1000C) to all the IP100Hs.

- The CS-IP100H is a freeware that can be downloaded from the Icom website.
- First, read the instructions of the CS-IP100H that can be downloaded from the Icom website, and follow its procedure to connect the cloning cable between the IP100H and a PC.

3. Common Settings (pp. 2-9 to 2-12)

Set common settings of each group that the IP100Hs or IP100FSs belong to and are registered on the [Transceiver Registration] screen.

[ID List] screen
Register the unit IDs that are registered on the [Transceiver Registration] screen or the group IDs that are registered on the [Destination Settings] screen.
- When an IP1000C’s bridge connection is made with a VE-PG3, you can register the telephone number of the IP phone.

[Message] screen
Enter messages that the IP100H will send.
Up to 32 characters can be programmed. (Up to 10 messages.)

[Status] screen
Enter Statuses that the IP100H will send.
Up to 10 messages, each with up to 32 characters, can be entered.

[Common Settings] screen
Specify the ID list and message list of the group that the IP100H belongs.

About updating setup
If the IP1000C’s setup has been changed, be sure to reboot the IP100H to read its setting.

1. Flow using IP100H

■ About the Setting procedures (continued)

4. Transceiver Settings (pp. 4-10, 4-12)

Set or assign the functions to all the IP100Hs that are registered on the [Transceiver Registration] screen.

- ❍ Use ID list
- ❍ Communication Method (Simplex/Full-duplex)
- ❍ Priority Call
- ❍ Area Call
- ❍ Message
- ❍ Status

5. Destination Settings (p. 2-8)

The registered IP100Hs or IP100FS on the [Transceiver Registration] screen, are assigned to a group, assigned a group ID and the communication type is set on the [Destination Settings] screen.

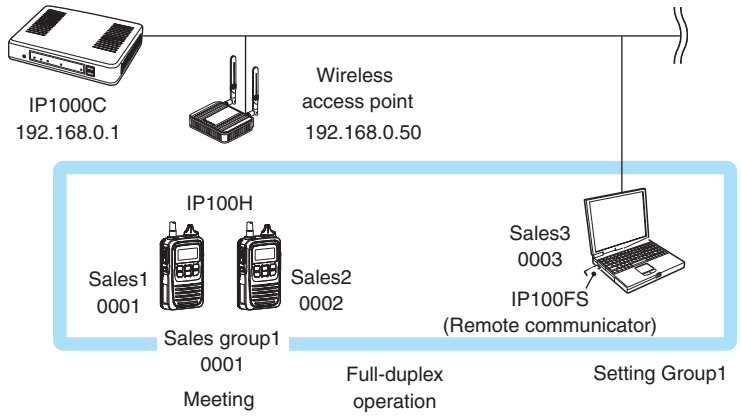
6. Mic gain, Notification beep or Talkback setting (pp. 4-41 to 4-43, 4-62 to 4-67)

Depending on your system requirement, set the mic gain or assign the VOX function* on the [Transceiver Settings] screen, set common settings, such as the various notice tones, talkback settings on the [Common Settings] screen.

* The VOX function requires to connect an optional headset, HS-94, HS-95 or HS-97 and the OPC-2006LS.

2. Transceiver settings

Each terminal requires that you set the unit ID and so on.
The following illustration is an example of setting requirements to register an IP100H to an IP1000C.



- Connect a wireless access point to the IP1000C network.
- Up to 100 of the total IP100H and IP100FS can register to the IP1000C.
  (Depending on the IP1000C versions, up to 20 of total IP100H and IP100FS can be registered.)
- This manual explains that IP addresses of the IP100H or a PC using the IP100FS are automatically assigned by the DHCP server on the network
- When assigning static IP addresses to the terminals, make sure that the addresses of the devices on the network don't overlap or conflict.

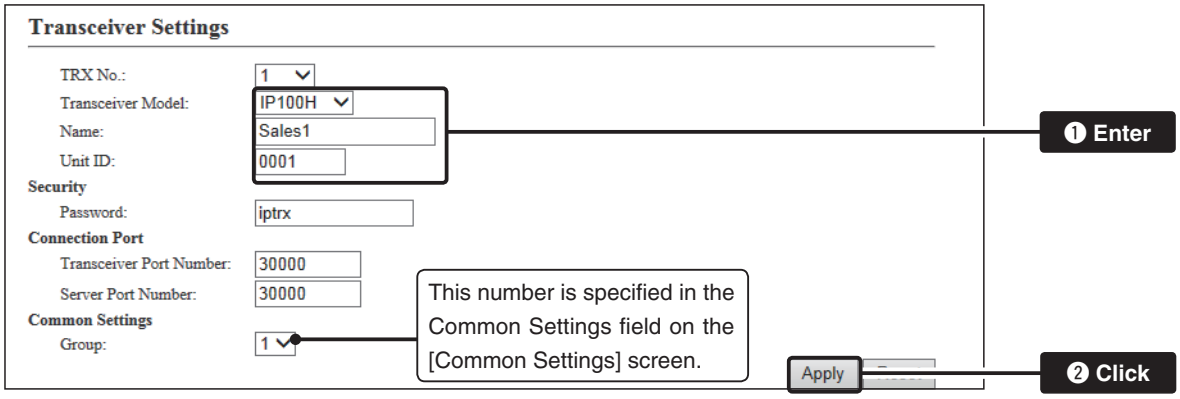
2. Transceiver settings (continued)

■ Registering the terminals

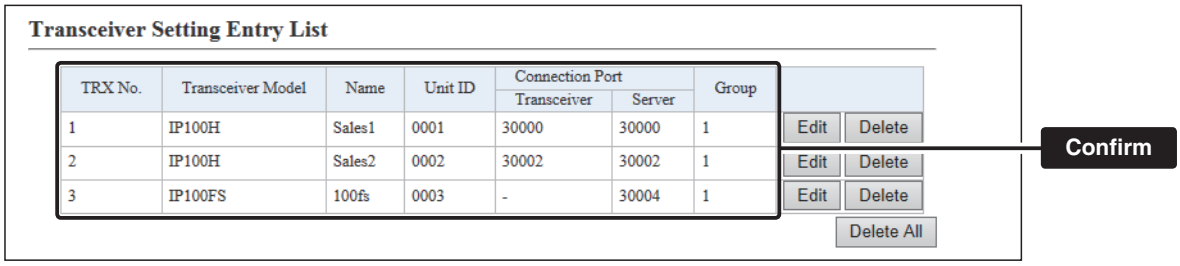
Set the Unit ID (Individual number) to register each IP100H or IP100FS.

1 Click [Transceiver Settings], then [Transceiver Registration].
• The [Transceiver Registration] screen is displayed.

2 Enter the “Transceiver Model,” “Name” and “Unit ID” items in the “Transceiver Settings” field, and then click <Apply>.



3 After registration is finished, confirm the registered contents the terminal in the “Transceiver Setting Entry List” field. (See pages 2-7, 2-8 and 2-9.)



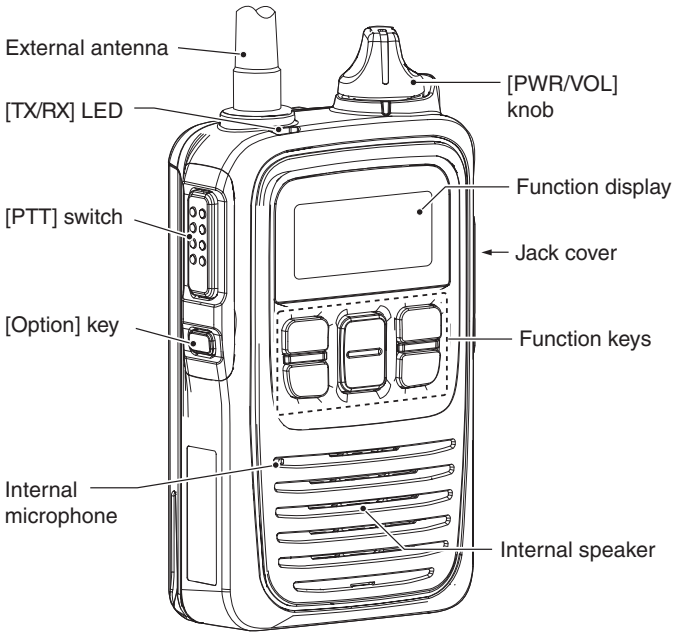
2. Transceiver settings (continued)

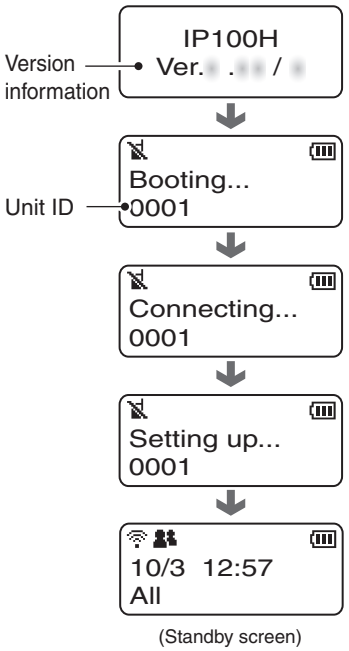
■ About confirming the registration and rebooting the IP100H

After the registration of the IP100H to the IP1000C is completed, program the IP100H using the CS-IP100H cloning software and a PC.

After that, reboot the IP100H and it will automatically read the contents of the IP1000C's setting.

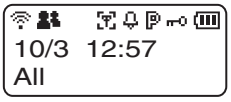
- The CS-IP100H is a freeware that can be downloaded from the Icom website.
- If the IP100H will not display the standby screen, check the settings of the IP1000C and the wireless access point.



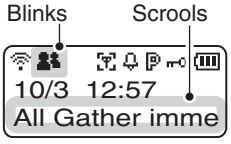


(Standby screen)

About the display icons



Standby screen



When a message is received

- **Signal strength indicator**
  Displays the signal strength in three levels when your communication terminal is in a service area.
  "" blinks when you are in out of the service area, and "" appears if your communication terminal is not registered, or not connected to the IP1000C.
- **Call mode icon**
  : Appears when All or Group call is selected.
  : Appears when Individual call is selected.
  : Appears when Telephone call is selected.
- **Area call function icon**
  Appears when the Area call function is ON.
- **Beep function icon**
  Appears when the Beep function is ON.
- **P-Bell function icon**
  Appears when the P-Bell function is ON.
- **Key lock function icon**
  Appears when the Key lock function is ON.
- **Battery indicator**
  Displays the attached battery pack's remaining battery charges.

About updating setup

If the IP1000C's setup has been changed, be sure to reboot the IP100H to read its setting.

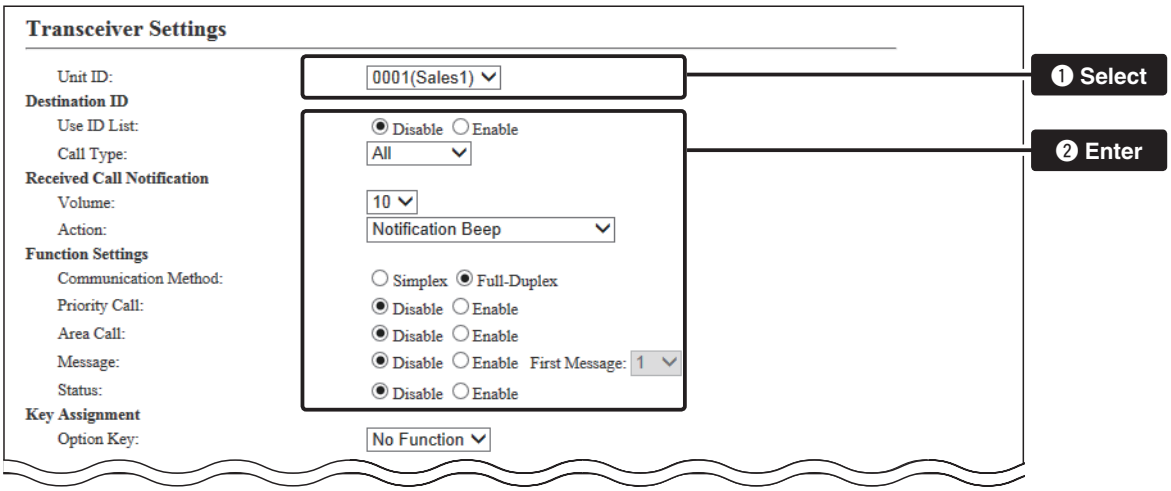
2. Transceiver settings (continued)

■ About the IP100H settings

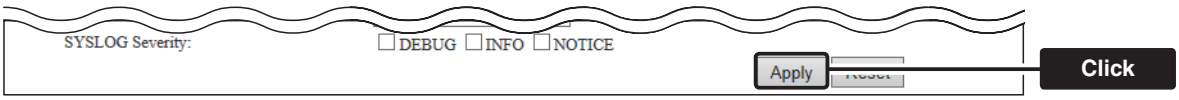
Set and assign functions to each registered IP100H.
After the settings have been changed, the IP100H needs to be rebooted.

1 Click [Transceiver Settings], then [Transceiver Settings].
• The [Transceiver Settings] screen is displayed.

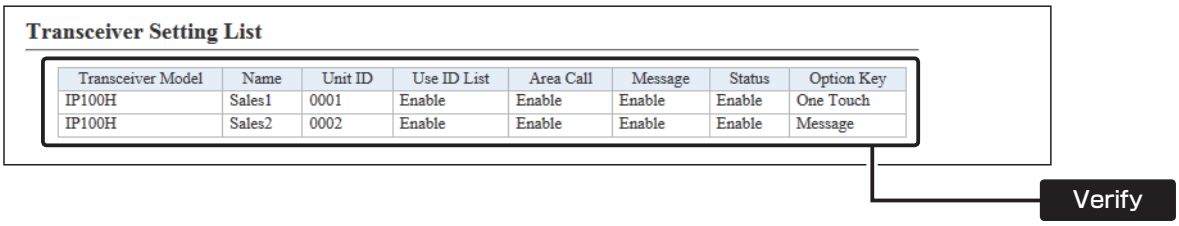
2 Select the “Unit ID” item to be set, then select and assign functions, depending on your requirements.



3 Click <Apply>.



4 After registration is finished, confirm the registered contents in the “Transceiver Setting List” field.



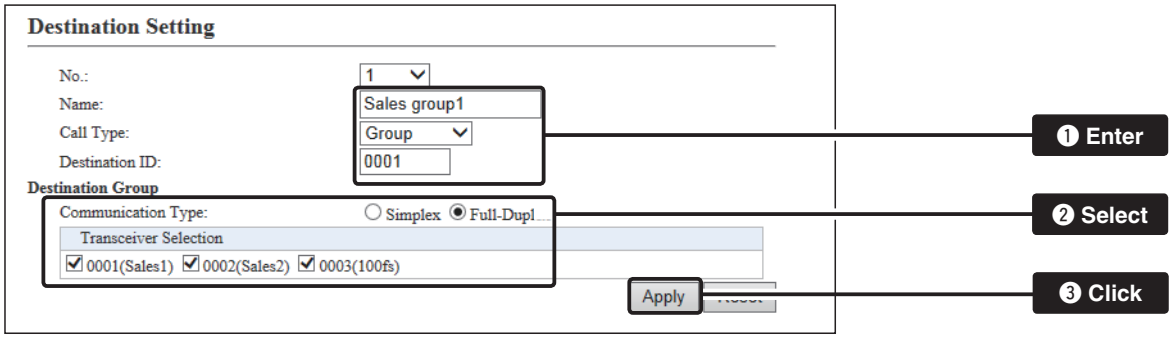
2. Transceiver settings (continued)

■ About the Group calls

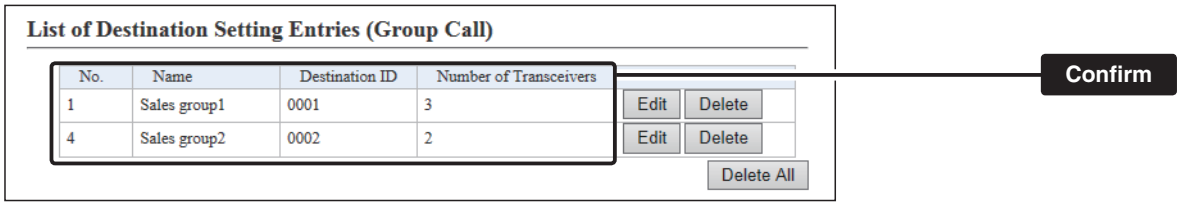
This topic describes registering IP100Hs or IP100FSs to a group, and they communicate with the full-duplex operation between three or more members as meeting.
After the settings have been changed, the IP100H needs to be rebooted.

1 Click [Destination Settings].
• The [Destination Settings] screen is displayed.

2 Enter the group name, Call type and a 4 digit group ID in the “Destination Setting” field, then select the terminals in the list that belong to the group. Click <Apply>.



3 After registration is finished, confirm the registered contents in the “List of Destination Setting Entries (Group Call)” field.



2. Transceiver settings (continued)

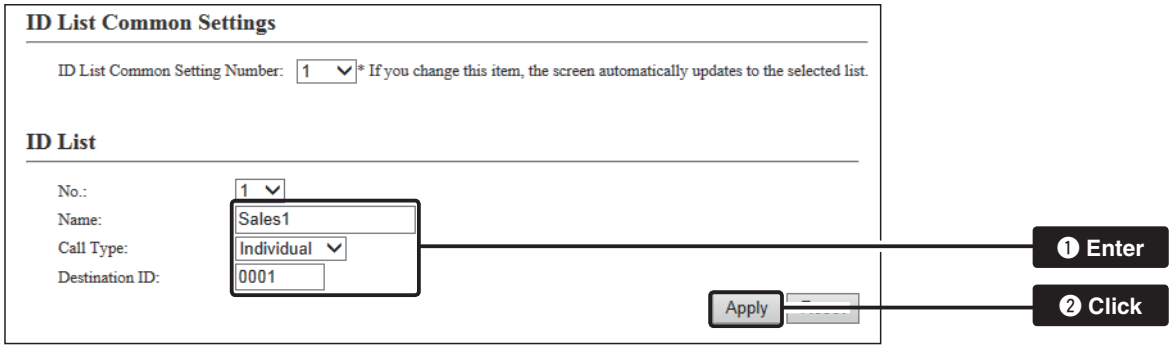
■ About the ID list

Enter Names, Call types and so on in an ID list that the IP100H will use.
After registration is finished, the IP100H needs to be rebooted.

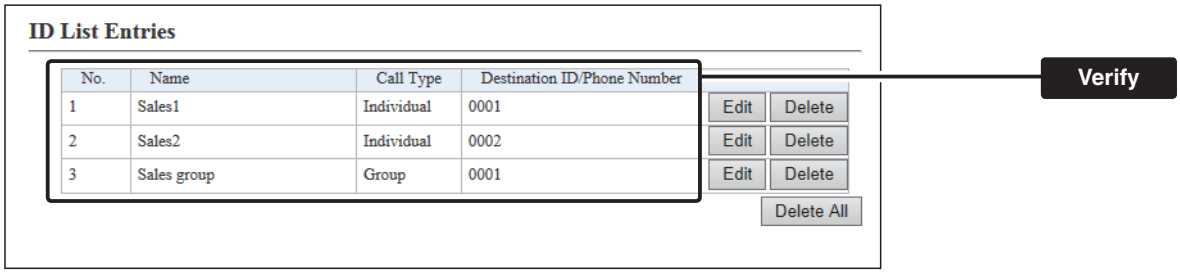
1 Click [Common Settings], then [ID list].
• The [ID List] screen is displayed.

2 Select the ID list group in the “ID List Common Settings” field.
• The ID list group number (example: 1) is used in the “ID List” item on the [Common Settings] screen.

3 Enter the name, Call type and a 4 digit destination ID in the “ID List” field, then click <Apply>.



4 After registration is finished, confirm the registered contents in the “ID List Entries” field.



2. Transceiver settings (continued)

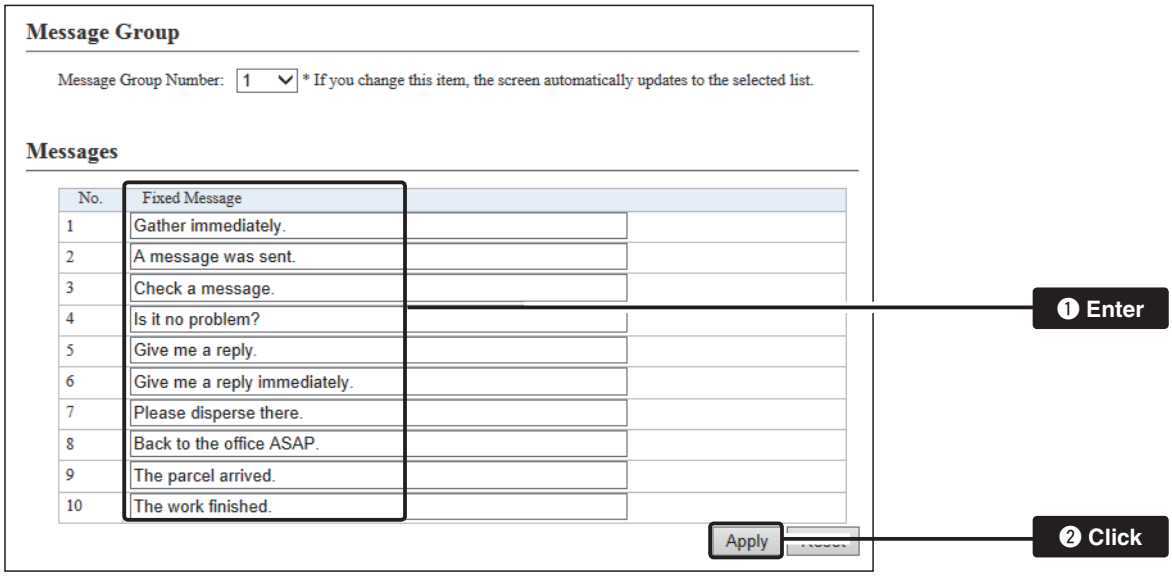
■ About messages

Enter messages that the IP100H will transmit.
After registration is finished, the IP100H needs to be rebooted.

1 Click [Common Settings], then [Messages].
• The [Messages] screen is displayed.

2 Select the message group number in the “Message Group” field.
• The message group number (example: 1) is used in the “Message List” item on the [Common Settings] screen.

3 Enter a message of up to 32 characters in the “Messages” field. Then click <Apply>.
• Up to 10 messages can be registered in each group.



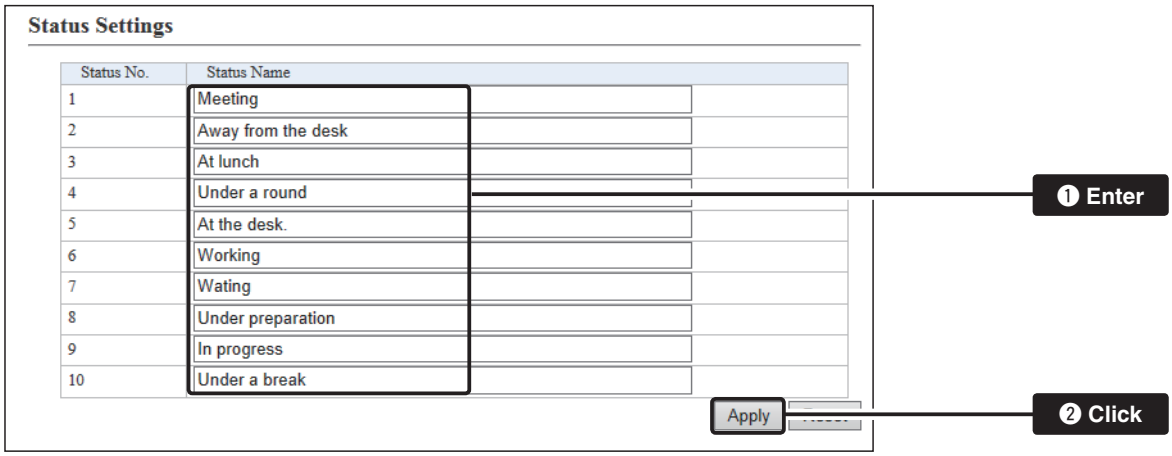
2. Transceiver settings (continued)

■ About the status settings

Enter the status that the IP100H will transmit.
After registration is finished, the IP100H needs to be rebooted.

1 Click [Common Settings], then [Status].
• The [Status] screen is displayed.

2 Enter a status of up to 32 characters in the “Status Setting” field. Then click <Apply>.
• Up to 10 statuses can be entered.



2. Transceiver settings (continued)

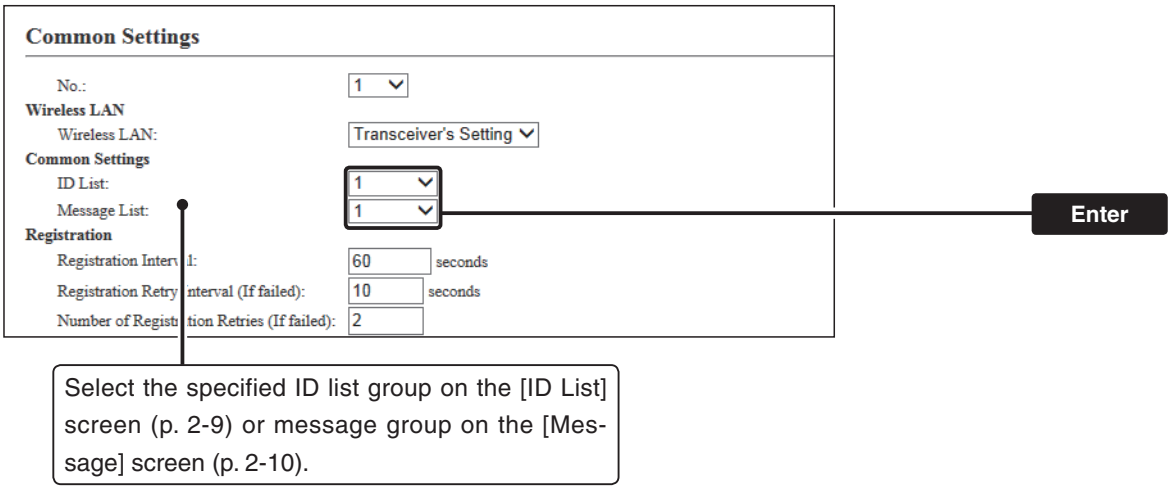
■ About commonly use the ID list and message in the group

Specify the ID and message lists of the group that the IP100H belongs to.
After registration is finished, the IP100H needs to be rebooted.

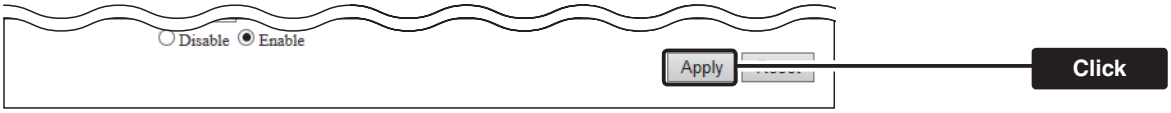
1 Click [Common Settings], then [Common Settings].
• The [Common Settings] screen is displayed.

2 Select the group number in the “Common Settings” field.
• The group number setting (example: 1) is specified in the “Group” item on the [Transceiver Registration] screen in each IP100H.

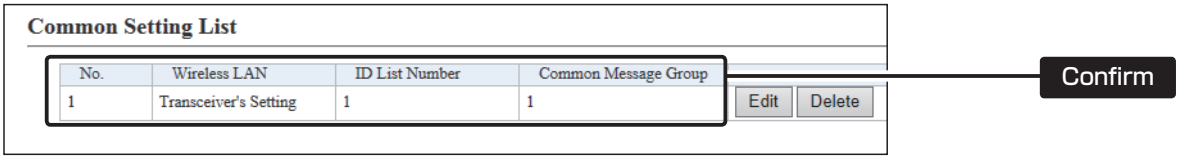
3 Select the “ID List” and “Message List” in the “Common Settings” field.



4 Click <Apply>.

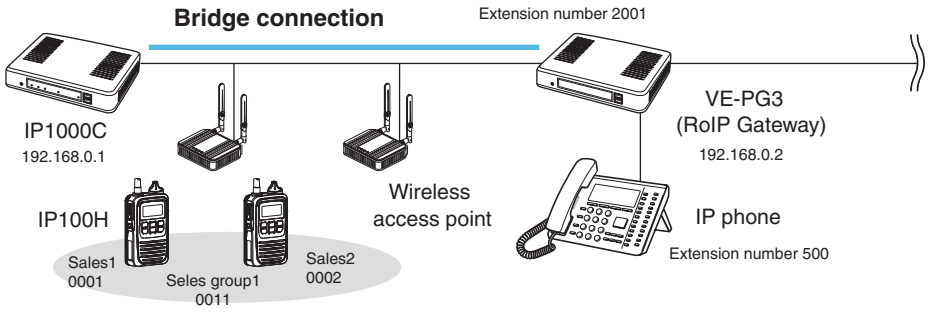


5 After registration is finished, confirm the registered contents in the “Common Setting List” field.



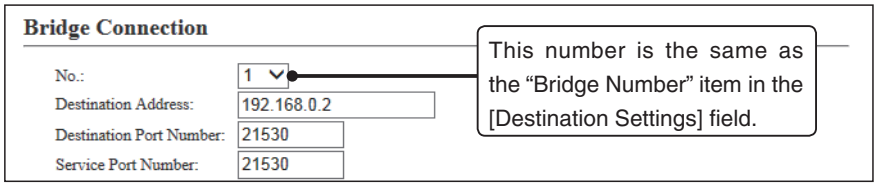
3. Bridge connection and Caller settings

When making a bridge connection with a VE-PG3*, the IP1000C system can communicate with the transceivers.
* A VE-PG3 with a firmware version that is earlier than 1.13, cannot communicate with the IP1000C system.
Before connecting the VE-PG3, check the firmware version on the VE-PG3's setting screen.

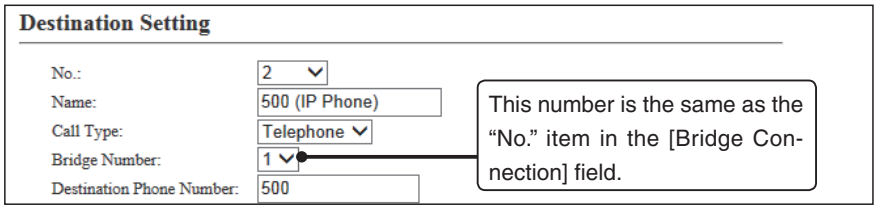


About the IP1000C settings

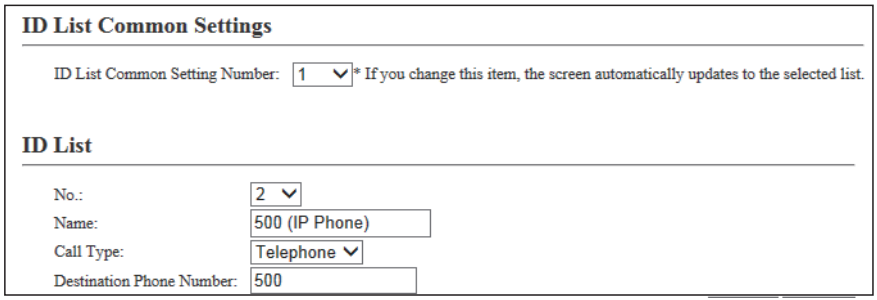
1. Enter the IP address of the VE-PG3 in the [Bridge Connection] field. (Example: 192.168.0.2)
[RoIP Server Settings] (menu) > [Bridge] (screen) > [Bridge Connection] (field)



2. After setting the "Call Type" item to "Telephone," select the "Bridge Number" item and then enter a telephone number in the "Destination Phone Number" item.
[Destination Settings] (menu) > [Destination Settings] (screen) > [Destination Setting] (field)
• Select the bridge number as same as the number that is selected the [Bridge Connection] field. (Example: 1)
• Enter the VE-PG3's extension number. (Example: 500)



3. After setting the "Call Type" item to "Telephone," enter the "Destination Phone Number" item.
[Common Settings] (menu) > [ID List] (screen) > [ID List] (field)
• Enter the VE-PG3's extension number. (Example: 500)



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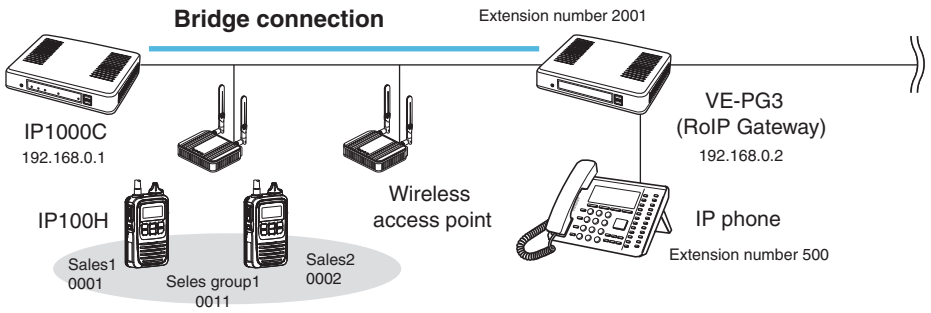
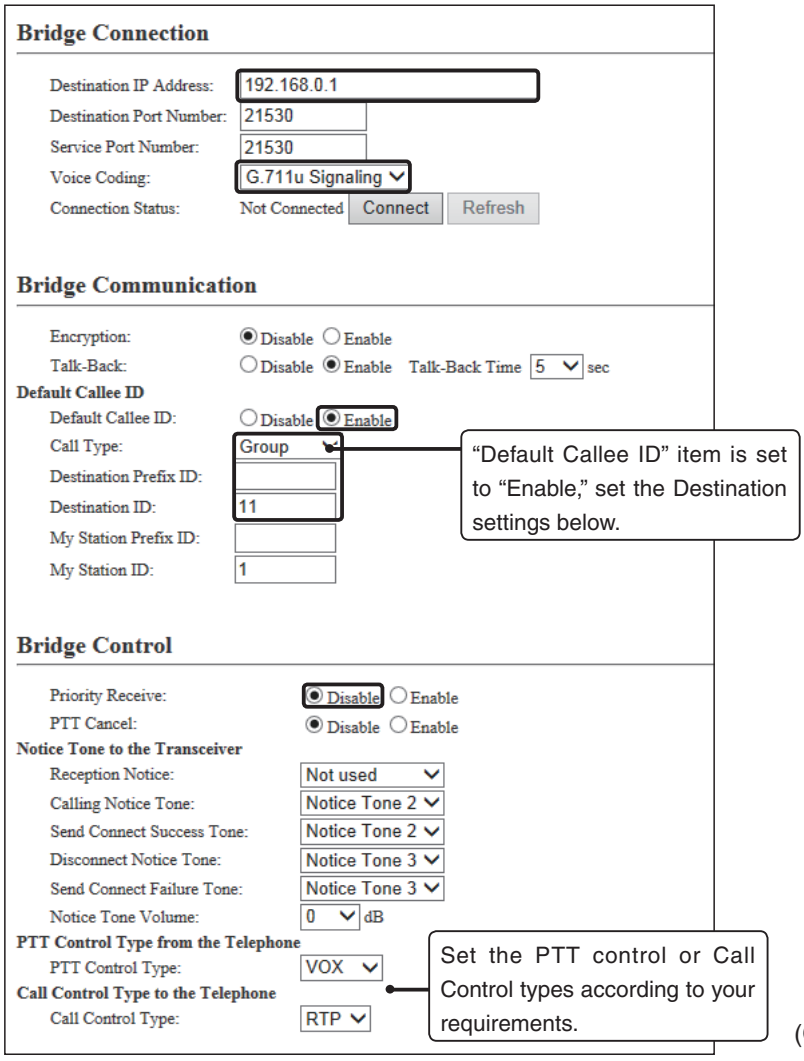
3. Bridge connection and Caller settings (continued)



About the VE-PG3 settings (Converter mode)

1. Enter the IP address of the IP1000C in the [Bridge Connection] field. (Example: 192.168.0.1)
   Select the Voice Cording. (Example: G.711u Signaling)
   [Port Settings] (menu) > [Bridge] (screen) (Example: Bridge1) > [Bridge Connection] (field)
   • Make sure the using port number for connection don't duplicate with another connection.
2. Select the call type and enter the destination ID in the [Bridge Communication] field.
   Call type (Example: Group), Destination ID (Example: 11)
3. For full-duplex telephone operation, set the "Priority Receive" item in the [Bridge Control] field to "Disable."
4. Click <Apply> at bottom of the screen. Then click <Connect> in the [Bridge Connection] field.
   • The "Connection Status" item changes form "Not Connected" to "During Transmit."



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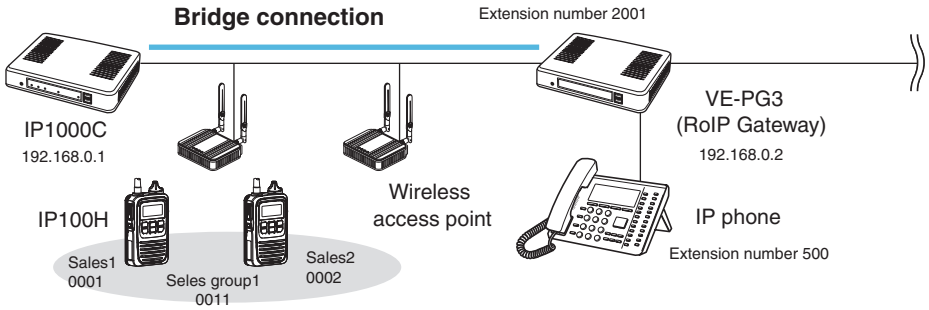
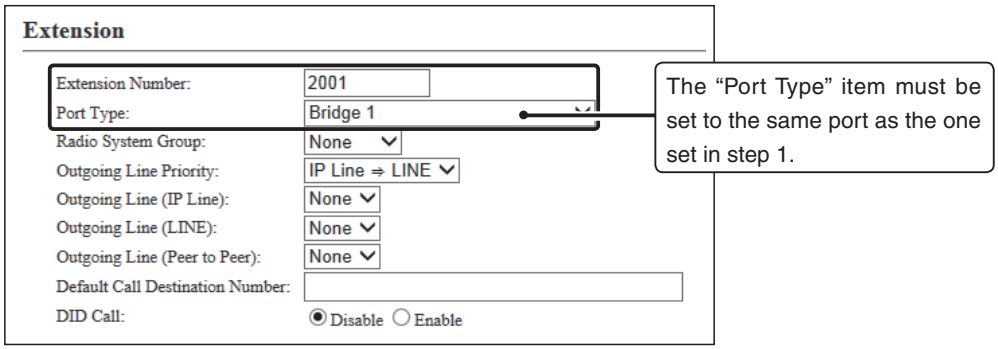
3. Bridge connection and Caller settings (continued)

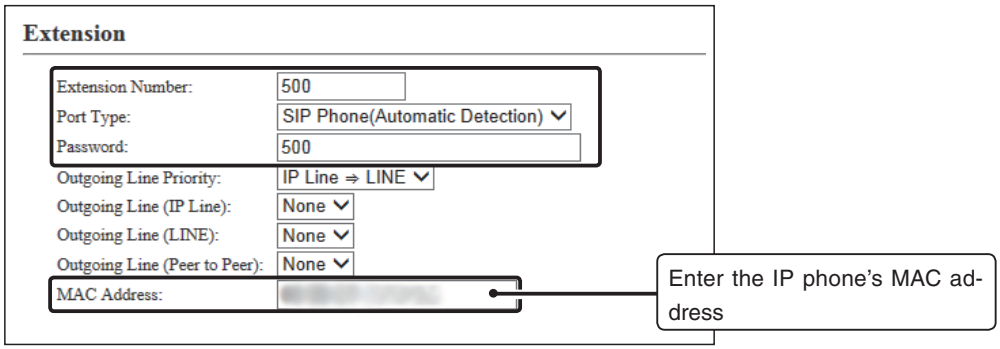


About the VE-PG3 settings (Converter mode)—continued

4. Enter the extension number of the [Bridge 1] port in the [Extension] field. (Example: 2001)
   [Extension Connect] (menu) > [Extension Connect] (screen) > [Extension] (field)



5. Enter the extension number of the IP phone in the [Extension] field. (Example: 500)
   [Extension Connect] (menu) > [Extension Connect] (screen) > [Extension] (field)



❍ When the IP phone calls the number “2001,” all the IP100Hs of sales group “0011” will be called.
  • The caller number on the IP100H’s display will be the extension number of the IP phone. (Example: 500)

❍ When the IP phone calls the number “∗011” + “0001,” only the IP100H of Sales 1 “0001” will be called.
  • The numbers “∗011” and “0001” are individual numbers for the [Bridge 1] port and Sales 1.
  • The caller number on the IP100H’s display will be the extension number of the IP phone. (Example: 500)

See the VE-PG3 instruction manual for the setting details.

❍ When the IP100H (example: Sales 2 “0002”) calls the IP phone:
  ① Display the IP phone’s Destination phone number on the IP100H’s screen.
    • The Destination phone number of the IP phone must be programmed in the IP100H’s ID list.
  ② Hold down [PTT] for more than 1 second.
    • The caller number on the IP phone’s display will be the individual number of Sales 2. (Example: “∗011” + “0002”)

See the IP100H instruction manual for the operating details.

OTHER BASIC FUNCTIONS

Section 3

1. How to restrict access

If you set a new administrator password, you can restrict access to the IP1000C's setting screen.
The default administrator password is "admin."

Setting password

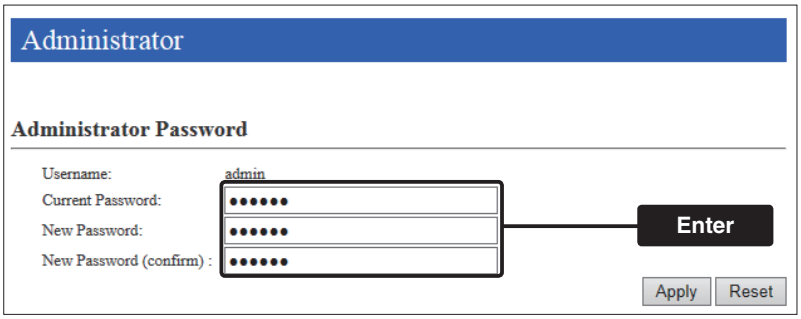
1 Click the [Management] menu, then [Administrator].

• The [Administrator] screen appears.

2 Enter [Current Password], [New Password] and [New Password (confirm)] in their respective input fields.

• The password can be composed of up to 31 characters (0–9, a–z and A–Z).

• The entered characters are displayed as an * (asterisk) or a • (dot).



3 Click <Apply>.

To prevent unauthorized access

You must be careful when choosing your password, and change it occasionally.

• Choose one that is not easy to guess.

• Use numbers, characters and letters (both lower and upper case).

NOTE:

When you forget the password, you cannot access to the IP1000C. In this case, initialize the IP1000C using the <INIT> button. (p. 5-4)

2. How to set the IP1000C's internal clock time

You can set the IP1000C's internal clock time.

Setting date and time (Manual setting)

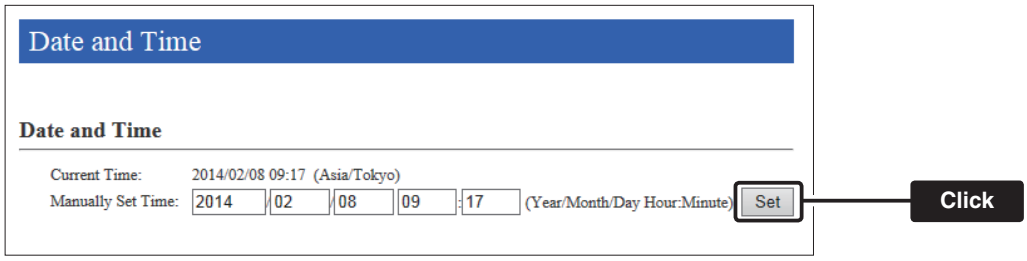
1 Click the [Management] menu, then [Date and Time].

• The [Date and Time] screen appears.

2 Verify the PC's current time in the [Date and Time] field.

Click <Set> to synchronize the internal clock with the displayed time in the "Manual Set Time" item.

• You can also enter the time in the "Manually Set Time" item.



Setting date and time (Automatic setting)

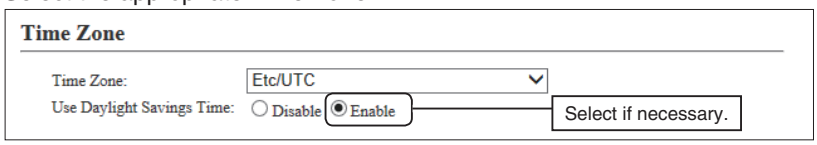
The Automatic Clock Synchronize function automatically synchronizes the internal clock with the time management server (NTP).

• To use this function, an internet connection and default gateway settings are necessary.

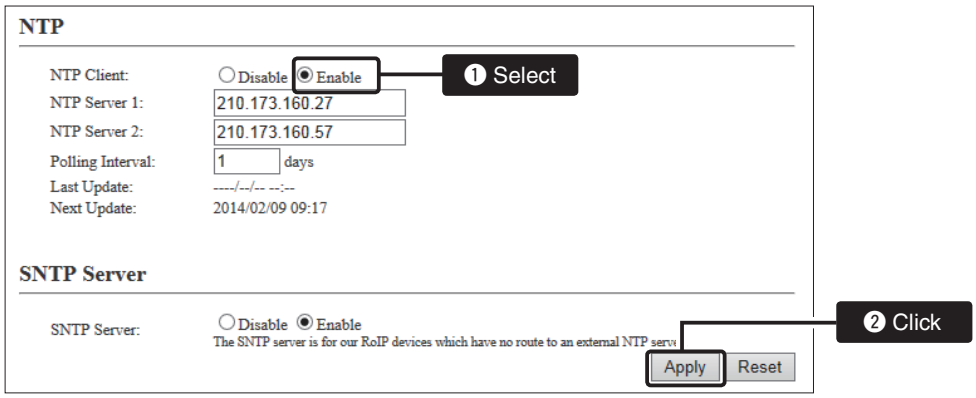
1 Click the [Management] menu, then [Date and Time].

• The [Date and Time] screen appears.

2 Select the appropriate Time Zone.



3 Select "Enable" in the "NTP Client" item, and then click <Apply>.



Note: The default NTP servers are provided by INTERNET MULTIFEED Co.

3. Using the DHCP function

You can use the DHCP function by following the procedures below.

Setting example

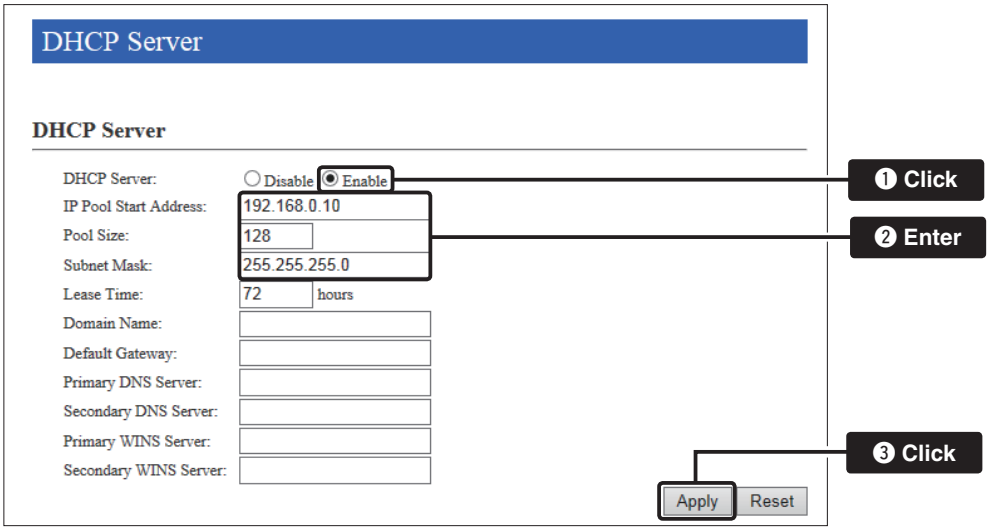
1 Click the [Network Settings] menu, then [DHCP Server].

• The [DHCP Server] screen appears.

2 Select “Enable” in the “DHCP Server” item, and then click <Apply>.

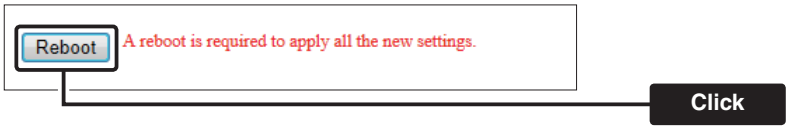
Enter the new IP pool start address and so on, depending on your requirement, and then click <Apply>.

• The factory default of this setting is “Disable.”



3 Click <Reboot>.

• When you are asked to reboot the IP1000C, follow the instructions.



About the DHCP server function

The IP1000C’s DHCP server function is disable as the default.

• Before changing this function to “Enable,” make sure that the addresses of the devices on the network don’t overlap or conflict.

If a DHCP server is already connected to the network, and there is an address conflict, a network problem will occur. See the Troubleshooting section for possible solutions.

About the maximum number of the IP addresses

Up to 128 addresses can be automatically assigned by the DHCP server function.

Another 32 addresses can be manually assigned.

ABOUT THE SETTING SCREEN

Section 4

(Continued to the next page.)

(Continued from the previous page)

(Continued to the next page.)

(Continued from the previous page)

1. About the setting screen

Icom website link

Click the Icom logo to open the Icom website, if your PC is connected to the Internet.

Setting menu

Displays the screen name list on the menu line. When you click the menu line that "▼" is displayed at the left of the title, a list of screen names drops down. Then, you can click to select the desired screen name.

- If you click "TOP," all screen names are displayed or hided.

Setting screen

Displays the settings and values when you click the screen name.

Setting buttons

Save or cancel setting values.

If "A reboot is required to apply all the new settings." is displayed on the screen when you click the [Apply] button, click the [OK] button.

The IP1000C reboots, and the setting items and values are updated.

The following message is displayed on the screen while the IP1000C is rebooting.

Now rebooting.

Wait XX seconds for startup.

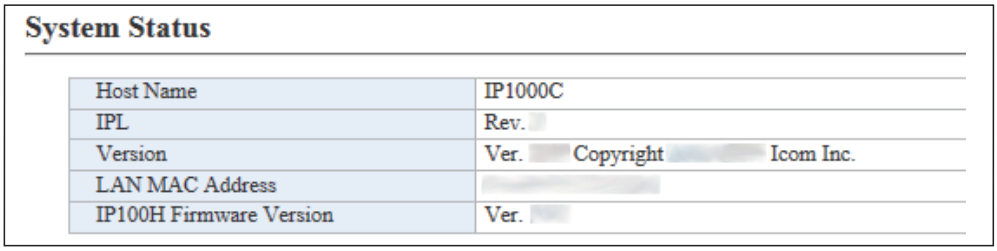
If this page doesn't automatically refresh after rebooting, click [Back].

- If the setting screen does not automatically return, click [Back] after XX seconds have passed from the "Now rebooting." message appears.
- Items and buttons may differ, depending on the settings.

2. [TOP] Menu [TOP]

■System Status

Displays the firmware version and MAC addresses.



(This is only an example.)

- The MAC address is the assigned number peculiar to networking device which it has in each. It is displayed by 12 digits (0090C7XXXXXX).
- The MAC address is also printed on the label on the bottom of the IP1000C.
- The version information of the firmware in every IP100H registered into this IP1000C can be checked on the [Transceiver Status] screen of the [Transceiver Settings] menu (p. 4-27).

■Network Status

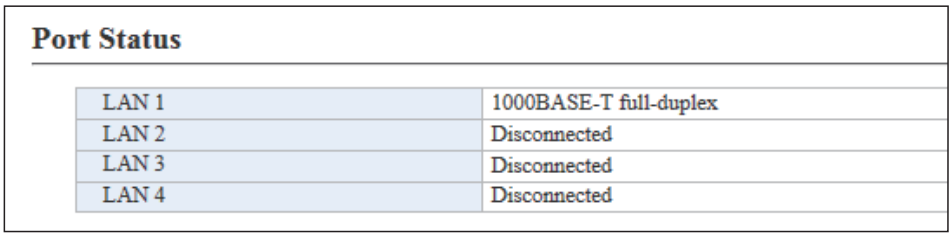
Displays the network information such as IP address.

(This is only an example.)

2. [TOP] Menu (continued) [TOP]

■Port Status

Displays the communication rate and mode for each port.



(This is only an example.)

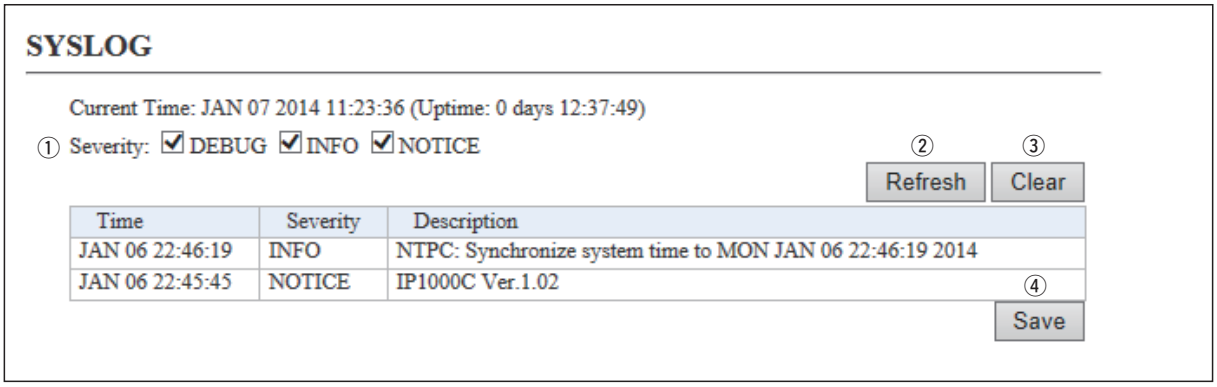
NOTES

- The IP1000C'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 to always enable auto-negotiation on the peer devices. If a peer device is fixed to full-duplex mode, auto-negotiation enabled devices (including the IP1000C) may generally take it for half-duplex mode and cannot communicate properly.

3. [Information] Menu

■SYSLOG

Displays the log information. The latest 500 log entries are displayed.



(This is only an example.)

①**Severity**..... Select the log information to display.
- Enter a check mark and click <Refresh> to display the log entries.
- Remove the check mark and click <Refresh> to hide the entries.

(Default: ☑ DEBUG ☑ INFO ☑ NOTICE)

Note: The selection is not stored, and reset when you leave this screen.

②**<Refresh>**..... Click to refresh the log screen.

③**<Clear>** ..... Click to delete all log entries.

Note: All log entries are also deleted when the IP1000C is turned OFF or initialized.

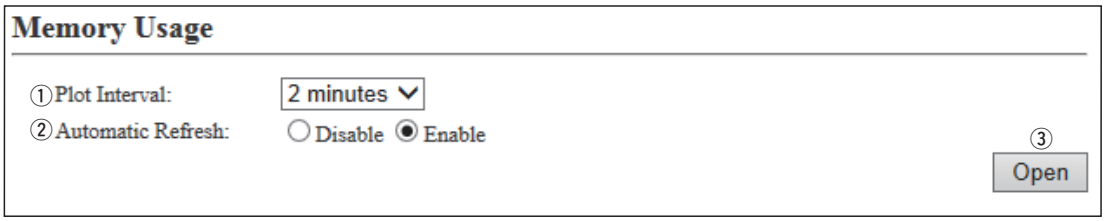
④**<Save>** ..... Click to save the log to a PC with a text file (extension: “txt”).
- Click this button, and then select a folder to save the file.

3. [Information] Menu (continued)

■Memory Usage

Displays a statistical graph of the memory usage.

• These setting items are reset when you leave this screen.



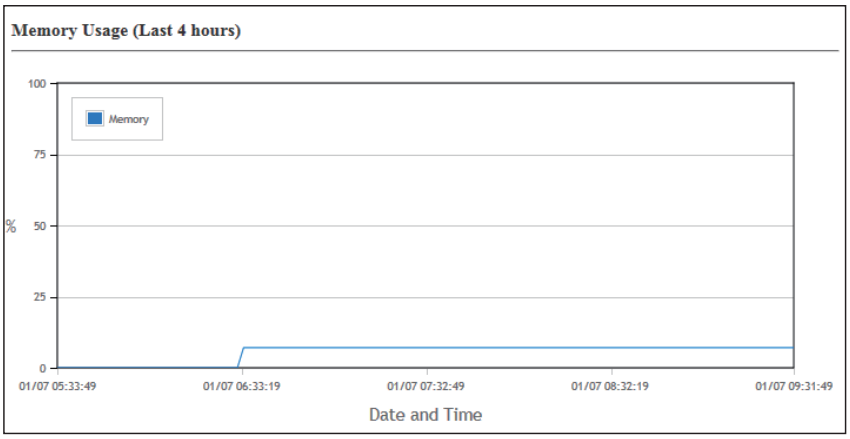
①Plot Interval ..... Select the plot interval. (Default: 2 minutes)

②Automatic Refresh..... Select “Enable” to periodically refresh the graph. (Default: Enable)

• The graph is refreshed according to the set interval in [Plot Interval] (①).

③<Open> ..... Click to open the memory usage graph window.

• The X axis represents the date and time, and the Y axis represents the usage (%).



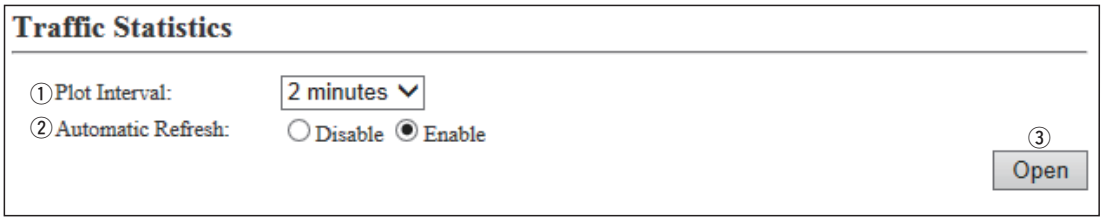
(This is only an example.)

3. [Information] Menu (continued)

■Traffic Statistics

Displays the traffic graph for LAN port.

• These setting items are reset when you leave this screen.



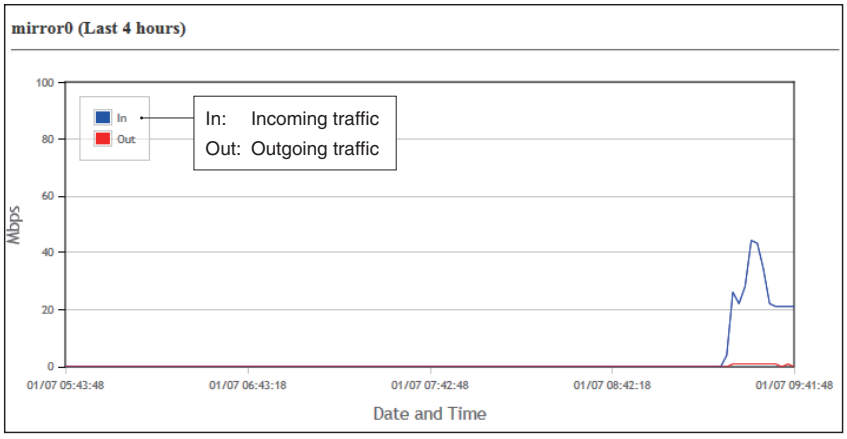
①Plot Interval ..... Select the plot interval. (Default: 2 minutes)

②Automatic Refresh..... Select “Enable” to periodically refresh the graph. (Default: Enable)

• The graph is refreshed according to the set interval in [Plot Interval] (①).

③<Open> ..... Click to open the traffic graph window.

• The X axis represents the date and time, and the Y axis represents the traffic (Mbps).

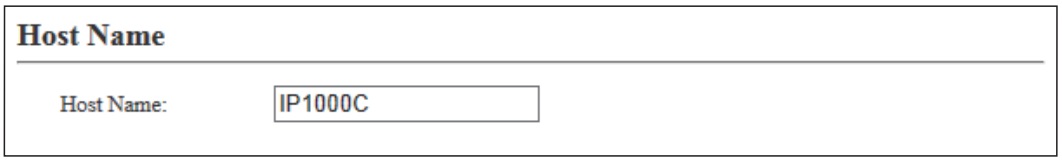


(This is only an example.)

4. [Network Settings] Menu

■Host Name

Enter the host name.



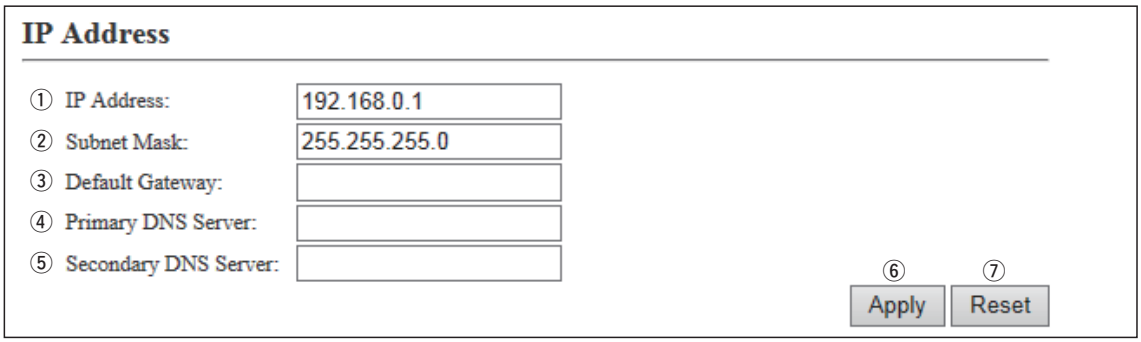
Host Name ..... Enter the host name. (Up to 31 characters) (Default: IP1000C)

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

4. [Network Settings] Menu (continued)

■IP Address

Enter the IP1000C's IP Address.



①IP Address ..... Enter the LAN IP address according to your network environment.
(Default: 192.168.0.1)

Note: 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. (p. 4-12)

②Subnet Mask ..... Enter the subnet mask according to your network environment.
(Default: 255.255.255.0)

③Default Gateway ..... If a default gateway device (such as a router) is connected to the LAN port, enter the device's IP address.

④Primary DNS server ..... Enter the DNS server address specified by your service provider.
If you have two DNS server addresses, enter the primary address.

⑤Secondary DNS server ... Enter the secondary DNS server address, if you have two DNS server addresses.

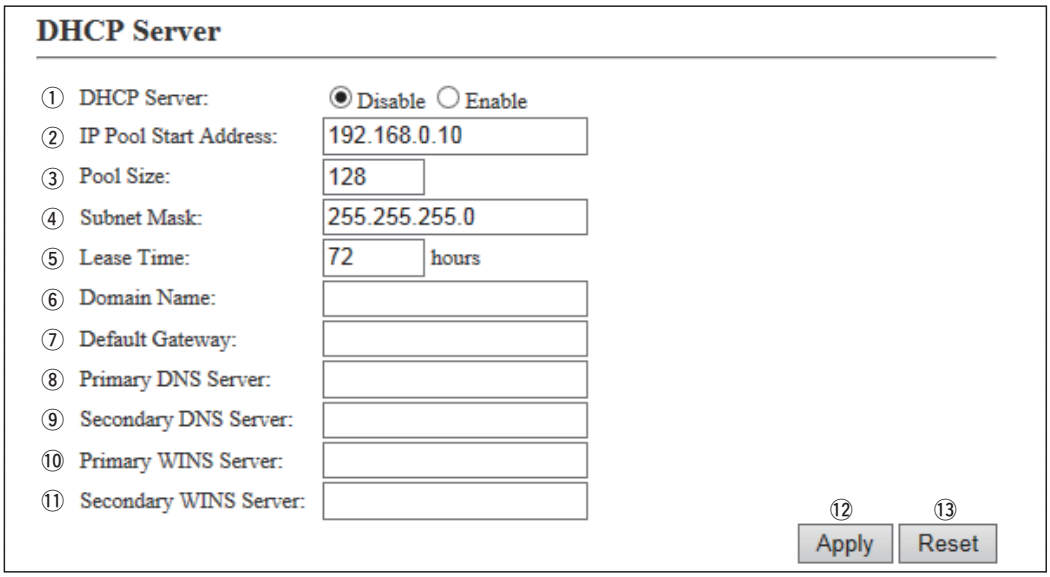
⑥<Apply> ..... Click to apply the entries.

⑦<Reset>..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

4. [Network Settings] Menu (continued)

■DHCP Server

Configure the DHCP Server function.



①DHCP Server ..... Select “Enable” to use the DHCP Server function. (Default: Disable)

②IP Pool Start Address ... Enter the IP pool start address. (Default: 192.168.0.10)

③Pool Size ..... Enter the size of IP pool. (Default: 128)

Note: Up to 128 addresses can be automatically assigned by the DHCP server function. Another 32 addresses can be manually assigned.

④Subnet Mask ..... Enter the subnet mask for the IP pool start address set in the “IP Pool Start Address” item (②). (Default: 255.255.255.0)

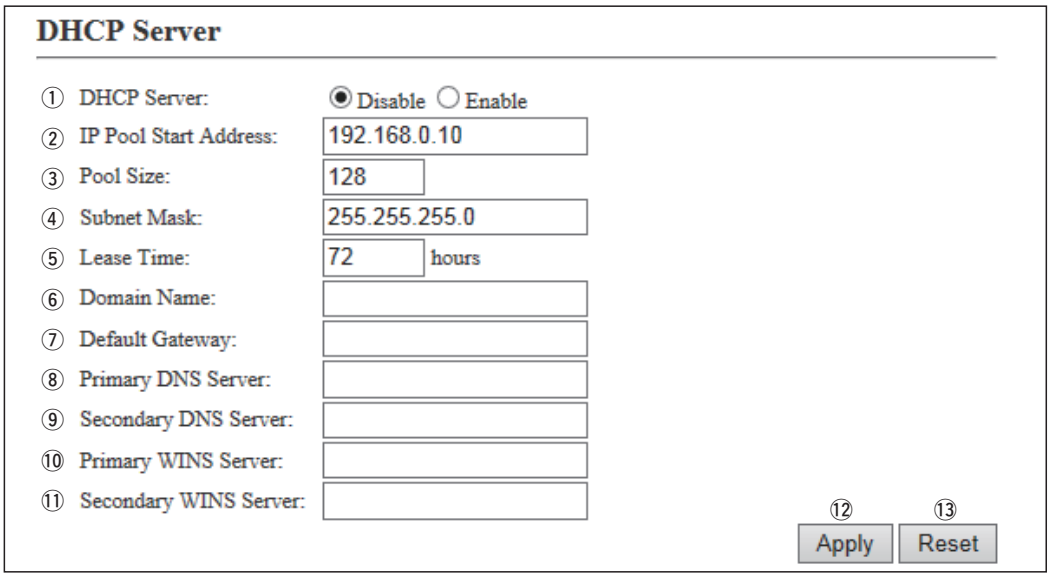
⑤Lease Time ..... Enter the lease time period. (Default: 72)

• Range: 1–9999 (hours)

⑥Domain Name ..... Enter the network address domain name. (Up to 127 characters)

4. [Network Settings] Menu

■DHCP Server (continued)



⑦Default Gateway ..... Enter the default gateway IP address.

⑧Primary DNS server ..... Enter the DNS server address specified by your service provider.
If you have two DNS server addresses, enter the primary address.

⑨Secondary DNS server ... Enter the secondary DNS server address, if you have two DNS server addresses.

⑩Primary WINS Server ... Enter the WINS server's primary address, if you have two WINS server addresses, enter the primary address.

⑪Secondary WINS Server Enter the WINS server's secondary address, if you have two WINS server addresses.

⑫<Apply> ..... Click to apply the entries.

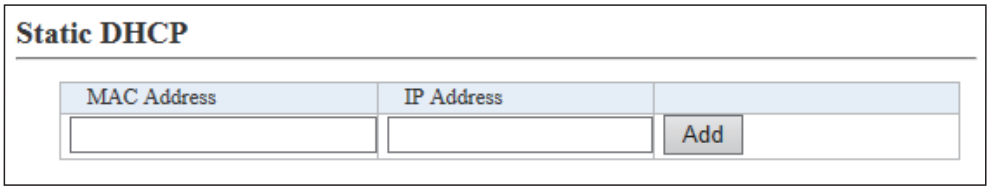
⑬<Reset>..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

4. [Network Settings] Menu (continued)

■Static DHCP

Enter MAC and static IP addresses to the DHCP server.

• You can enter up to 32 entries.

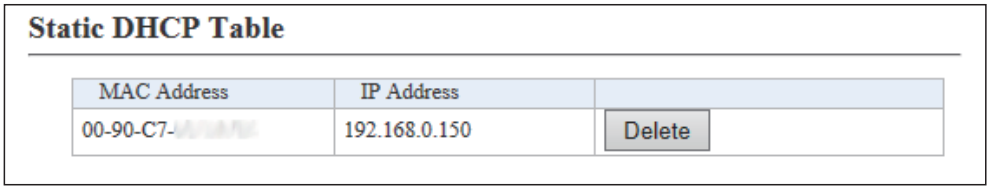


Static DHCP ..... Enter the MAC and IP addresses, and then click <Add>.

Note: Make sure that the addresses of the devices on the network don't overlap or conflict. If a DHCP server is already connected to the network, and there is an address conflict, a network problem will occur. See the Troubleshooting section for possible solutions.

■Static DHCP Table

Displays the static DHCP entries.



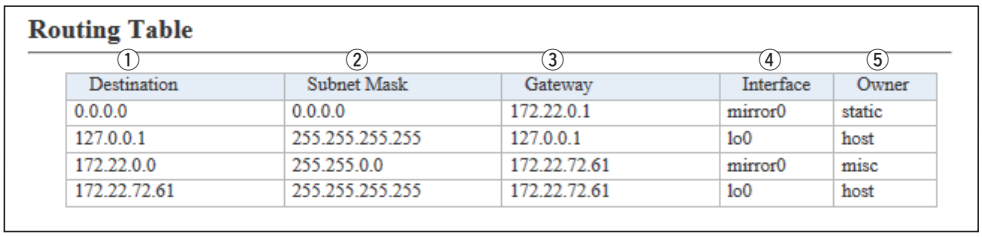
(This is only an example.)

<Delete> ..... Click <Delete> to remove the entry.

4. [Network Settings] Menu (continued)

■Routing Table

Displays the routing information.



Routing Table

① Destination	② Subnet Mask	③ Gateway	④ Interface	⑤ Owner
0.0.0.0	0.0.0.0	172.22.0.1	mirror0	static
127.0.0.1	255.255.255.255	127.0.0.1	lo0	host
172.22.0.0	255.255.0.0	172.22.72.61	mirror0	misc
172.22.72.61	255.255.255.255	172.22.72.61	lo0	host

①**Destination** ..... The network address of the route's destination network.

②**Subnet Mask** ..... The subnet mask of the route's destination network.

③**Gateway** ..... The route’s gateway address.

④**Interface** ..... The routing interface.
- **lo0:** Loop back interface
- **mirror0:** LAN

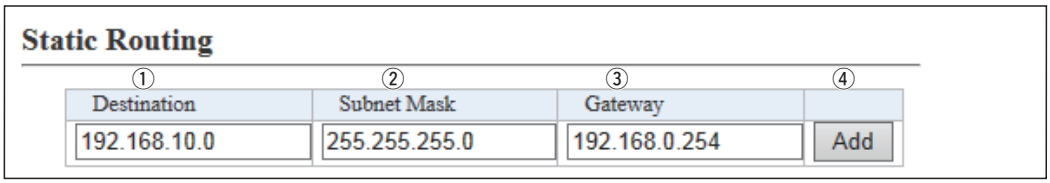
⑤**Owner** ..... The type of routing path.
- **static:** Static route
- **misc:** Broadcast frame
- **host:** Host route

4. [Network Settings] Menu (continued)

■Static Routing

Enter the static routing destinations.

• You can enter up to 32 entries.



(This is only an example.)

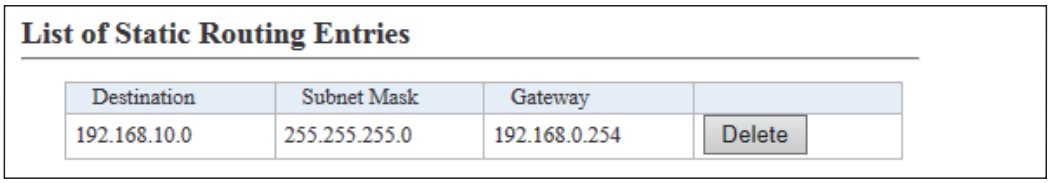
①**Destination** ..... The network address of the route's destination network.

②**Subnet Mask** ..... The subnet mask of the route's destination network.

③**Gateway** ..... The route's gateway address.

④**<Add>** ..... Click to add the entry.

■List of Static Routing Entries



(This is only an example.)

<Delete> ..... Click <Delete> to remove the entry.

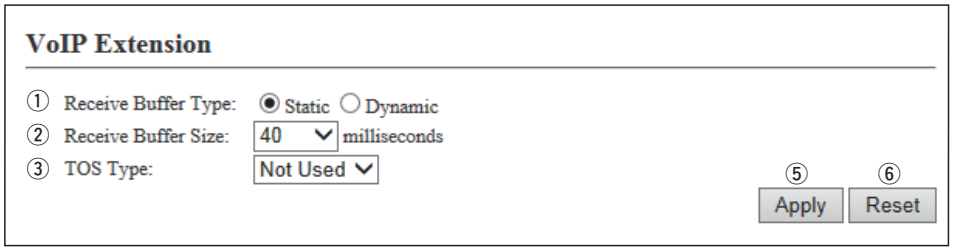
5. [RoIP Settings] Menu

■VoIP Extension

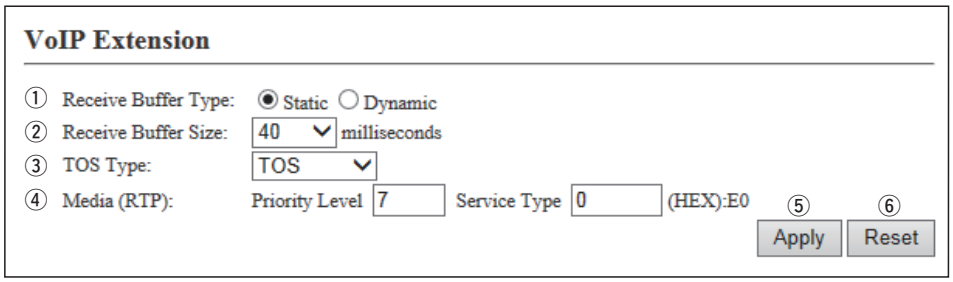
Set the V/RoIP details.

• The items on the [RoIP Settings] screen differ depending on the TOS type setting.

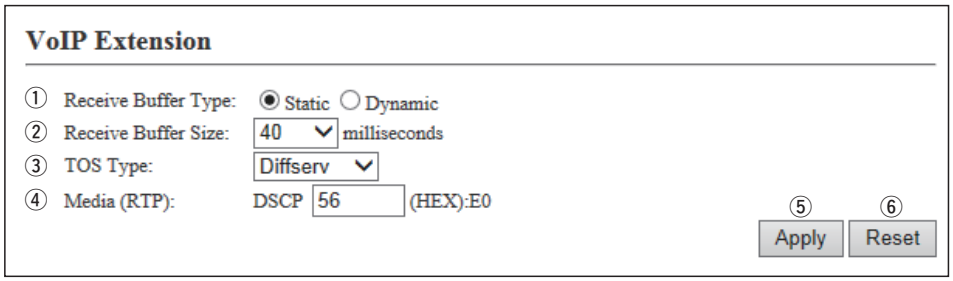
TOS Type: Not used



TOS Type: TOS



TOS Type: Diffserv



(These are examples when the “Receive Buffer Type” item is set to “Static.”)

①Receive Buffer Type …… Select the buffer type to reduce that the received audio breaks up. (Default: Dynamic)

• Static

The buffer time is set the “Receive Buffer Size” item below.

• Dynamic

The buffer time is changed, depending on the audio fluctuation.

②Receive Buffer Size …… Select the buffer time to keep the audio from breaking up. (Default: 40)

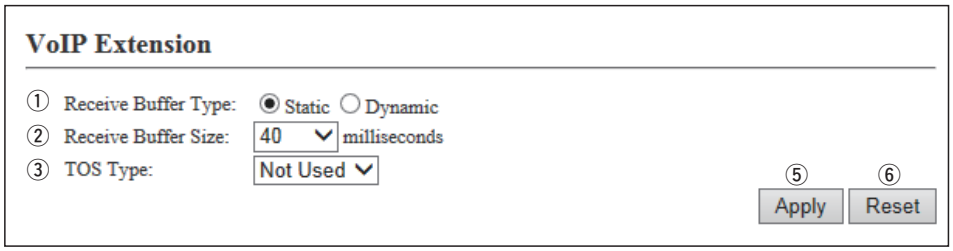
Shorter value improves the delay, but it may frequently break the audio signal.

• This item is displayed when the “Receive Buffer Type” item is set to “Static.”

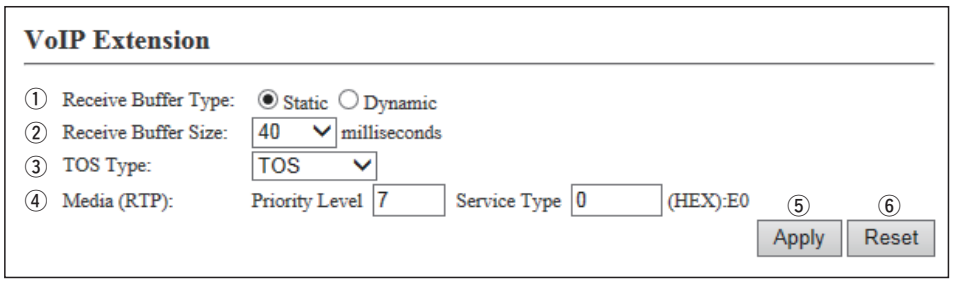
5. [RoIP Settings] Menu (continued)

■VoIP Extension (continued)

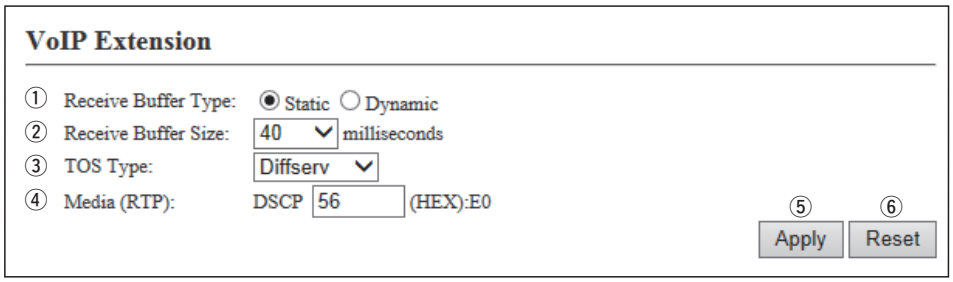
TOS Type: Not used



TOS Type: TOS



TOS Type: Diffserv



③TOS type ..... Select the TOS (Type-Of Service) format. (Default: TOS)

- **Not used**
  Does not use the TOS function.

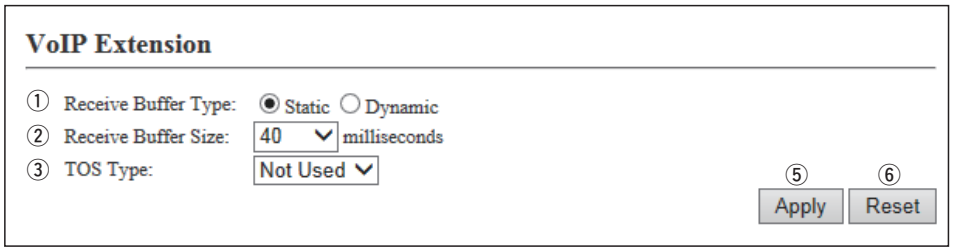
- **TOS**
  Sends the VoIP packets to TOS field (8 bits) in the IP header using the TOS format.

- **Diffserv**
  Sends the VoIP packets to TOS field (8 bits) in the IP header using the Diffserv (Differentiated Service) format.

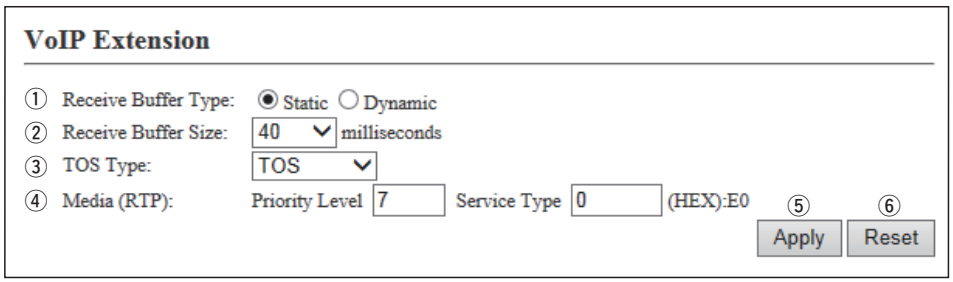
5. [RoIP Settings] Menu (continued)

■VoIP Extension (continued)

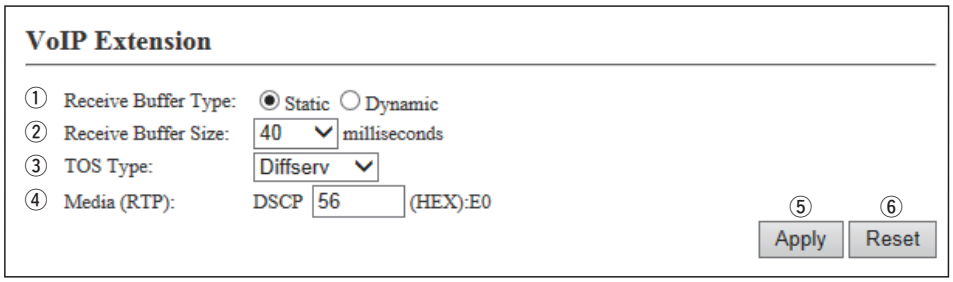
TOS Type: Not used



TOS Type: TOS



TOS Type: Diffserv



④Media (RTP) ..... Select the Priority level and Service type of the sent VoIP packets.

- **Priority Level**
  Set the TOS priority level between 0 to 7 in decimal. (Default: 7)
- **Service Type**
  Set the TOS service type code between 0 to 15 in decimal. (Default: 0)
- **DSCP**
  Set the DSCP (Differentiated Services Code Point) code between 0 to 63 in decimal. (Default: 56)

⑤<Apply> ..... Click to apply the entries.

⑥<Reset>..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

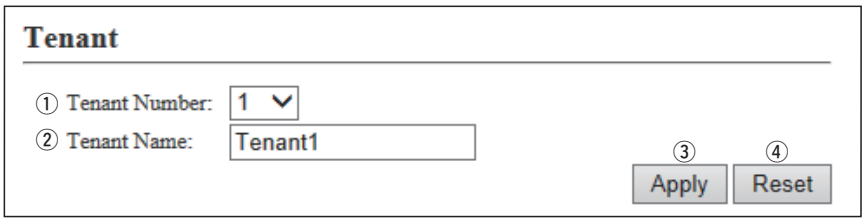
6. [Tenant Settings] Menu

[Tenant Settings]–[Tenant]

■Tenant

The tenant divides the IP100Hs or IP100FSs which belong to this IP1000C for a system management purpose.
(Example: Security company/Commissioned company)

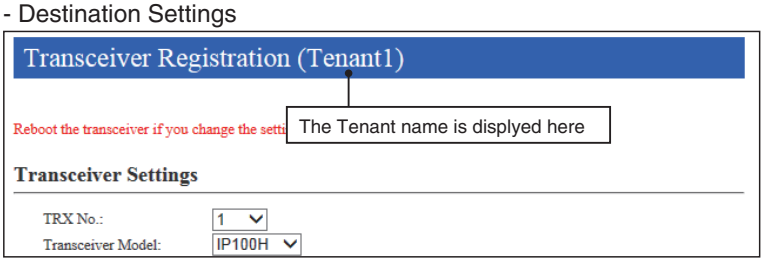
• The terminals cannot communicate among different tenants.



①Tenant Number ..... Select the tenant number that is registered or edited. (Default: 1)

②Tenant Name ..... Enter the tenant name. (Up to 31 characters) (Default: Tenant1)

• The tenant name is displayed on the following menus.
- RoIP Server Settings
- Transceiver Settings
- Common Settings (Except Wireless LAN menu)
- Destination Settings



(This is only an example.)

③<Apply> ..... Click to apply the entries.

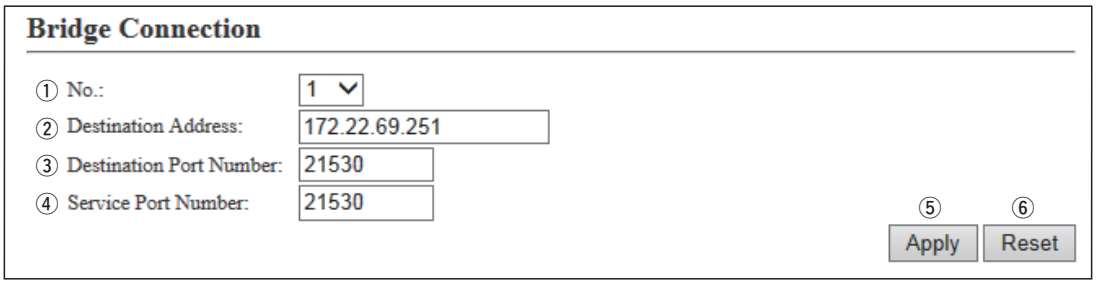
④<Reset>..... Click to restore the settings.

• You cannot restore after clicking <Apply>.

7. [RoIP Server Settings] Menu

■Bridge Connection

Set the Bridge connection with a VE-PG3.



(This is only an example.)

①No. ..... Select the number that is registered to a device.
- Up to 20 devices can be registered.

②Destination Address ..... Enter the destination device's IP address or domain name. (Up to 63 characters)

③Destination Port Number Enter the destination VE-PG3's port number.
Range: "2" to "65534" (only even numbers)
- The set port number (RTP) and the port number +1 (RTCP) are used for the communication.

④Service Port Number..... Enter the port number for receiving audio signals.
Range: "2" to "65534" (only even numbers)
- The set port number (RTP) and the port number +1 (RTCP) are used for the communication.
- This number is also used for the caller port number.
- Do not set the port number which has already been used by another connection setting.

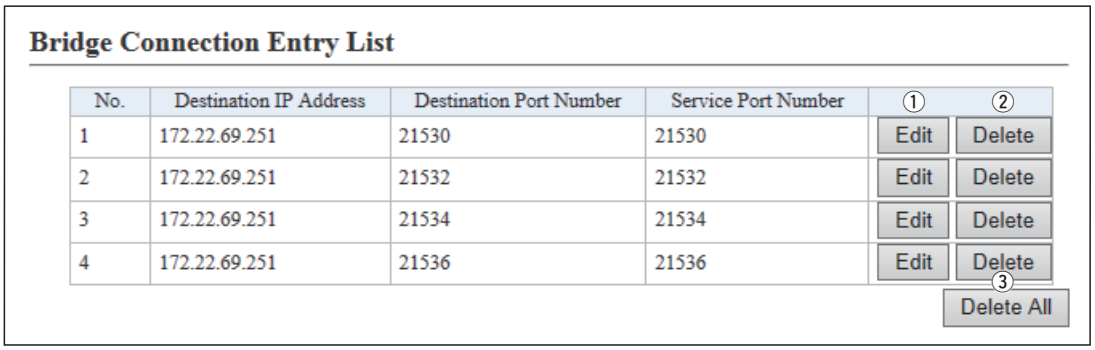
⑤<Apply> ..... Click to apply the entries.

⑥<Reset>..... Click to restore the settings.
- You cannot restore after clicking <Apply>.

7. [RoIP Server Settings] Menu (continued)

■Bridge Connection Entry List

The list of the registered device for the bridge connection.



(This is only an example.)

①**<Edit>** ..... Click to edit the setting on the [Bridge Connection] field.

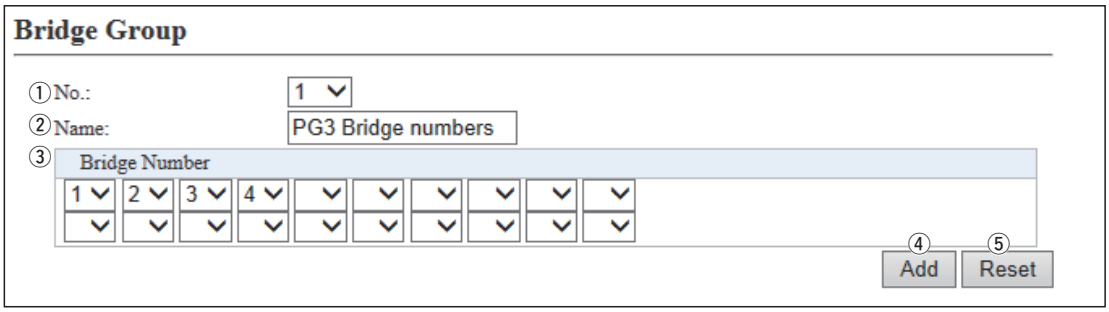
②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

7. [RoIP Server Settings] Menu (continued)

■Bridge Group

If the courses of the bridge connection to the VE-PG3s are made into a group, the unused course in the group can be selected to dispatch.



(This is only an example.)

①**No.** ..... Select the number that is registered to a group.
• Up to 20 groups can be registered.

②**Name** ..... Enter the group name. (Up to 31 characters)

③**Bridge Number** ..... Select the bridge to register to the group.

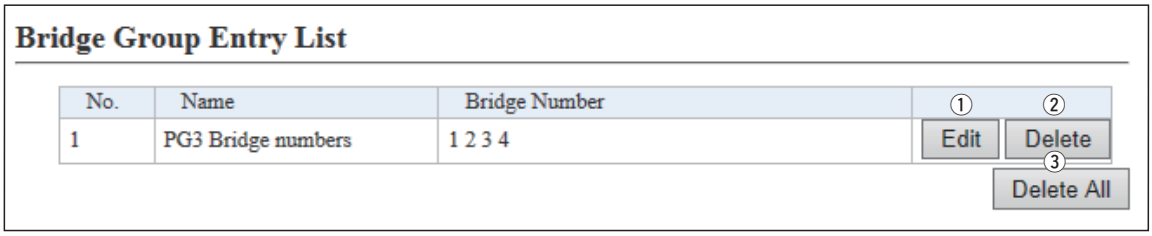
④**<Add>** ..... Click to add the entries.

⑤**<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Add>.

7. [RoIP Server Settings] Menu (continued)

■Bridge Group Entry List

The list of the registered bridge group.



(This is only an example.)

①**<Edit>** ..... Click to edit the setting on the [Bridge Group] field.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

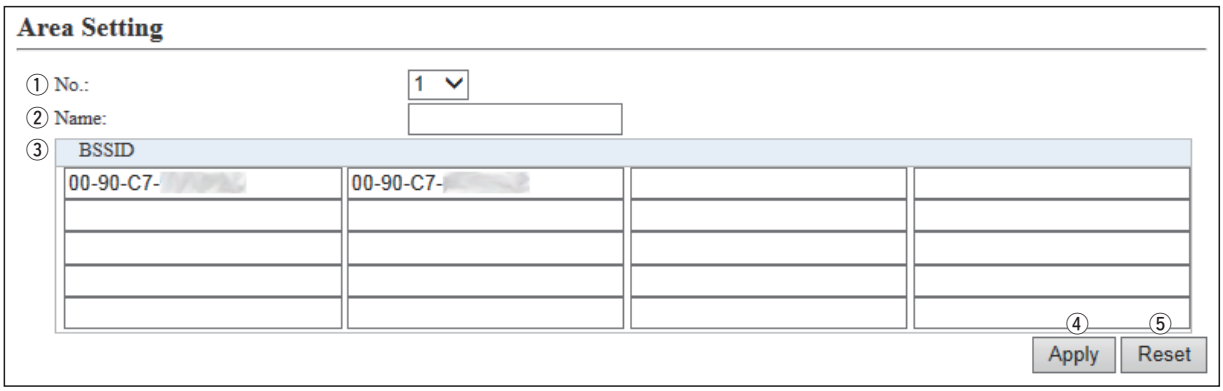
③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

7. [RoIP Server Settings] Menu (continued)

■Area Setting

The Area call function limits the communication with the devices in the specified area.
When an IP100H makes an All call or Group call using the Area call function, it calls other IP100Hs or IP100FSs in the same area.

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



(This is only an example.)

①**No.** ..... Select the number that is registered to the Area call.
• Up to 20 calls can be registered.

②**Name** ..... Enter the area name. (Up to 31 characters)

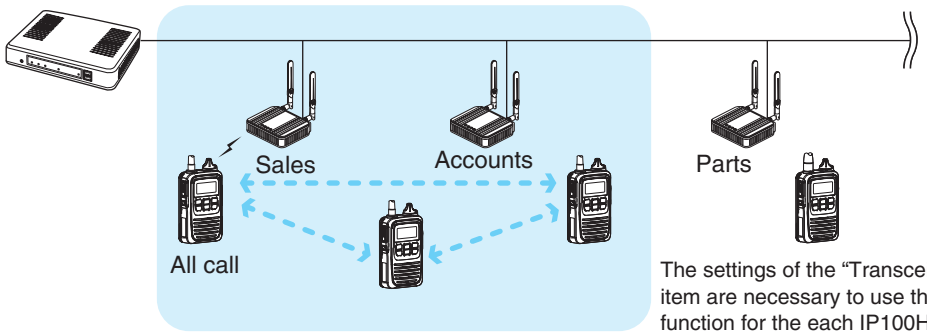
③**BSSID** ..... Enter the 12 digit BSSID of the wireless access point in the area. (Example: Sales and Accounts)
• Up to 20 access points can be registered to the area.

④**<Apply>** ..... Click to apply the entries.

⑤**<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

The IP100H makes All call in the area

Example: The wireless access points “Sales” and “Accounts” are registered in the same area. The access point “Parts” is registered in the different area.
In that case, two IP100Hs in the same area receive the call, but the IP100H in the different area will not receive it.

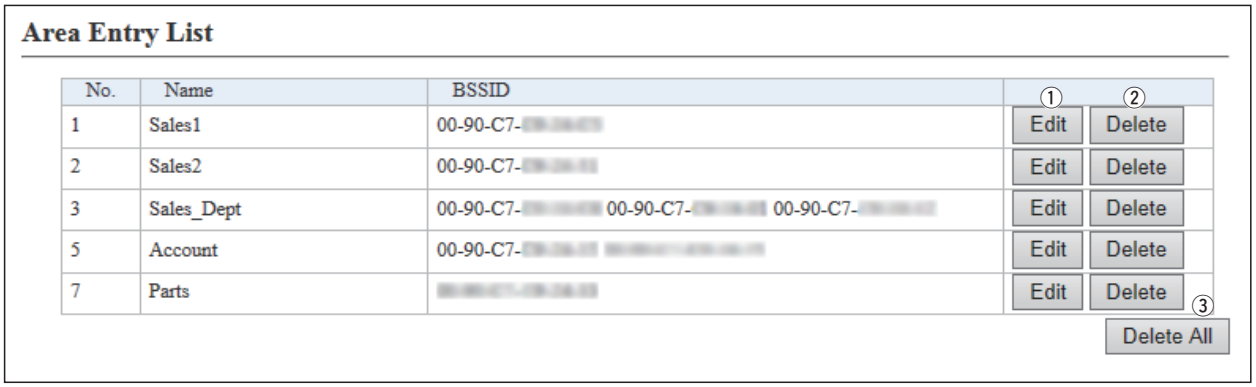


The settings of the “Transceiver Settings” item are necessary to use the Area call function for the each IP100H.

7. [RoIP Server Settings] Menu (continued)

■Area Entry List

The list of the registered Area setting.



(This is only an example.)

①**<Edit>** ..... Click to edit the setting on the [Area Setting] field.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

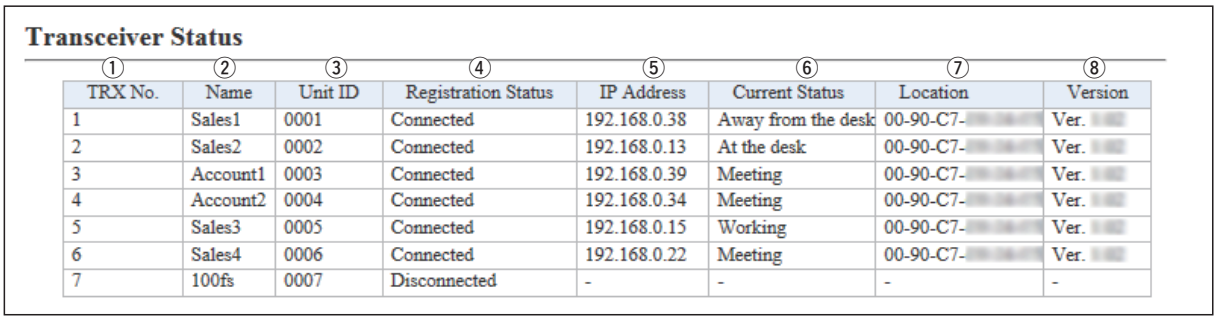
③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Status]

■Transceiver Status

Displays the registered IP100Hs' or IP100FSs' information such as the IP Address, Current Status and Location.



Transceiver Status

① TRX No.	② Name	③ Unit ID	④ Registration Status	⑤ IP Address	⑥ Current Status	⑦ Location	⑧ Version
1	Sales1	0001	Connected	192.168.0.38	Away from the desk	00-90-C7-	Ver.
2	Sales2	0002	Connected	192.168.0.13	At the desk	00-90-C7-	Ver.
3	Account1	0003	Connected	192.168.0.39	Meeting	00-90-C7-	Ver.
4	Account2	0004	Connected	192.168.0.34	Meeting	00-90-C7-	Ver.
5	Sales3	0005	Connected	192.168.0.15	Working	00-90-C7-	Ver.
6	Sales4	0006	Connected	192.168.0.22	Meeting	00-90-C7-	Ver.
7	100fs	0007	Disconnected	-	-	-	-

(This is only an example.)

①TRX No...... Displays the TRX numbers that are registered the "TRX No" item on the [Transceiver Registration] screen.

②Name ..... Displays the Names that are registered the "Name" item on the [Transceiver Registration] screen.

③Unit ID ..... Displays the Unit IDs that are registered the "Unit ID" item on the [Transceiver Registration] screen.

④Registration Status ..... Displays the IP100Hs' or IP100FSs' Registration Status either the "Connected" or "Disconnected."

- If the IP100H is turned OFF or IP100FS's application is not running, displays "Disconnected."

⑤IP Address ..... Displays the IP Addresses of the IP100Hs or IP100FSs.

- While the "Registration Status" displays "Disconnected," "–" is displayed.

⑥Current Status ..... Displays the Current Status of the IP100Hs. (Example: In the meeting)

- If the IP1000C has not received the Current Status from the IP100H, or its Status function is set to OFF, "–" is displayed.
- If you refresh the page on the web browser, the newest status will be displayed.

⑦Location ..... Displays the BSSIDs of the wireless access point that the IP100Hs are connected to.

- While the "Registration Status" displays "Disconnected" or the terminal is IP100FS, "–" is displayed.

⑧Version ..... Displays the version of the IP100Hs or IP100FSs that are registered to the IP1000C.

- While the "Registration Status" displays "Disconnected," "–" is displayed.

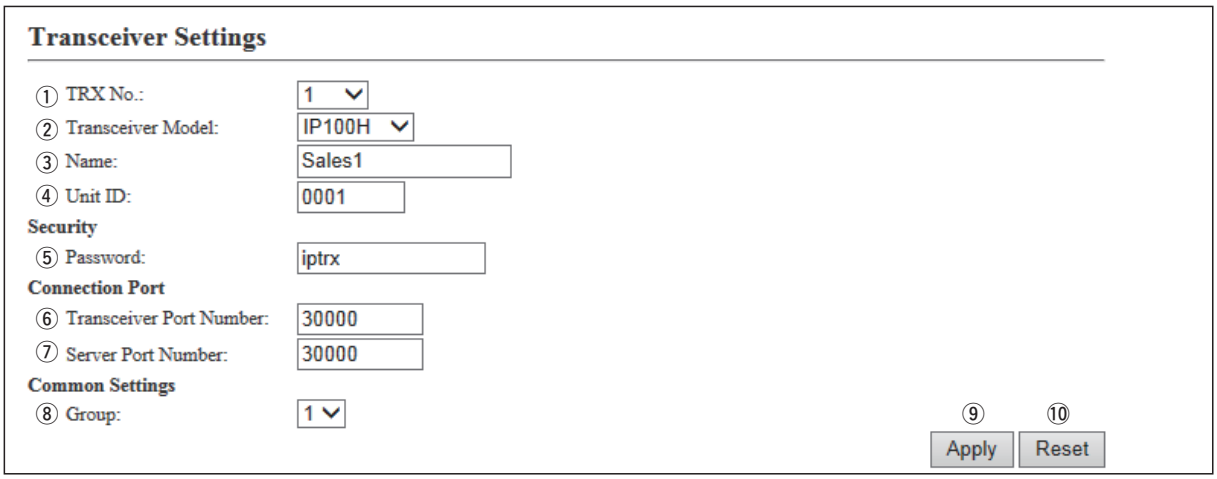
8. [Transceiver Settings] Menu (continued)

[Transceiver Settings]–[Transceiver Registration]

■Transceiver Settings

Registers or edits the IP100H or IP100FS settings.

• After the setting is completed, you must reboot the IP100H.



(This is only an example.)

①TRX No...... Selects the number that the IP100H or IP100FS is registered to.
Up to 100 terminals can be registered.
• Depending on the IP1000C versions, up to 20 terminals can be registered.

②Transceiver Model..... Select either the IP100H or IP100FS. (Default: IP100H)

③Name..... Enter the transceiver name. (Up to 31 characters)

④Unit ID..... Enter the 4 digit individual number between 0001 to 9999. (Default: 0001)

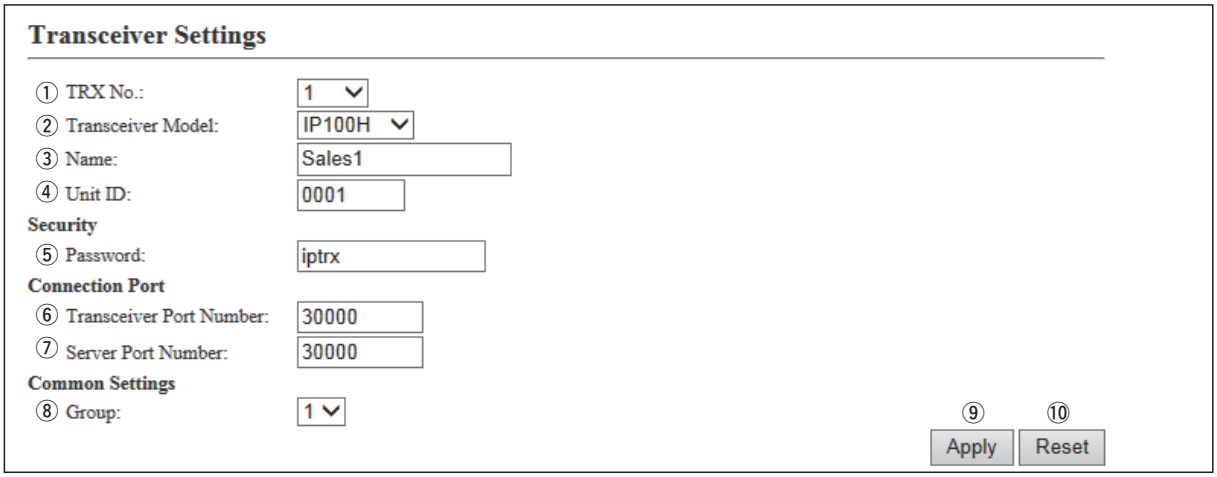
⑤Password..... Enter the password to access to the IP1000C. (Default: iptrx)
• Up to 12 characters, lower or upper letters, numbers, symbols can be used.

⑥Transceiver Port Number Enter the port number that the IP100H uses to communicate with the IP1000C. (UDP port)
• The set port number (RTP) and the port number +1 (RTCP) are used for the communication.
• We recommend to use default port number, if it is not problem.
• 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. 100 (30198)
• Setting range: Even numbers between 2 and 59998.
(Some numbers may not be acceptable.)
• Do not set the port number which has already been used by another connection setting.
• When the “Transceiver Model” item (②) is selected “IP100FS,” this item is not displayed.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Registration]

■ Transceiver Settings (continued)



(This is only an example.)

⑦Server Port Number ..... Enter the port number that the IP1000C uses to communicate with the IP100H or IP100FS. (UDP port)

- The set port number (RTP) and the port number +1 (RTCP) are used for the communication.
- We recommend to use default port number, if it is not problem.
- 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. 100 (30198)
- Setting range: Even numbers between 2 and 65534.
  (Some numbers may not be acceptable.)
- Do not set the port number which has already been used by another connection setting.

⑧Group ..... Select the group number that the IP100H or IP100FS belongs to. (Default: 1)

- 1 to 100 are selectable.
- Set the Group setting in the [Common Settings] menu, such as ID list, message or Receive notification tone settings.

⑨<Apply> ..... Click to apply the entries.

⑩<Reset>..... Click to restore the settings.

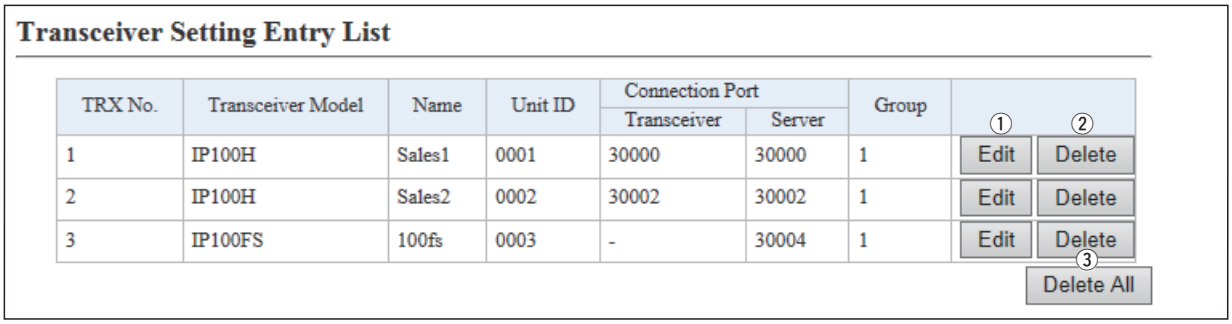
- You cannot restore after clicking <Apply>.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Registration]

■Transceiver Setting Entry List

The list of the registered IP100Hs or IP100FSs.



(This is only an example.)

①**<Edit>** ..... Click to edit the setting on the [Transceiver Setting] field.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

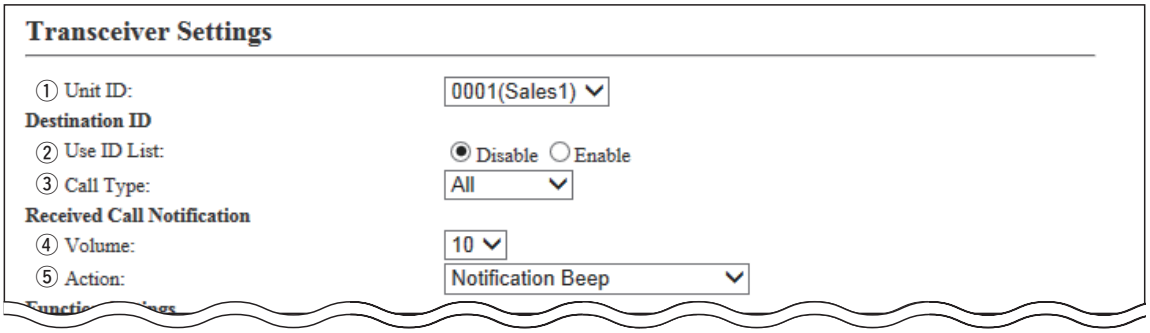
③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

8. [Transceiver Settings] Menu (continued)

■Transceiver Settings

Individually assign the functions or set the receive notification tone to the registered IP100H.

• After the setting is completed, you must reboot the IP100H.



(This is only an example.)

①Unit ID ..... Select the Individual number (Name) that the IP100H is edited.

• Only the individual numbers for the IP100H are selectable.
The individual number that the “Transceiver Model” item on the [Transceiver Registration] screen is set to “IP100FS,” cannot be selected.

②Use ID List ..... Select whether the IP100H uses the ID list or not. (Default: Disable)

• **Disable**

When you push [Address] on the IP100H, nothing changes.

• Even “Disable” is selected, the IP100H displays a received ID in the ID list.

• **Enable**

When you push [Address] on the IP100H, the Call Type will change.

(Address) key

• Select the All or ID number (1 to 50) that the IP100H displays after power ON.

• The ID list is select the Common Setting screen.

③Call Type ..... When the “Use ID List” item is set to “Disable,” set the Call type and destination ID. (Default: All)

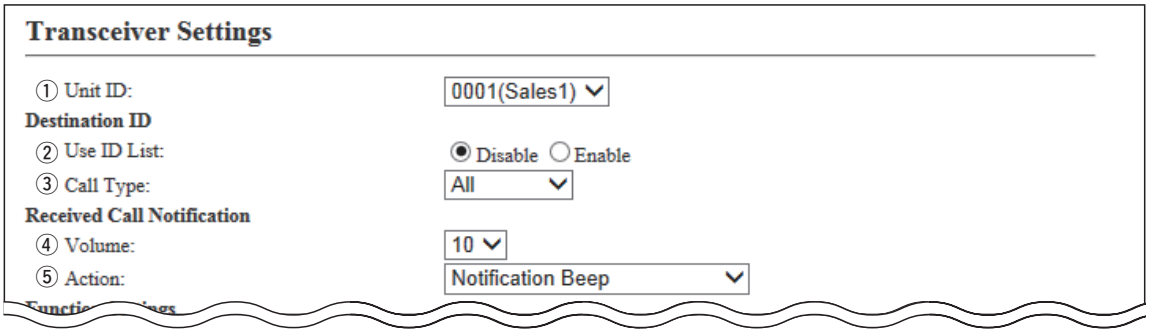
• If “Individual” or “Group” is selected, enter the 4 digit destination ID in the “Destination ID” item.

• When the “User ID List” item (②) is selected “Enable,” this item is not displayed.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

④Volume ..... Set the beep level when the IP100H receives a Call or message to between 0 and 32. (Default: 10)

- When this setting set to "0," the notification beep becomes OFF.
- The notification beep is individually set for the Call type or message in the "Receive Notification Tone" item on the [Common Settings] screen.

⑤Action ..... Set the action when the IP100H receives a Call or message to between "Notification Beep," "Vibration" and "Notification Beep + Vibration." (Default: Notification Beep)

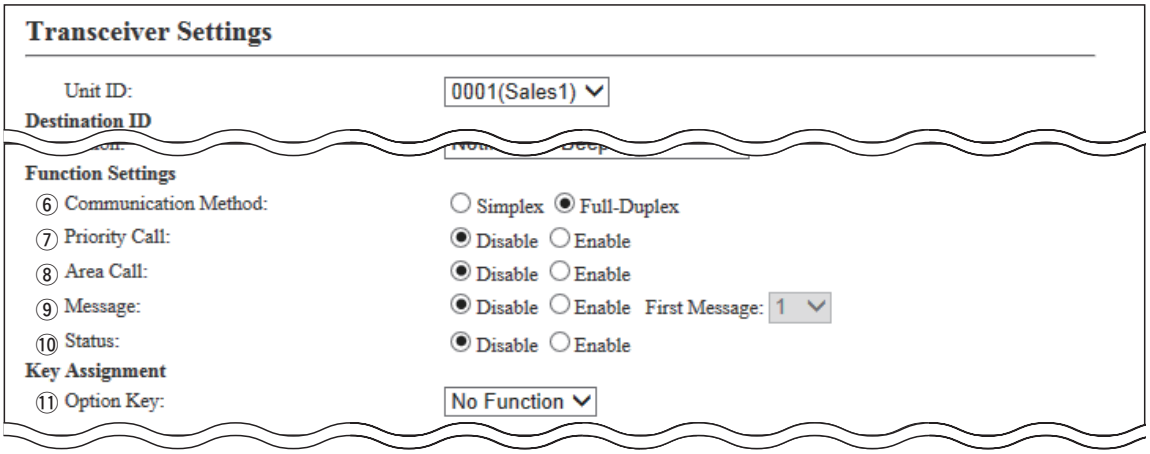
- **Notification Beep**
  When the IP100H receives a Call or message, the specified Notification beep sounds depending on the Call or message.
  The notification beep is set in the "Receive Notification Tone" item on the [Common Settings] screen.

- **Vibration**
  When the IP100H receives a Call or message, it vibrates for notification.

- **Notification Beep + Vibration**
  When the IP100H receives a Call or message, the Notification beep sounds and it vibrates for notification.

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

⑥Communication Method Select the communication method that the IP100H uses.

(Default: Full-Duplex)

• Simplex

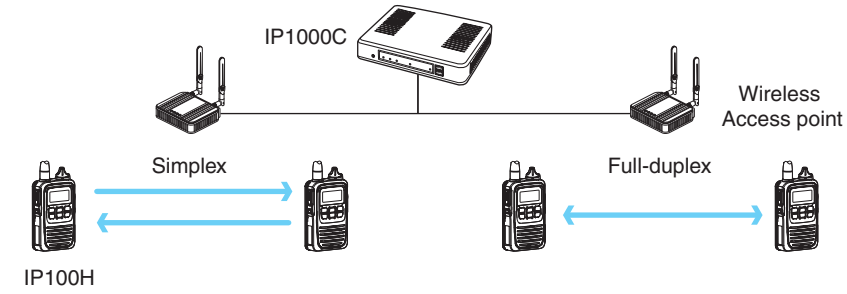
Toggles the transmission (Talker) and reception (Listener) by turns for communication.

• Full-duplex

Operates the transmission and reception simultaneously like a telephone.

• When connecting the optional microphone to the IP100H, you can operate the IP100H like a telephone.

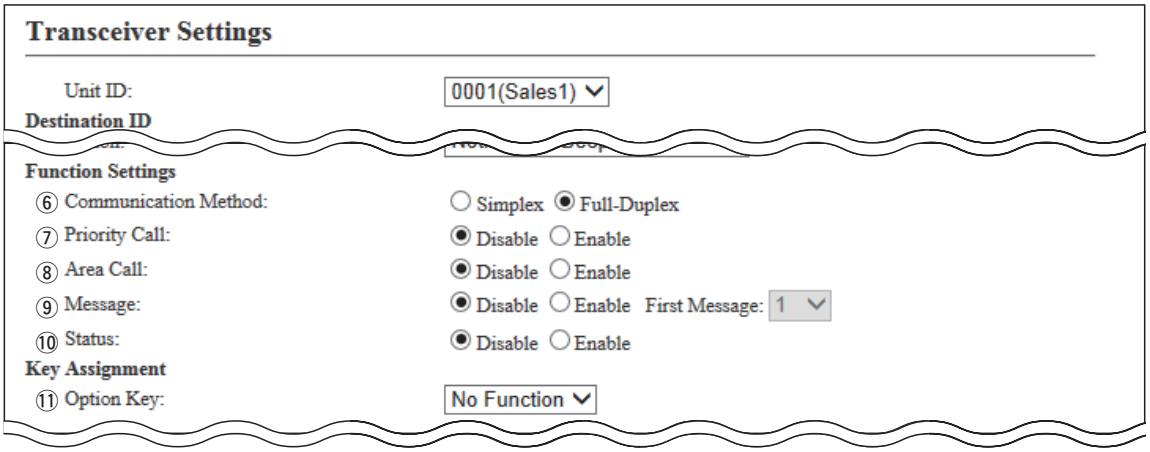
Simplex and Full-duplex



8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

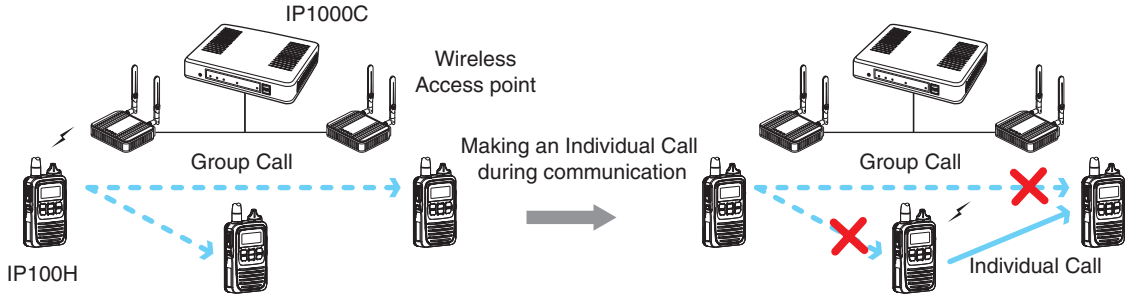
⑦**Priority Call** ..... Select whether the IP100H uses the Priority Call or not. (Default: Disable)

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

Priority level	Call type	Priority Call	Remarks
High	Telephone	—	For telephone communication
↑	All Call	Enable	Includes the Area Call or calling from an IP100FS
	Individual Call	Enable	Includes from an IP100FS
	Group Call	Enable	Includes the Area Call or calling from an IP100FS
	All Call	Disable	Includes the Area Call
	Individual Call	—	
Low	Group Call	Disable	Includes the Area Call

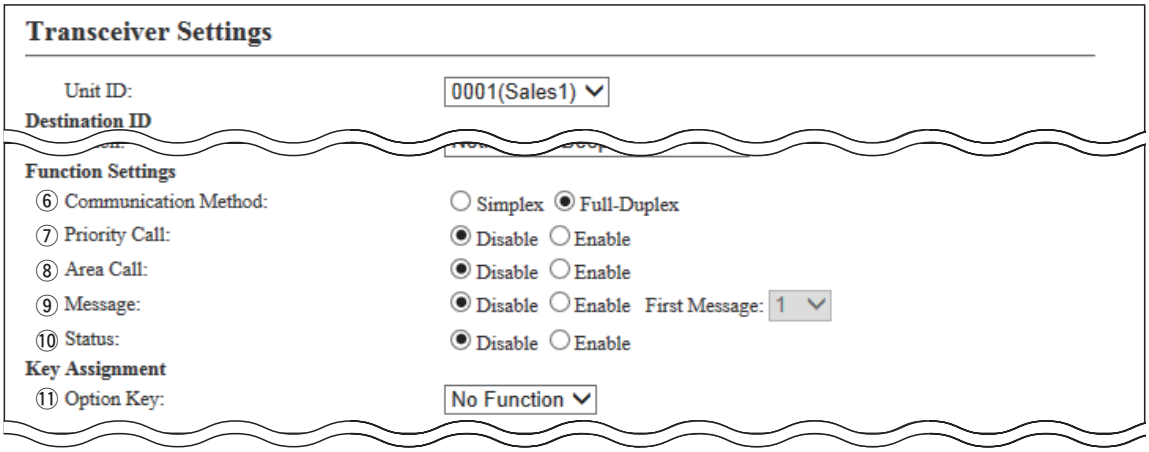
- The priority is given to the first call between calls with the same priority level.
- The reply call follows the priority level of the talk side.

Change the target during communication with the Priority Call function enabled



8. [Transceiver Settings] Menu

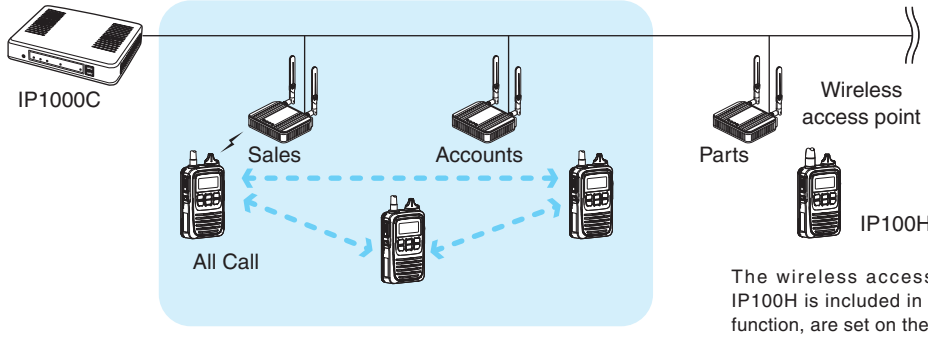
■ Transceiver Settings (continued)



(This is only an example.)

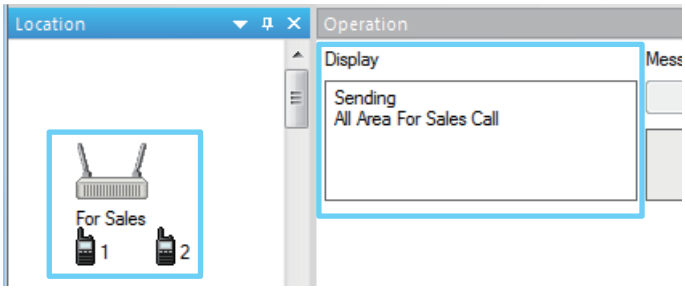
⑧Area Call ..... Select whether the IP100H uses the Area Call or not. (Default: Disable)
When the IP100H calls All Call or Group Call using the Area Call function, it calls only other IP100Hs or IP100FSs in the same area that it connects to the wireless access point.

IP100H makes an All Call with the Area Call function



The wireless access points that the IP100H 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)

IP100FS calls the All Call with the Area Call function

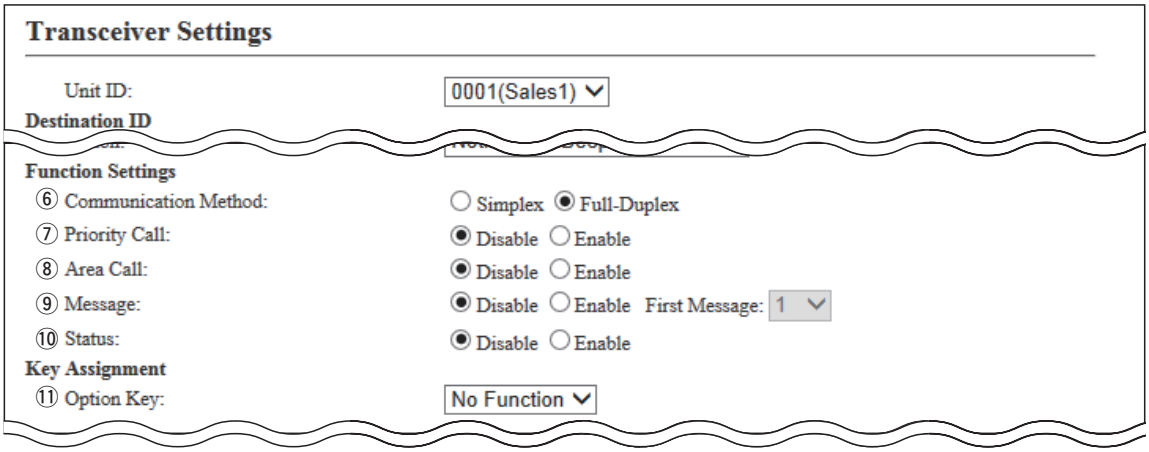


When the IP100FS uses the Area Call function, can call IP100Hs that are in the communication range of the access points assigned to the Area Call.
Select the access point in the [Location], the Call type (Individual, Group, All, Area or Telephone) and names are displayed

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

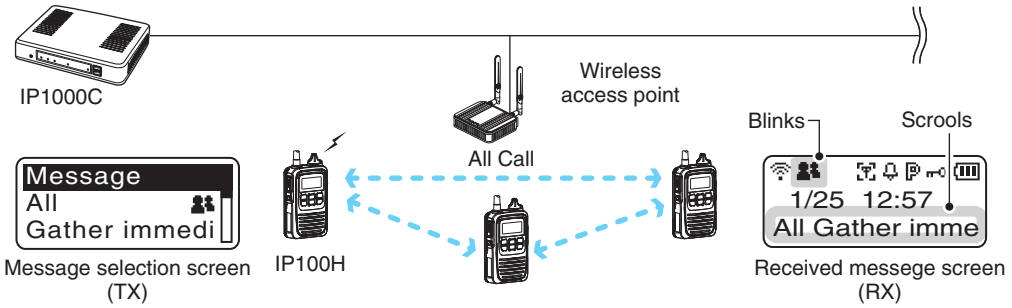


(This is only an example.)

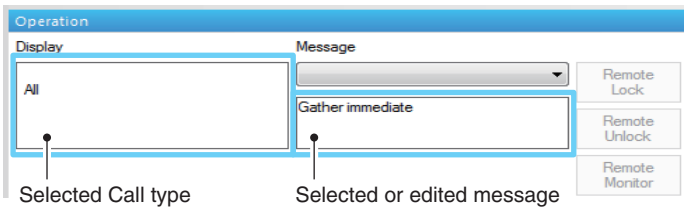
⑨**Message** ..... Select whether the IP100H can send the messages or not. (Default: Disable) When “Enable” is selected, push [FUNC] on the IP100H once to enter the Message selection screen.

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

IP100H calls transmits a message



IP100FS trasmits a message

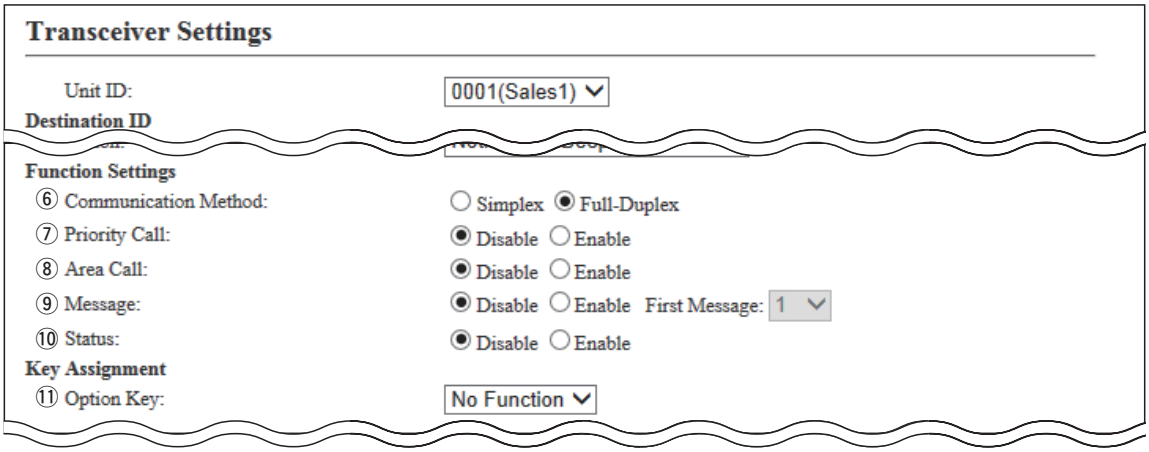


The IP100FS can store up to 100 messages in the each Site.
You can edit the storeed messages.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

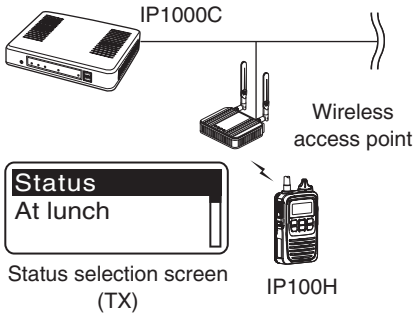


(This is only an example.)

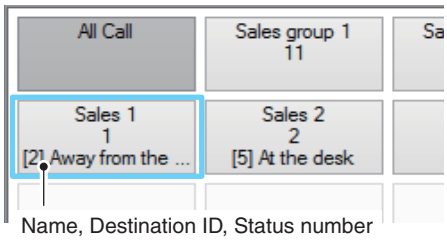
⑩Status ..... Select whether the IP100H can send the Status information or not.
(Example: At lunch, Meeting, Waiting) (Default: Disable)
When "Enable" is selected, push [FUNC] on the IP100H twice to enter the Status selection screen.

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

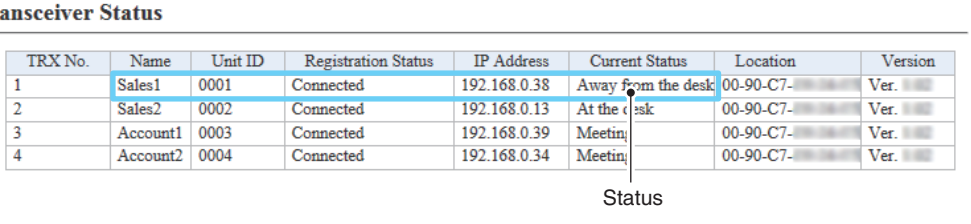
IP100H sends the Status



IP100FS One-Touch button



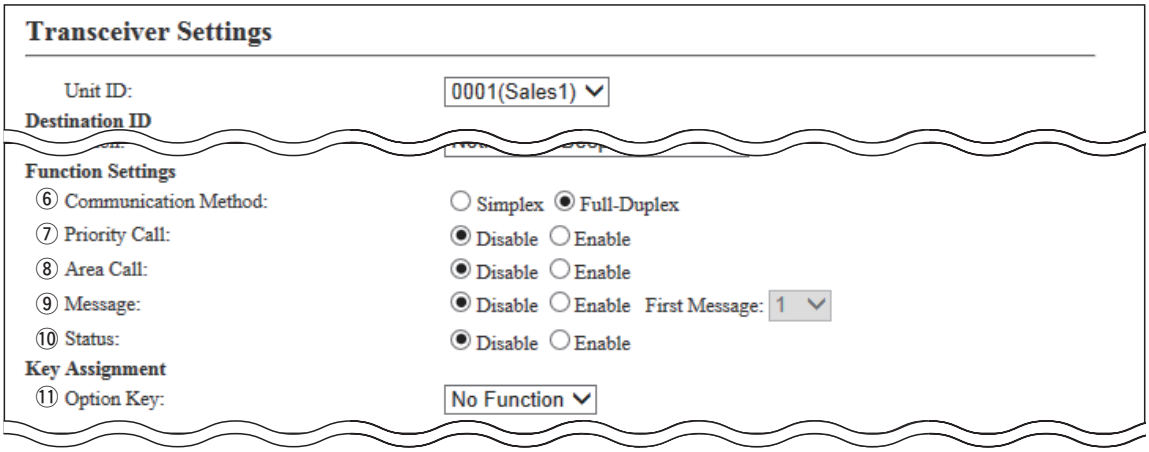
IP1000C Transceiver Status screen



8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

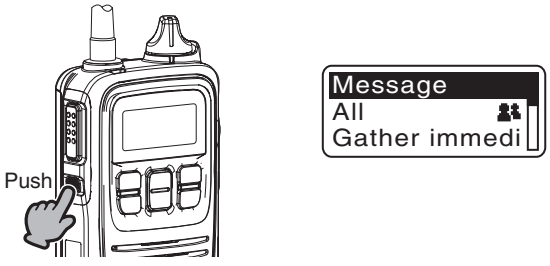
⑪Option Key ..... Assign “Message,” “One Touch,” “Clear down” or “No function” to the IP100H’s Option key. (Default: No Function)

- When “No function” is selected, and if you push [Option] on the IP100H, no action occurs.

- **Message**

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

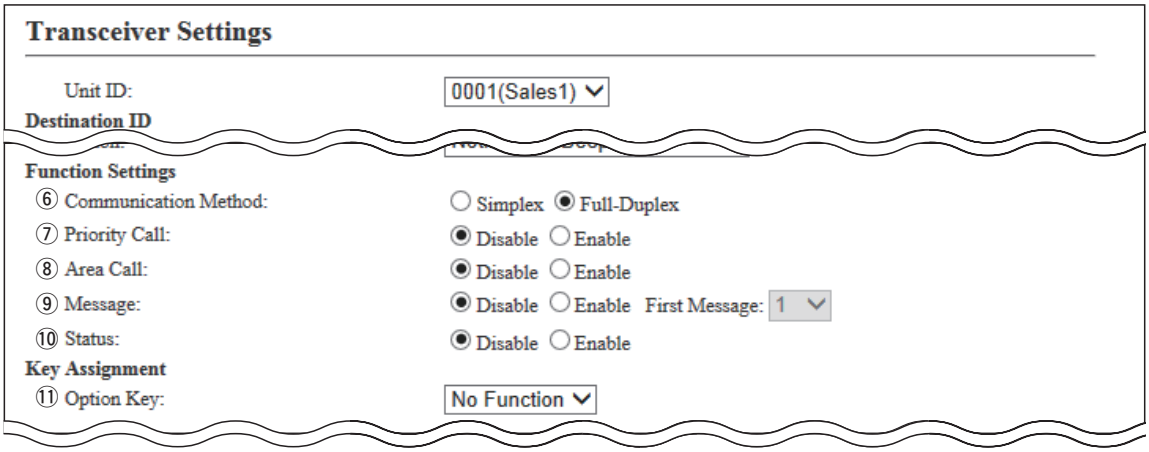
  - Select the message number 1 to 10 in the “Message No.” item that registered on the [Message] screen.



8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

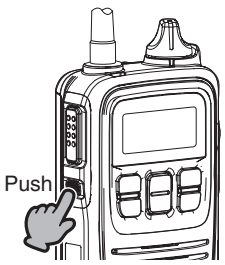
⑪Option Key
(continued) .....

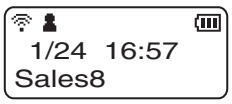
• One Touch

Pushing [Option] on the IP100H 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 4 digit Individual ID or Group ID in the “Destination ID” item.
- When “Telephone” is selected, enter up to 31 numbers and symbols (#, ∗) in the “Destination Phone Number” item.

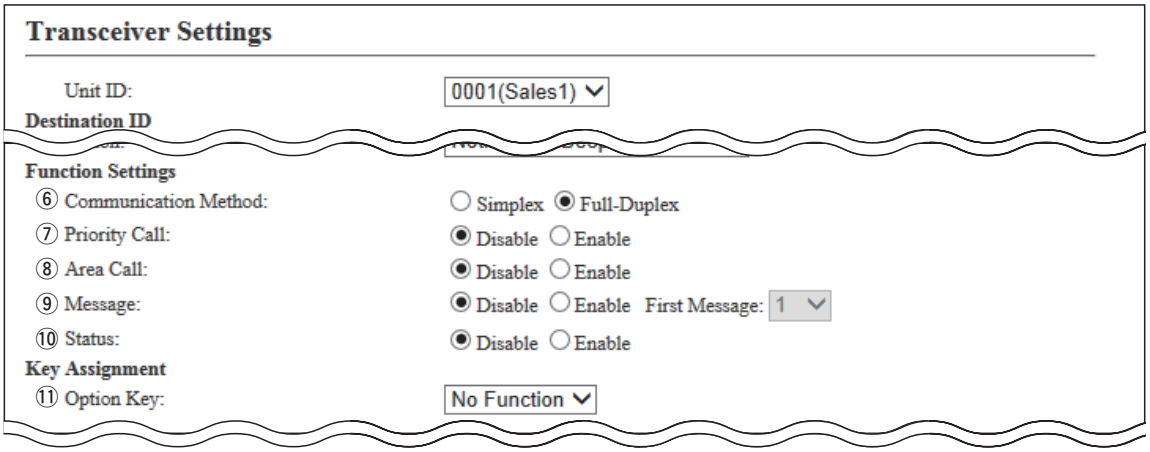




8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

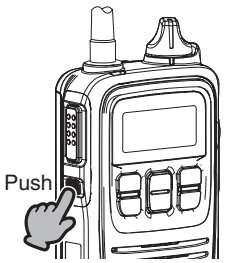


(This is only an example.)

⑪Option Key
(continued) .....

• Clear Down

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

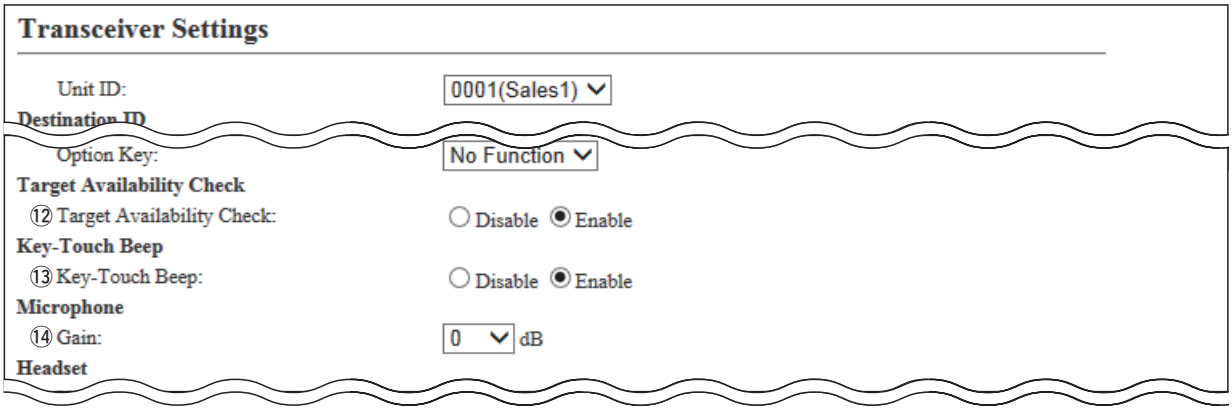


Before the target telephone is picked up, or during phone call, pushing [Option] terminates the phone call.

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

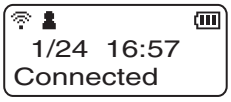
8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

⑫Target Availability Check Select whether the IP100H displays a confirmation after it makes an Individual Call, or not. (Default: Enable)
When “Enable” is selected, the IP100H 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” item is set to “Enable,” the Success Tone or Failure Tone sounds to notify its connection status.
  Common Settings (menu) > Common Settings (screen) > Common Settings > Connection Notice Tone

⑬Key-Touch Beep…… Select whether the IP100H sounds the key touch beep or not. (Default: Enable)
When “Disable” is selected, the IP100H does not sound the confirmation beep when a key is pushed.

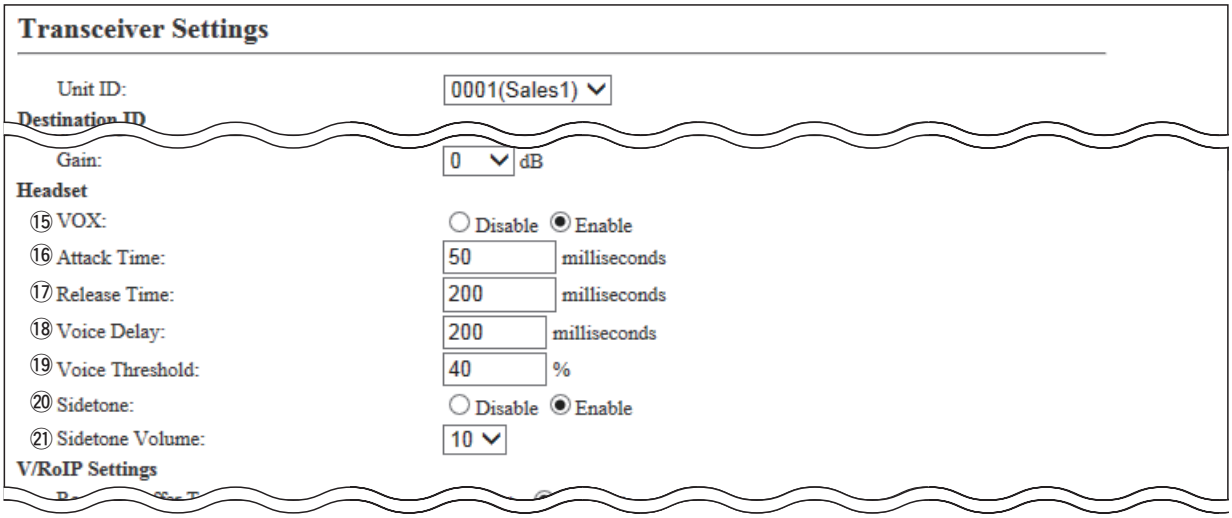
⑭Gain …… Adjust the microphone sensitivity. (Default: 0 (dB))
The adjustable range is –12 (low) to 12 (high) dB, in 3 dB steps.

- When the noise level around the IP100H is high, set to low sensitivity and speak in a slightly louder voice that helps listening easily. Or when the noise level around the IP100H is quiet, set to high sensitivity and speak in smaller voice that helps listening easily.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



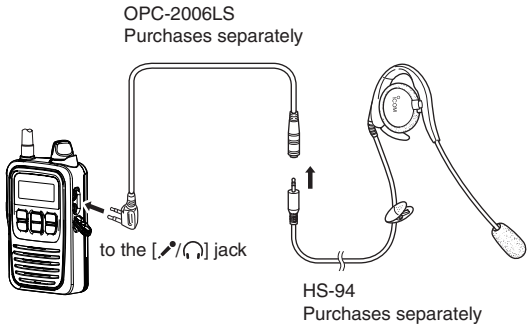
(This is only an example.)

⑮VOX ..... Select whether the IP100H can use the VOX (voice operated transmission) function or not. (Default: Disable)

The transceiver has a VOX function, which allows hands-free operation.

An optional HS-94, HS-95 or HS-97 headset and the OPC-2006LS plug adapter cable are required to use the VOX function.

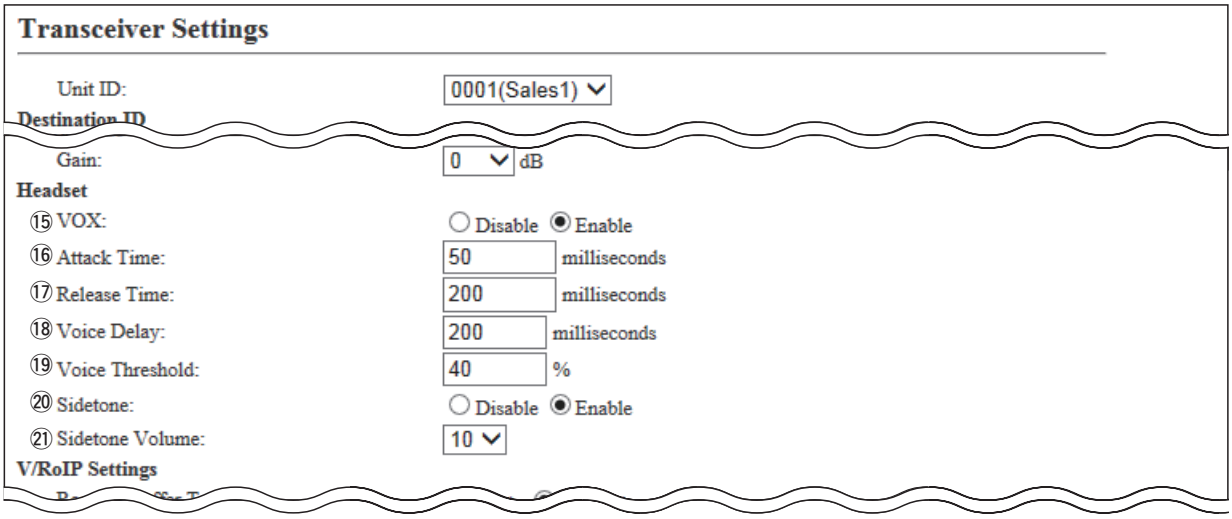
- The VOX function starts transmission when you speak into the microphone, without needing to push [PTT]; then, automatically returns to reception when you stop speaking.



- 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" through "Sidetone Volume" items are displayed.

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

⑯Attack Time .....
VOX: Enable

Adjust the Attack time to between 5 and 500 milliseconds in 5 milliseconds steps. (Default: 50 (milliseconds))
When audio from a headset microphone is input for this specified time, the IP100H starts transmitting.

⑰Release Time .....
VOX: Enable

Adjust the Release time to between 5 and 2000 milliseconds in 5 milliseconds steps. (Default: 200 (milliseconds))
The release time is amount of time the transmitter stays ON after you stop speaking.

⑱Voice Delay .....
VOX: Enable

Adjust the Voice Delay time to prevent clipping of the first few syllables after you begin speaking. The adjustable range is between 0 and 500 milliseconds, in 5 millisecond steps. (Default: 200 (milliseconds))

⑲Voice Threshold .....
VOX: Enable

Adjust the VOX Threshold level to between 0% and 100%. (Default: 40%)
Higher values make the VOX function more sensitive to your voice.

⑳Sidetone .....
VOX: Enable

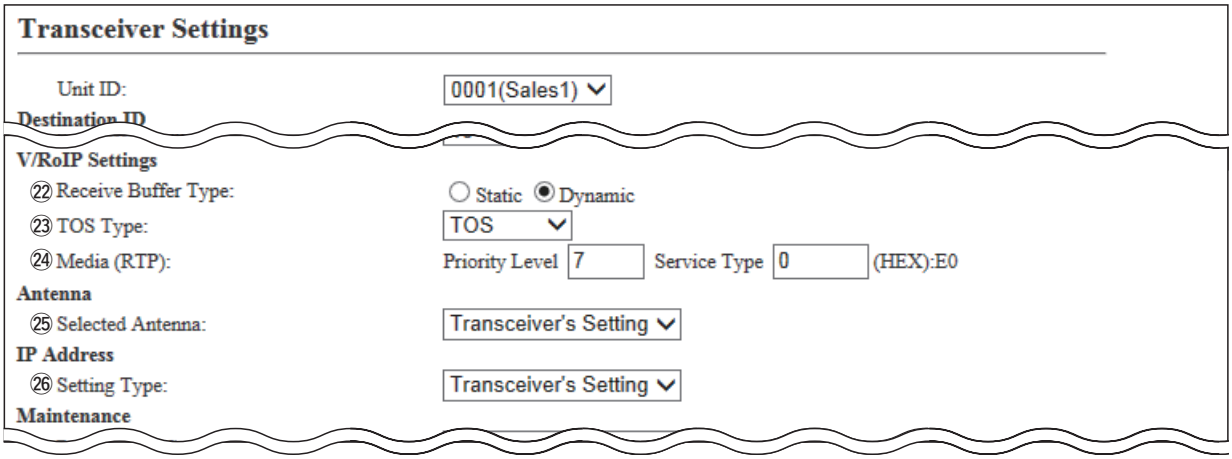
Select whether to use the Sidetone function or not. (Default: Disable)
When “Enable” is selected, you can hear your voice from the headset.

㉑Sidetone Volume .....
VOX: Enable

Adjust the Sidetone level to between 0 (minimum) and 32 (maximum).
(Default: 10)

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

㉒Receiver Buffer Type … Select a type of buffers to reduce the received audio breaks up.

(Default: Dynamic)

• Static

The buffer time is set the “Receive Buffer Size” item.

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.

• Dynamic

The buffer time changes according to the audio fluctuation.

㉓TOS type …… Select the TOS (Type-Of Service) format. (Default: TOS)

• Not used

The TOS function is disabled.

• TOS

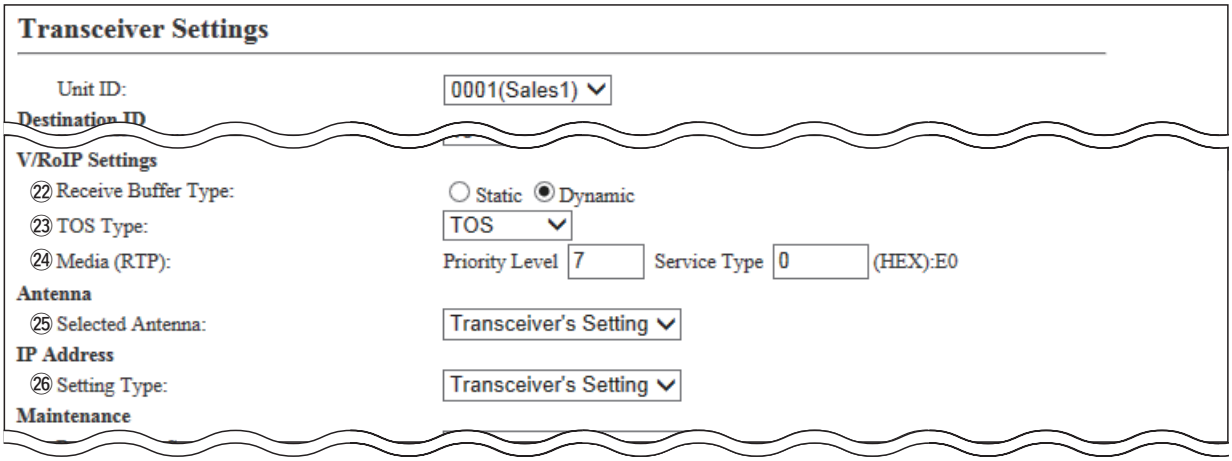
Sends the 8 bit VoIP packets to the TOS field in the IP header using the TOS format.

• Diffserv

Sends the 8 bit VoIP packets to the TOS field in the IP header using the Diffserv (Differentiated Service) format.

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

㉔Media (RTP) ..... Select the Priority level and Service type of the sent VoIP packets.

• Priority Level

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

• Service Type

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

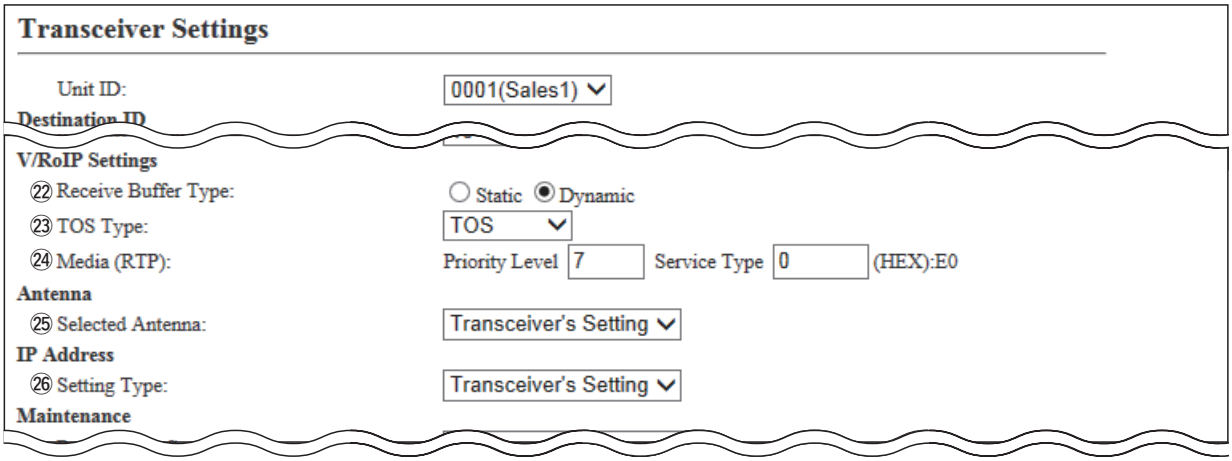
• DSCP

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

- This item is displayed when the “TOS Type” item (㉓) is set to “Diffserv.”

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

㉕Selected Antenna ..... 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 IP1000C.

• Internal Antenna
Uses the internal antenna.
The internal antenna reduces the communication range.

• External Antenna
Uses the external antenna.
The external antenna extends the communication range.

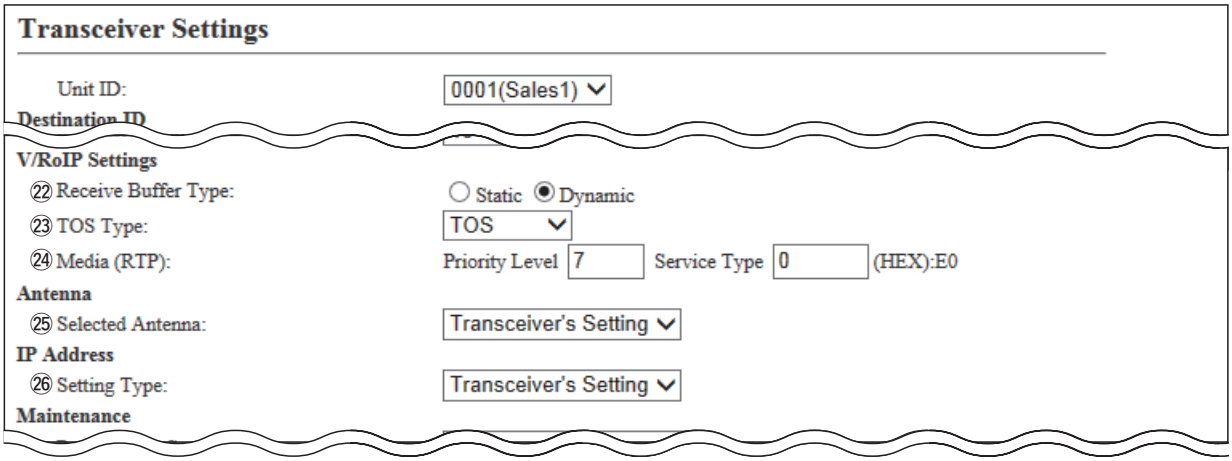
For your reference
The communication range may differ, depending on the area environment and installation conditions.

• Communication range

	Internal antenna	External antenna
2.4 GHz band	90 m; 295 ft	160 m; 525 ft
5 GHz band		190 m; 623 ft

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

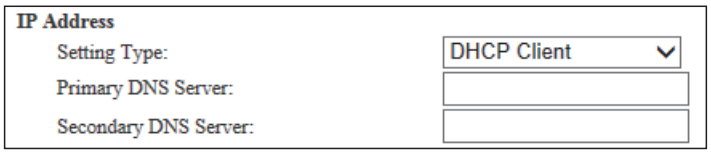
㉖Setting Type ..... Select the IP100H's IP settings. (Default: Transceiver's Setting)

• Transceiver Setting

Uses the last IP setting set by the CS-IP100H or IP1000C.

• DHCP Client

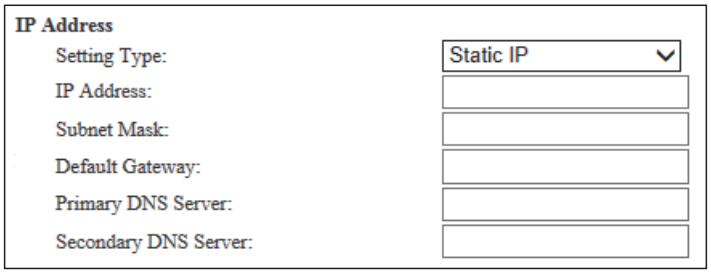
Selects the DHCP Client when the IP address is automatically obtained by a DHCP server.



• 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.



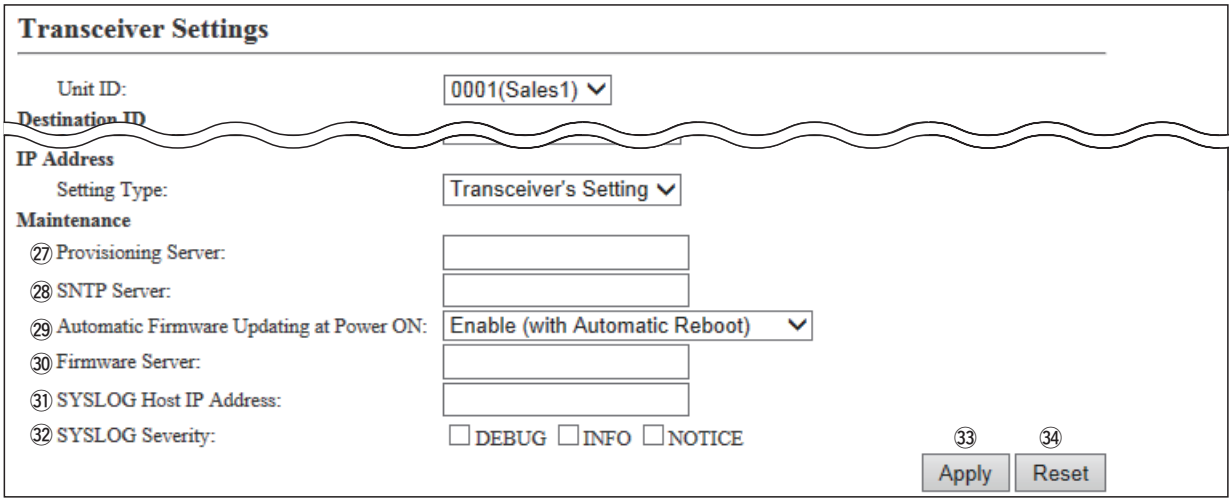
• Enter the default gateway address, if your network connects to a different network.

• If necessary, enter the "Primary DNS Server" or "Secondary DNS Server" settings.

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

㉗Provisioning Server …… Enter an IP Address or Host name of the Provisioning Server for the IP100H, up to 63 characters.

- When the IP1000C is used as its Provisioning Server, this entry is not necessary.

㉘SNTP Server …… Enter the IP Address of the device that is specified as the SNTP server for the IP100H.

- When the IP1000C is used as its SNTP Server, this entry is not necessary.

㉙Automatic Firmware Updating at Power ON

…… Select whether the IP100H will use the Automatic Update function or not.

(Default: Enable (with Automatic Reboot))

• Desable

Disables the automatic firmware updating at the IP100H turns ON.

• Enable (without Automatic Reboot)

When tuning ON the IP100H, it confirms the firmware of the IP1000C, and if there are updating contents, it automatically downloads the firmware. Then turn OFF the IP100H and turn it ON again, and it starts updating the firmware.

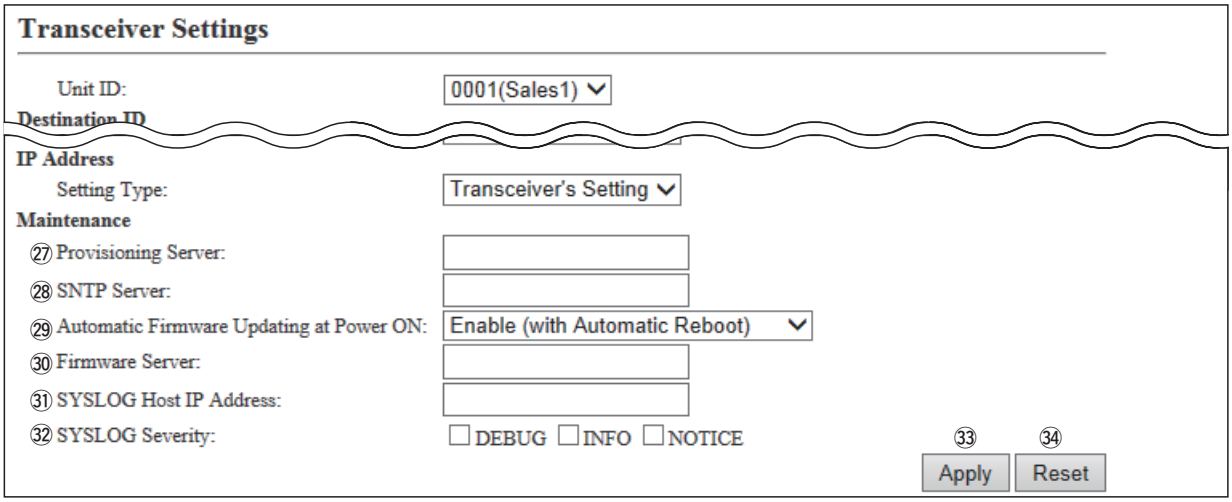
• Enable (with Automatic Reboot)

When tuning ON the IP100H, it confirms the firmware of the IP1000C, and if there is an updated firmware version, it automatically downloads it. Then the IP100H automatically reboots and starts updating the firmware.

You can check the firmware version of the IP100H on the [TOP] menu.

8. [Transceiver Settings] Menu

■ Transceiver Settings (continued)



(This is only an example.)

㉚Firmware Server..... Enter the IP Address or Host name of the Firmware Server for the IP100H, up to 63 characters.

- When the IP1000C is used as its Firmware Server, this entry is not necessary.

㉛SYSLOG Host IP Address Enter the SYSLOG host's address.

- The host device must have the SYSLOG server function.

㉜SYSLOG Severity ..... Select the log information to send to the SYSLOG host.

- Enter a check mark to send the log entries.

(Default: ☐ DEBUG ☐ INFO ☐ NOTICE)

㉝<Apply> ..... Click to apply the entries.

㉞<Reset>..... Click to restore the settings.

- You cannot restore after clicking <Apply>.

8. [Transceiver Settings] Menu

■Transceiver Setting List

The list of the registered IP100Hs.

• When verifying the contents or editing the settings, select the individual number in Unit ID item (①).

Transceiver Setting List

Transceiver Model	Name	Unit ID	Use ID List	Area Call	Message	Status	Option Key
IP100H	Sales1	0001	Enable	Enable	Enable	Enable	One Touch
IP100H	Sales2	0002	Enable	Enable	Enable	Enable	Message

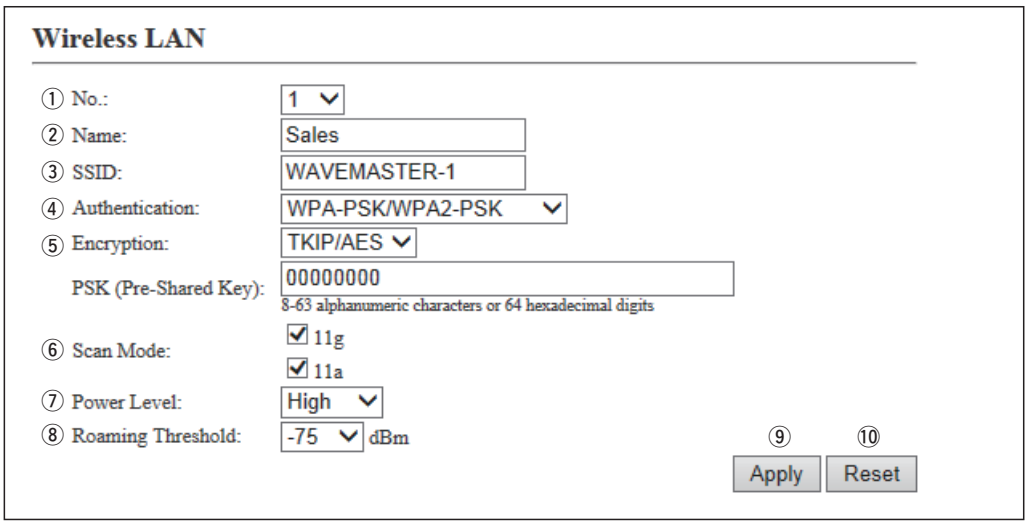
(This is only an example.)

9. [Common Settings] Menu

■Wireless LAN

Registers wireless LAN settings that are commonly used by the IP100Hs.

- You can individually set the common settings to each registered group in the “Common Setting List” field on the [Common Settings] screen.
- If any setting in this screen has been changed, you must reboot the IP100H.



(This is only an example.)

①No. ..... Select a group number between 1 and 20 to assign to the IP100Hs. Up to 20 groups can be registered.

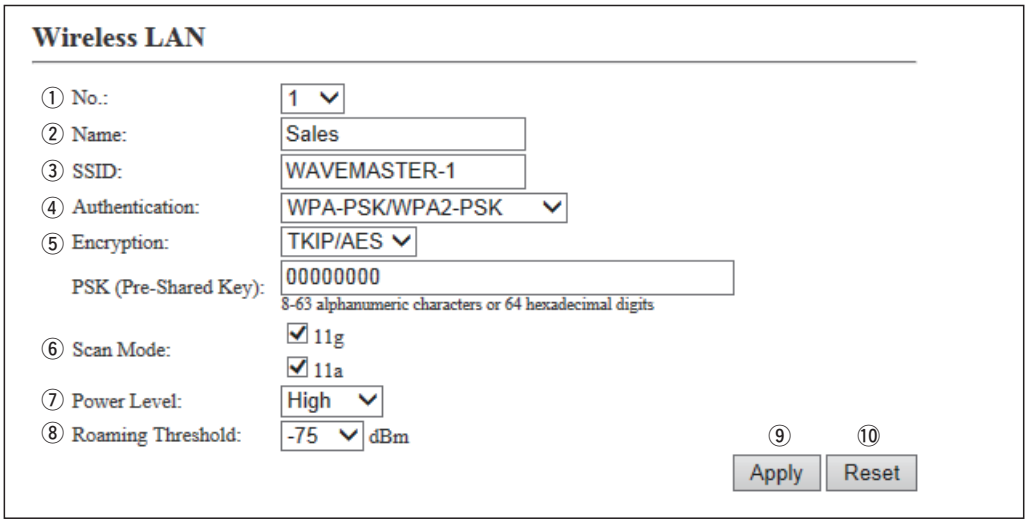
②Name ..... Enter a Group name of up to 31 characters.

③SSID ..... Enter an SSID that is the same as the wireless access point. Enter up to 32 characters, using numbers, symbols and letters (both lower and upper case). Be careful to difference between lower and upper case.

- 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).
- For any other wireless device, this may be called ESSID.

9. [Common Settings] Menu

■ Wireless LAN (continued)



(This is only an example.)

④Authentication ..... Select the authentication method that is the same as the wireless access point. (Default: Open System/Shared Key)

- Be sure to verify the Access point setting, because a different authentic methods cannot access each other.

About authentic method

- **Open System/Shared Key**

  When accessing to a wireless access point, “Open System” and “Shared Key” are automatically recognized. If the Encryption key is matched with the Access point, they can communicate.

- **Open System**

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

- **WPA-PSK/WPA2-PSK**

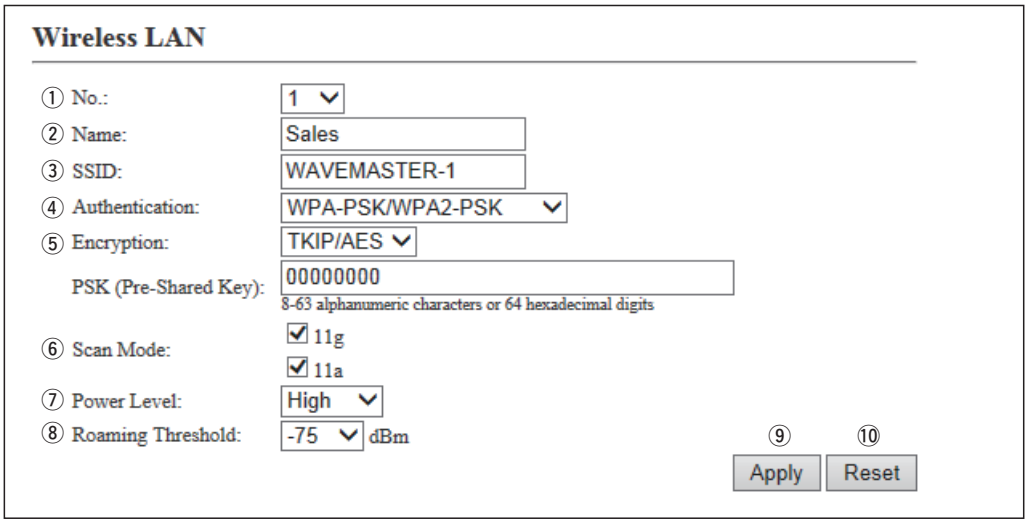
  The “WPA-PSK” and “WPA2-PSK” confirmations are automatically recognized.

The combination of the Authentication and Encryption

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

9. [Common Settings] Menu

■Wireless LAN (continued)



(This is only an example.)

⑤Encryprion ..... Select the encryption that is the type same as the wireless access point.

(Default: None)

- Be sure to verify the Access point setting, because the different encryption types cannot be accessed with each other.

About the encryption type

- **None**

  No data is encrypted.

  - This option can be selected when the “Authentication” item (④) is set to “Open System” or “Open System/Shared Key.”

- **WEP RC4**

  This is a security type often used by wireless communications.

  - You can set the encryption key length to between 64 (40) and 128 (104) bits.
  - You can select this option when the “Authentication” item (④) is set to “Open System” or “Open System/Shared Key.”

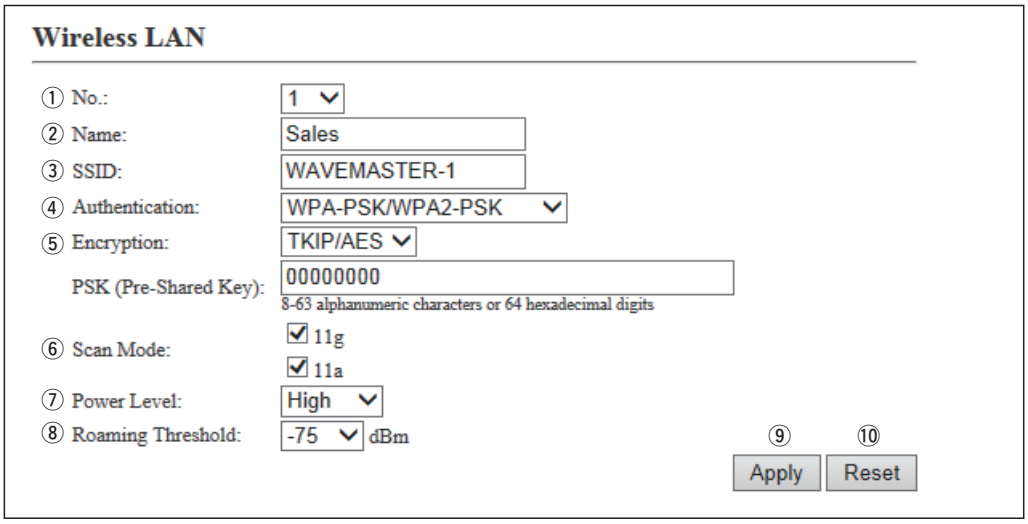
- **TKIP/AES**

  Either the “TKIP” or “AES” encryptions are automatically recognized when accessing a wireless LAN terminal.

  - You can select this option when the “Authentication” item (④) is set to “WPA-PSK/WPA2-PSK.”

9. [Common Settings] Menu

■ Wireless LAN (continued)

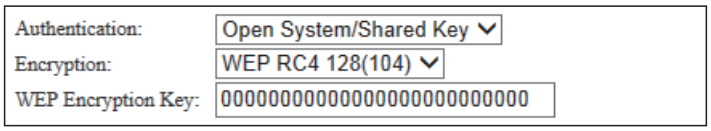


(This is only an example.)

⑤Encryprion (continued) .....

• WEP Encryption Key

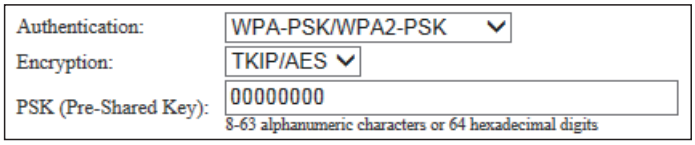
Enter the encryption key that is the same as the wireless access point.



- This option can be selected when the “Authentication” item (④) is set to “Open System” or “Open System/Shared Key.”
- Enter a hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter an ASCII characters. The key lengths are the 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)

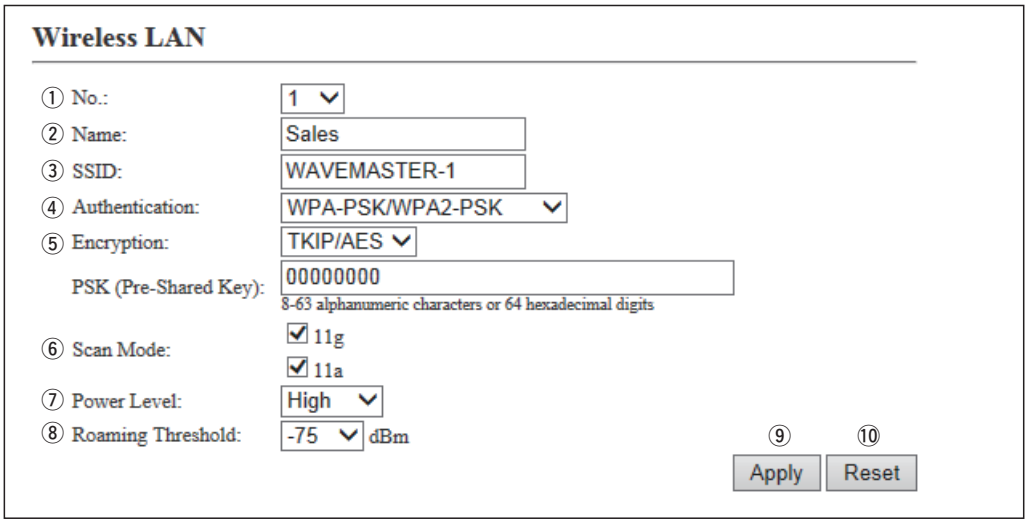
Enter the pre-shared key that is the same as the wireless access point.



- This option can be selected when the “Authentication” item (④) is set to “WPA-PSK/WPA2-PSK.”
- Enter a hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key lengths are 64 digits using hexadecimal number, or 8 to 63 characters using ASCII characters.

9. [Common Settings] Menu

■ Wireless LAN (continued)



(This is only an example.)

⑥Scan Mode ..... Select the wireless LAN standard that the IP100H uses.

(Default: ☑11g, ☑11a)

- Access points that corresponds the wireless LAN standards, can be used with the IP100H.

⑦Power Level..... Set the IP100H transmit power level to between High, Middle and Low.

(Default: High)

- When “High” is selected, the transmission distance of the IP100H is maximum. Or when selecting a lower level, the distance will be reduced.

⑧Roaming Threshold ..... Set the received signal strength level when the IP100H starts roaming. The selectable level is between –1 and –100 dBm.

(Default: –75 (dBm))

- When setting to high level (example: –50 dBm), it becomes easy to start roaming. Or when setting to low level (example: –90 dBm), it becames difficult to start roaming.

⑨<Apply> ..... Click to apply the entries.

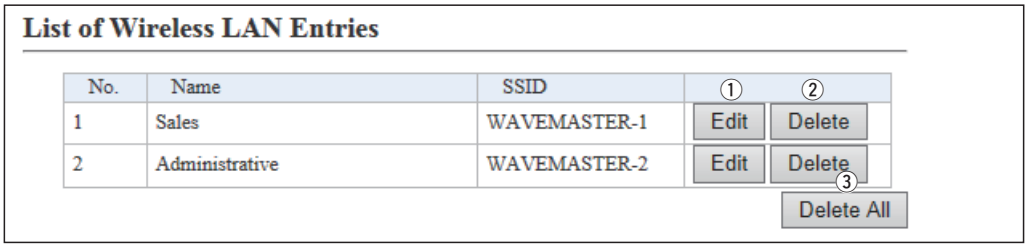
⑩<Reset>..... Click to restore the settings.

- You cannot restore after clicking <Apply>.

9. [Common Settings] Menu (continued)

■List of Wireless LAN Entries

The list of the wireless LAN settings.



(This is only an example.)

①**<Edit>** ..... Click to edit the entries in the [Wireless LAN] field.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

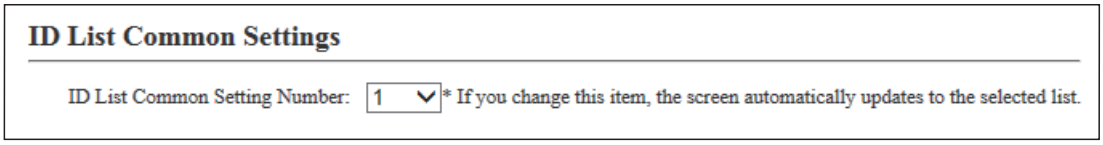
③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

9. [Common Settings] Menu (continued) [Common Settings]–[ID List]

■ID List Common Settings

Selects an ID list that the IP100Hs will use.

- You can individually specify an ID list that the IP100Hs belong to the groups in the “Common Setting List” field on the [Common Settings] screen.
- If any entries on this screen have been changed, you must reboot the IP100H.



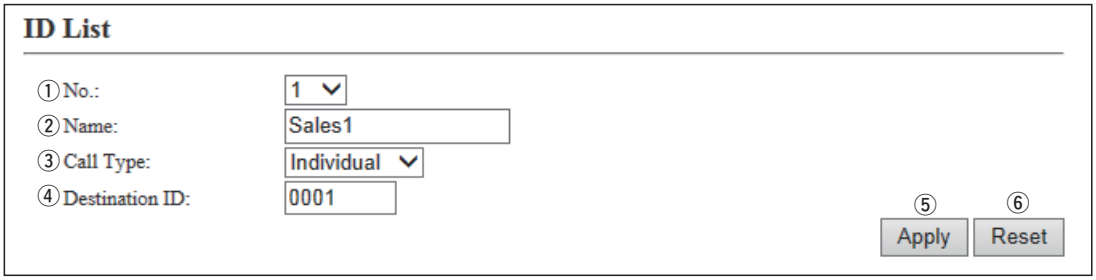
(This is only an example.)

ID List Common Settings… Select the group number to between 1 and 100, enter IDs that the IP100Hs will use.

■ID List

Enters target IDs in the group that is selected in the “ID List Common Settings” field.

- You can enter up to 50 target IDs in each group.



(This is only an example.)

①No. ..... Select a number to register the destination.
Up to 50 destinations can be registered to a group.

②Name ..... Enter a destination name of up to 32 characters.

③Call Type ..... Select the “Individual,” “Group” or “Telephone” Call type.

④Destination ID ..... Enter a 4 digit target individual ID or group ID.
When “Telephone” is selected as the “Call Type,” enter a target phone number of up to 31 digits using numbers and symbols (#, ∗).

⑤<Apply> ..... Click to apply the entries.

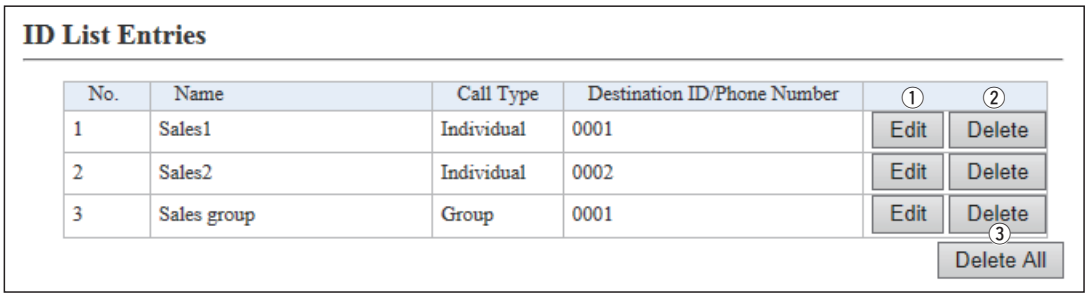
⑥<Reset>..... Click to restore the settings.

- You cannot restore after clicking <Apply>.

9. [Common Settings] Menu (continued) [Common Settings]–[ID List]

■ID List Entries

The list of entered Group Calls.



(This is only an example.)

①**<Edit>** ..... Click to edit the entries in the [ID List] field.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

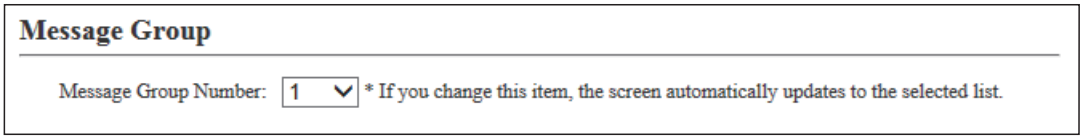
③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

9. [Common Settings] Menu (continued) [Common Settings]–[Message]

■Message Group

Entering messages Selects to register a message that the IP100Hs will use.

- You can individually specify the message group that the IP100Hs belong to the groups in the “Common Setting List” field on the [Common Settings] screen.
- If any entries on this screen have been changed, you must reboot the IP100H.



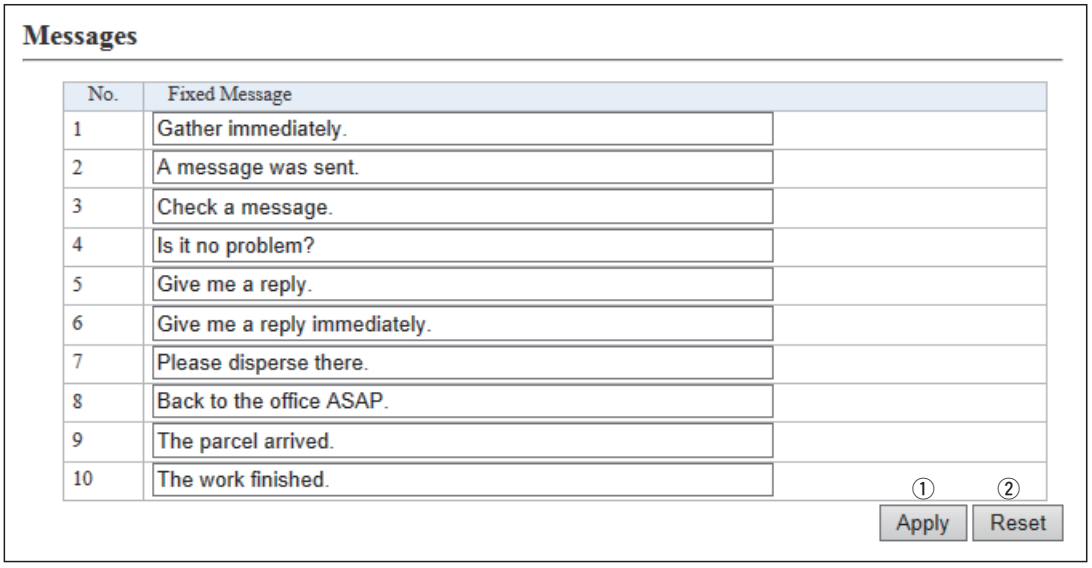
(This is only an example.)

Message Group Number … Select the group number to between 1 and 100 enter the messages that the IP100Hs will use.

■Messages

Enter messages in the group that is selected in the “Message Group” field.
You can transmit fixed message of up to 32 characters.

- You can enter up to 10 messages in each message group.



(This is only an example.)

①<Apply> …… Click to apply the entries.

②<Reset>…… Click to restore the settings.

- You cannot restore after clicking <Apply>.

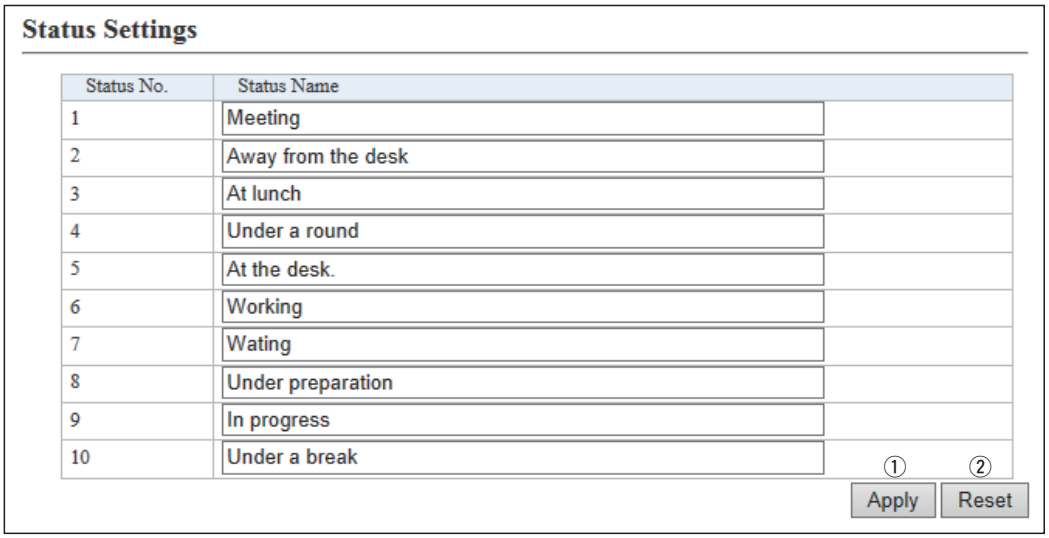
9. [Common Settings] Menu (continued) [Common Settings]–[Status]

■Status Settings

Selects to register a status that the IP100Hs use.

• You can programmed statuses of up to 32 characters. You can enter up to 10 statuses.

• If any entries on this screen have been changed, you must reboot the IP100H.



(This is only an example.)

①**<Apply>** ..... Click to apply the entries.

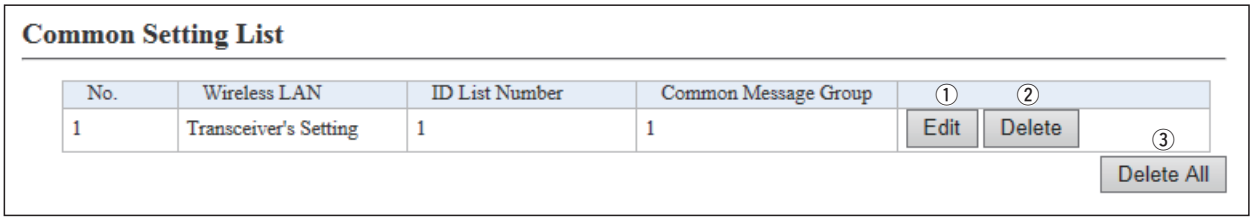
②**<Reset>**..... Click to restore the settings.

• You cannot restore after clicking <Apply>.

9. [Common Settings] Menu (continued)

■Common Setting List

Displays the entries that are entered in the “Common Settings” item.



(This is only an example.)

①**<Edit>** ..... Click to edit the entries in the “Common Settings” items.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

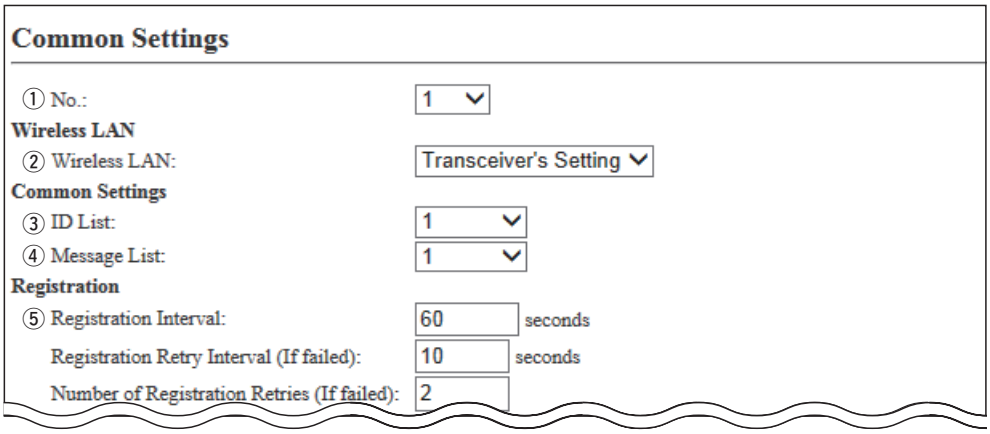
③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

9. [Common Settings] Menu (continued)

■Common Settings

Individually assign an ID list, message list or receive notification tone to the group that the IP100H belongs to.

• After the setting is completed, you must reboot the IP100H.



(This is only an example.)

①No. ..... Select a group between 1 and 100, to assign to the IP100H belongs to.

②Wireless LAN ..... Select the wireless LAN setting that are commonly used by the IP100Hs in the group. (Default: Transceiver's Setting)

- **Transceiver's Setting**
  Uses the last wireless LAN setting that was set by the CS-IP100H or IP1000C.

- **1 (Name) to 20 (Name)**
  Select a number with wireless LAN name that was entered in the Wireless LAN screen.

③ID list ..... Select an ID list that are commonly used by the IP100Hs in the group. (Default: Disable)

• Select an ID number that is registered in the ID list screen.

④Message List ..... Select a message list that are commonly used by the IP100Hs in the group. (Default: Disable)

• Select a message number that is registered in the Messages.

⑤Registration Interval ..... Enter the transmit interval for the registration information that the IP100Hs will use. (Default: 60 (seconds))

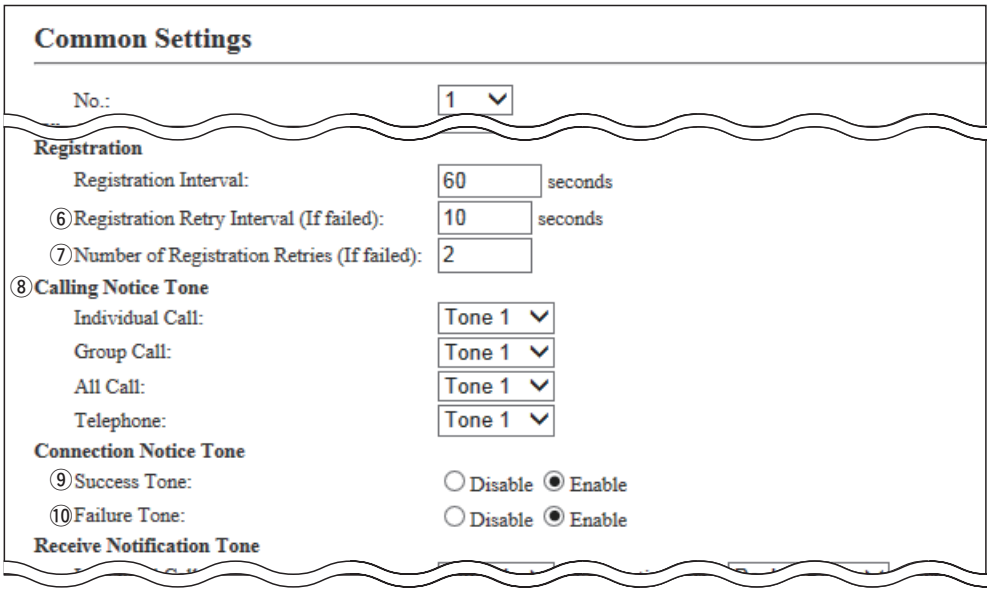
• Generally use the default setting.

• When the interval period is short, and an IP100H goes out of the communication area, the IP100H registration on the IP1000C can be updated earlier. Therefore, if the IP100H receives an Individual call, the IP1000C can quickly reply "No response" as a Target availability check.

9. [Common Settings] Menu

[Common Settings]–[Common Settings]

■ Common Settings (continued)



(This is only an example.)

⑥Registration Retry Interval (If failed)

..... Enter a retry interval when the IP100H fails to register to the IP1000C, between 1 and 30 seconds. (Default: 10 (seconds))

⑦Number of Registration Retries (If failed)

..... Enter a number of registration retries if the IP100H fails to register to the IP1000C, between 1 and 10. (Default: 2)

⑧Calling Notice Tone ..... Select a notice tone for calling. (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.”

⑨Success Tone ..... Select a notice tone for a successful connection. (Default: Enable)

- When an individual call, Message call, Status call or telephone call connection is successful, the notice tone sounds.
- When the “Target Availability Check” item in the [Transceiver Settings] screen is set to “Disable,” the notice tone will not sound.

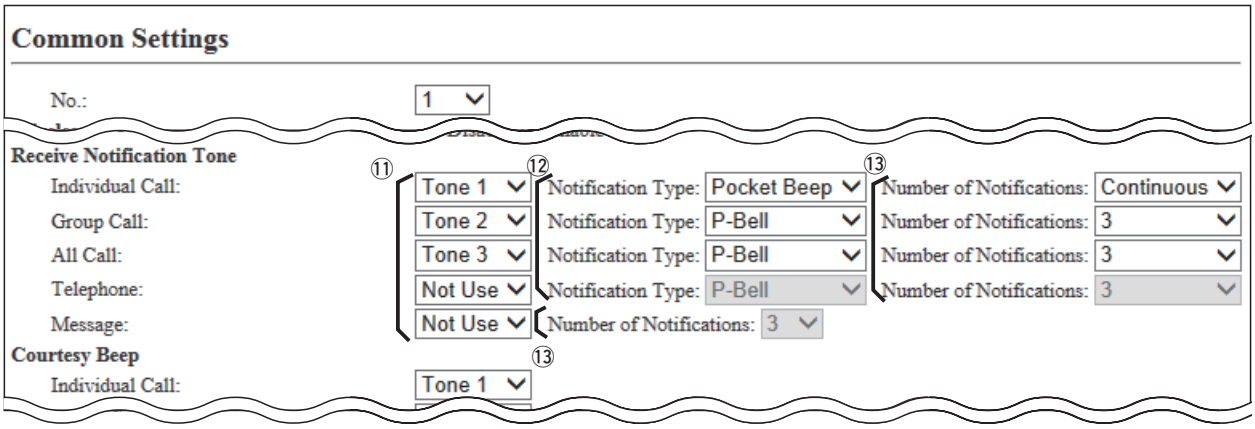
⑩Failure Tone ..... Select a notice tone for connection failure. (Default: Enable)

- When an individual call, Message call, Status call or telephone call connection fails, the notice tone sounds.
- When the “Target Availability Check” item in the [Transceiver Settings] screen is set to “Disable,” the notice tone will not sound.

9. [Common Settings] Menu

[Common Settings]–[Common Settings]

■ Common Settings (continued)



(This is only an example.)

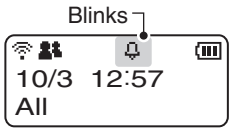
⑪Receive Notification Tone Select a notice tone when a call is received. (Default: Not Use)

- This tone can be individually assigned to each call type, "Individual Call," "Group Call," "All Call," "Telephone" and "Message."
- You can select "Not Use" or "Tone 1" to "Tone 8."

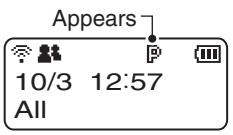
⑫Notification Type ..... Select a notice type between "Pocket Beep" and "P-Bell." (Default: P-Bell)

- This item can be selected when the "Received Notification Tone" item (⑪) is set to "Tone 1" to "Tone 8."
- You cannot select this item for a Message call.

- **Pocket Beep**
  When a specified call is received, the IP100H sounds the notification beep and the notification icon blinks.
- **P-Bell**
  When a specified call is received, the IP100H sounds the notification beep. The received audio is muted until you reply the call.
  - After pushing [PTT] on the IP100H, the mute will be released.



When the Pocket beep is active



When the P-bell is ON

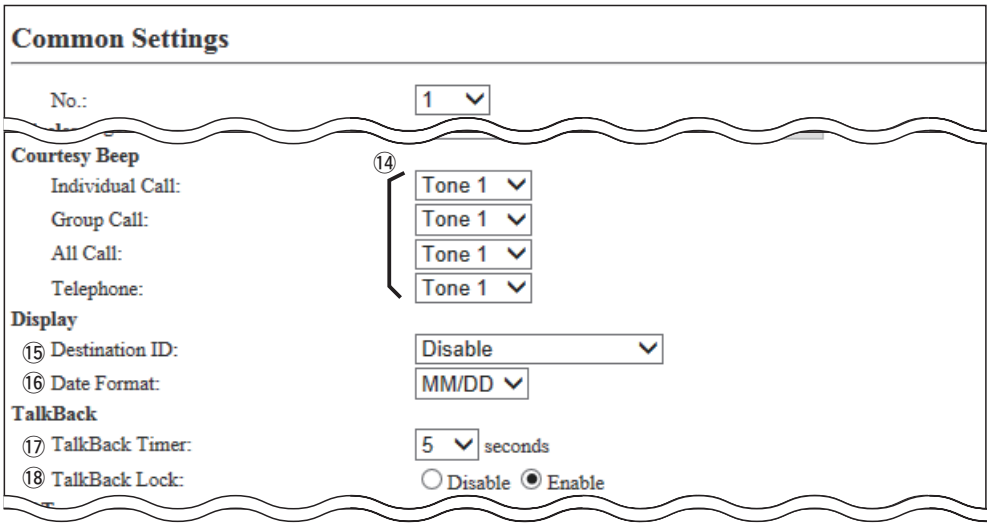
⑬Number of Notification ... Select a notification number of "Continuous," "1," "3," "10" or "20." (Default: 3)

- You can select this item when the "Received Notification Tone" item (⑪) is set to "Tone 1" to "Tone 8."
- You cannot select this item for a Message call.

9. [Common Settings] Menu

[Common Settings]–[Common Settings]

■ Common Settings (continued)



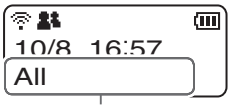
(This is only an example.)

⑭Courtesy 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 IP100H will sound the specified beep.

⑮Destination ID ..... Select a destination ID that will be displayed after returning to the standby mode. (Default: Disable)

- **Disable**
  Displays the destination ID or call type that is specified in the “Destination ID” item in the [Transceiver Settings] screen.



Destination ID
(Call type)

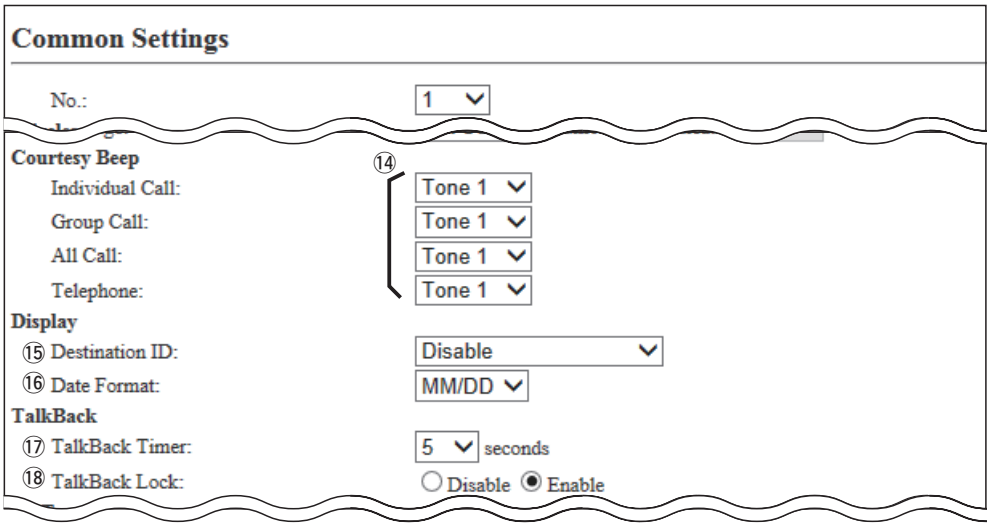
- **Transmit**
  Displays the IDs that the IP100H recently called.

- **Transmit and Receive**
  Displays either IDs that the IP100H recently called or was called by.

- **All operations**
  Displays either IDs that the IP100H recently called, was called by or displayed ID list/History.

9. [Common Settings] Menu

■ Common Settings (continued)

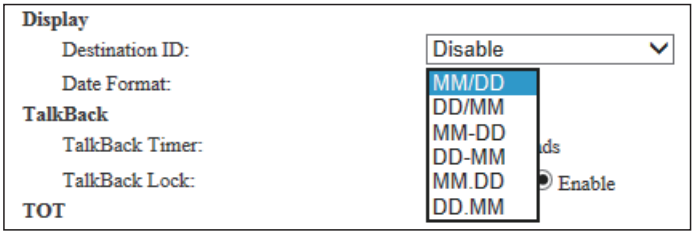


(This is only an example.)

⑯Date Format..... Select a date format to display on the IP100H'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)



⑰TalkBack Timer ..... Enter a time between 1 and 30 seconds that the IP100H will return to the standby mode after a received signal disappears. (Default: 5 (seconds))

⑱TalkBack Lock ..... Select whether the Talk Back Lock function "Disable" or "Enable."

(Default: Enable)

- **Enable**

  After a call is finished and the IP100H returns to the standby mode, if it is received another call in the Talk back timer, it accepts to receive when higher priority level call is received, or refuses same or lower priority level call is received than the finished call.

  After the Talk back timer has passed, a new call can be received.

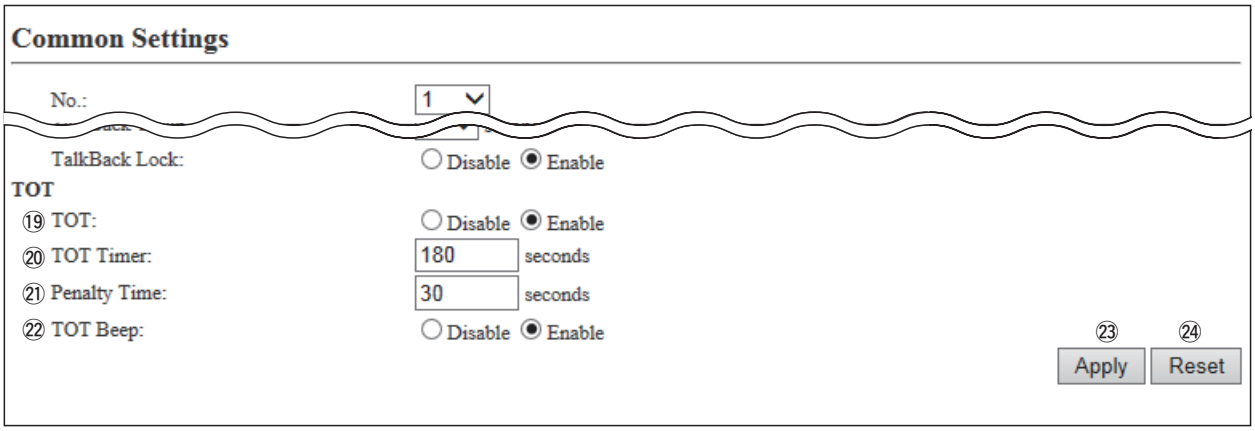
- **Disable**

  Accepts to receive a new call after your current call is finished.

9. [Common Settings] Menu

[Common Settings]–[Common Settings]

■ Common Settings (continued)



(This is only an example.)

⑲TOT ..... Select whether the IP100H uses the Time-out timer or not. (Default: Disable)

- When “Enable” is selected, the “TOT Timer,” “Penalty Timer” “TOT Beep” items are displayed.
- This function works when the IP100H’s PTT switch has accidentally been held down.

⑳TOT Timer ..... Set the Time-out timer to between 11 and 600 seconds.
The this timer limits the IP100H’s continuous transmission.
(Default: 180 (seconds))

㉑Penalty Timer ..... Set the TOT Penalty timer to between 1 and 30 seconds.
After the TOT timer period ends, the TOT Penalty timer starts and inhibits the user from transmitting during the penalty period.
(Default: 30 (seconnds))

㉒TOT Beep ..... Select whether the IP100H uses the TOT beep function or not.
(Default: Enable)

㉓<Apply> ..... Click to apply the entries.

㉔<Reset>..... Click to restore the settings.

- You cannot restore after clicking <Apply>.

10. [Destination Settings] Menu

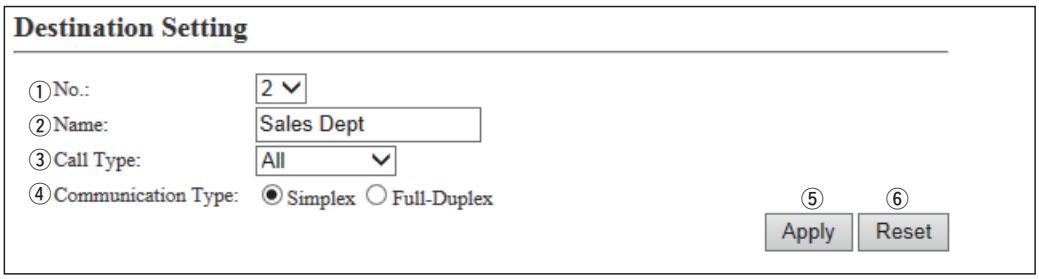
[Destination Settings]–[Destination Setting]

■Destination Setting

Call Type: All

Set the destinations to call all of the IP100Hs or IP100FSs in the tenant through the Internet.

• The items on the [Destination Setting] screen differ depending on the Call type selection.



(These are examples when the “Call Type” item is set to “All.”)

①No. ..... Select the number to register the destinations.
Up to 1000 destinations can be registered.

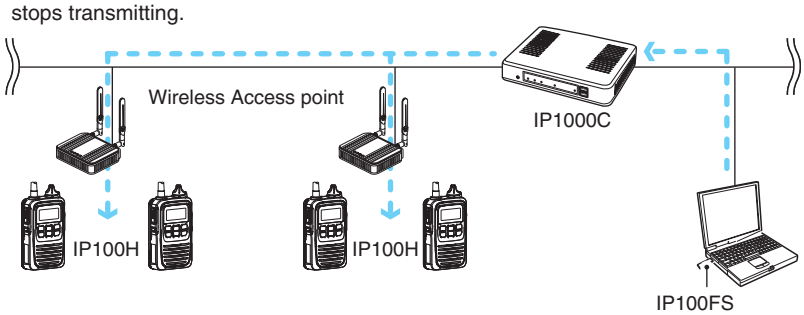
②Name ..... Enter the destination name. (Up to 31 characters)

③Call Type ..... Select “All” to use the All call.

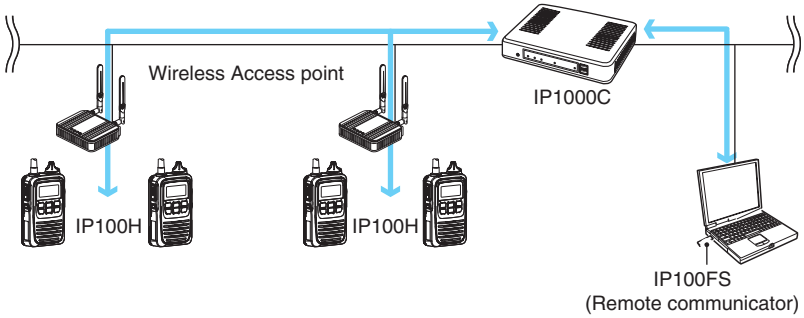
④Communication Type ... Select “Simplex” or “Full-Duplex” to use the All call.

Simplex operation

• When the Simpex is selected, the called station cannot reply until the caller station stops transmitting.



Full-duplex operation



⑤<Apply> ..... Click to apply the entries.

⑥<Reset>..... Click to restore the settings.

• You cannot restore after clicking <Apply>.

10. [Destination Settings] Menu

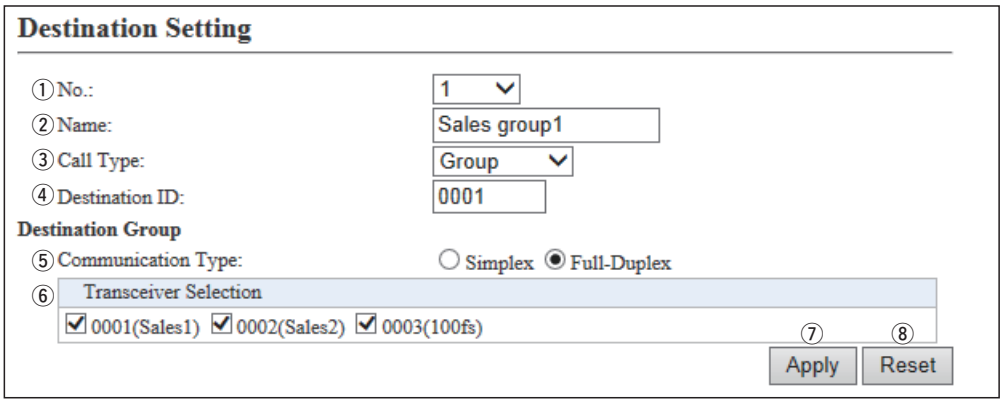
[Destination Settings]–[Destination Setting]

■ Destination Setting (continued)

Call Type: Group

Set the destinations to call the group through the Internet.

• The items on the [Destination Setting] screen differ depending on the Call type setting.



(These are examples when the “Call Type” item is set to “Group.”)

①No. ..... Select the number to register the destination groups. Up to 1000 destinations can be registered.

②Name ..... Enter the destination name. (Up to 31 characters)

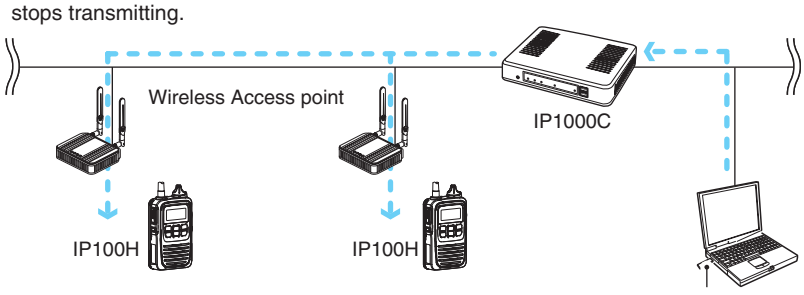
③Call Type ..... Select “Group” to use the Group call.

④Destination ID ..... Enter the 4 digit destination number.

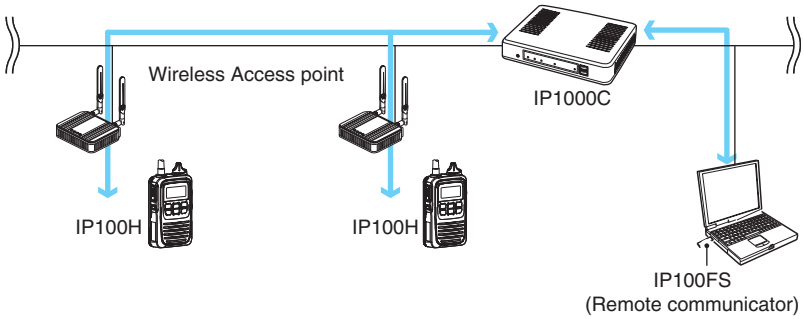
⑤Communication Type ... Select “Simplex” or “Full-Duplex” to select the operation type.

Simplex operation

• When the Simpex is selected, the called station cannot reply until the caller station stops transmitting.



Full-duplex operation



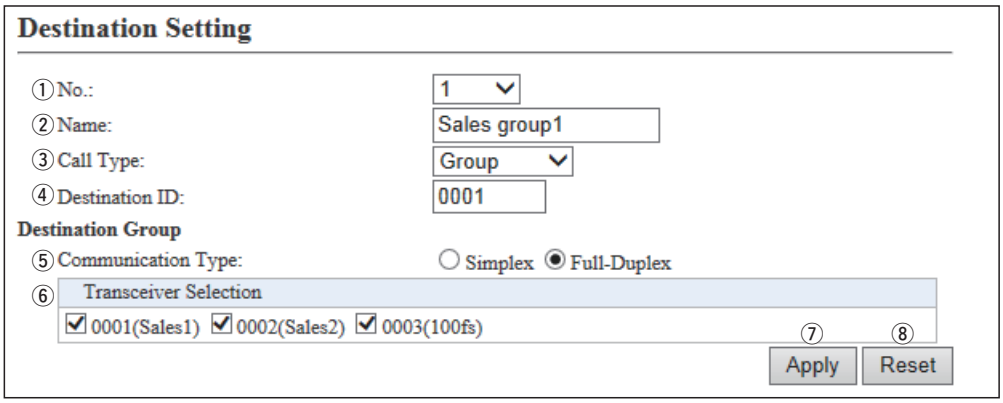
10. [Destination Settings] Menu

■ Destination Setting (continued)

Call Type: Group

Set the destinations to call the group through the Internet.

• The items on the [Destination Setting] screen differ depending on the Call type setting.



(These are examples when the “Call Type” item is set to “Group.”)

⑥Transceiver Selection … Click to select the IP100H or IP100FS which belong to the group.

• Only the IP100Hs or IP100FSs that are registered in the [Transceiver Registration] screen are listed.

⑦<Apply> …… Click to apply the entries.

⑧<Reset>…… Click to restore the settings.

• You cannot restore after clicking <Apply>.

10. [Destination Settings] Menu

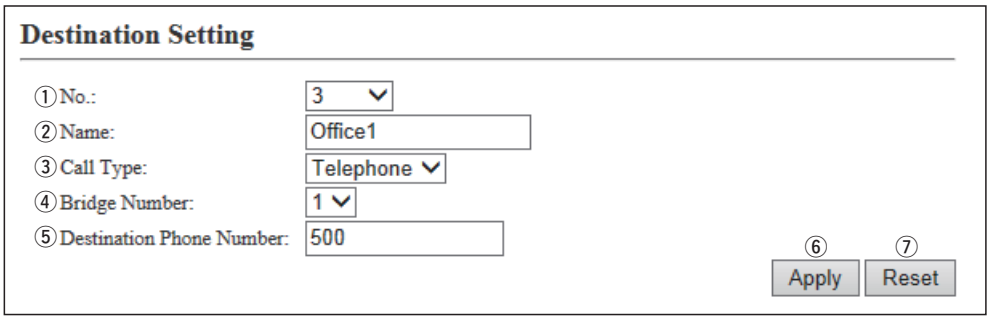
[Destination Settings]–[Destination Setting]

■ Destination Setting (continued)

Call Type: Telephone

Set the destinations to call the IP phone through the Internet.

• The items on the [Destination Setting] screen differ depending on the Call type setting.



(These are examples when the “Call Type” item is set to “Phone.”)

①No. ..... Select the number to register the destination IP phone.
Up to 1000 destinations can be registered.

②Name ..... Enter the destination name. (Up to 31 characters)

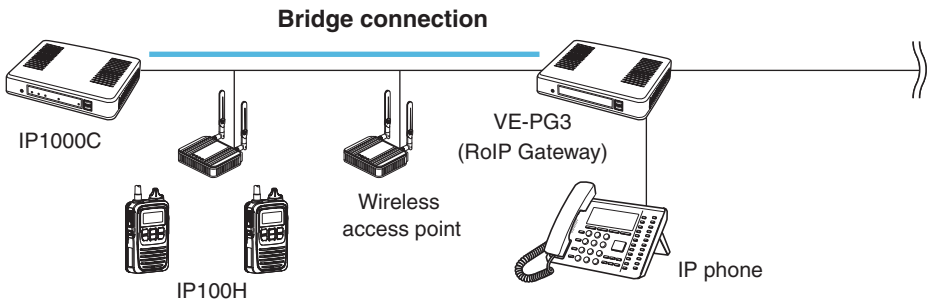
③Call Type ..... Select “Telephone” to call the IP phone.
• The “Telephone” option includes the transceivers in the VE-PG3’s network.

④Bridge Number ..... Select the bridge connection device (VE-PG3) to call the IP phone.
• It is necessary to complete the bridge connection setting between the IP1000C and the VE-PG3s that are registered in the [Bridge] screen on the [RoIP Server Setting] menu.

⑤Destination Phone Number ..... Enter the phone number.
Up to 31 digits numbers and symbols (#, ∗).

⑥<Apply> ..... Click to apply the entries.

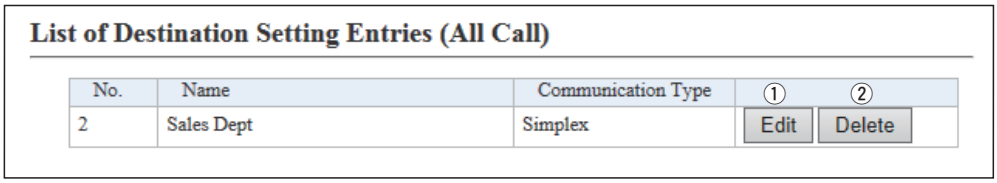
⑦<Reset>..... Click to restore the settings.
• You cannot restore after clicking <Apply>.



10. [Destination Settings] Menu (continued)

■List of Destination Setting Entries (All Call)

The list of the registered All Call.



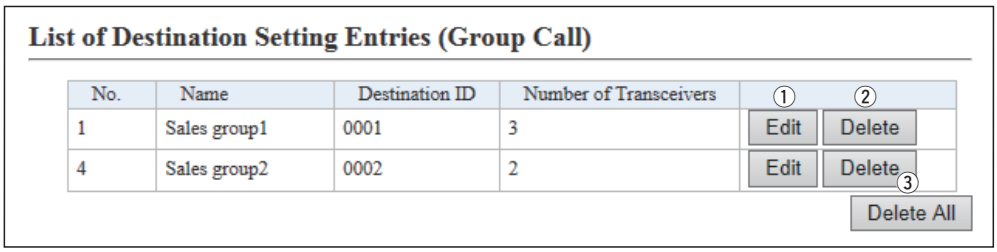
(This is only an example.)

①**<Edit>** ..... Click to edit the setting on the [Destination Setting] field.

②**<Delete>** ..... Click to delete the entries.
• After clicking <Delete>, the content cannot be recalled.

■List of Destination Setting Entries (Group Call)

The list of the registered Group Calls.



(This is only an example.)

①**<Edit>** ..... Click to edit the entries in the [Destination Setting] field.

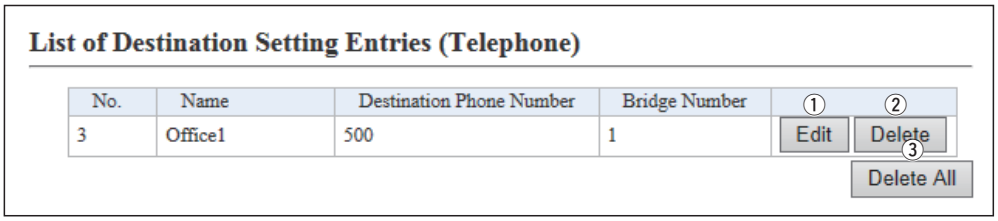
②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

10. [Destination Settings] Menu (continued)

■List of Destination Setting Entries (Telephone)

The list of the registered Phone Calls.



(This is only an example.)

①**<Edit>** ..... Click to edit the setting on the [Destination Setting] field.

②**<Delete>** ..... Click to delete the selected entries.
• After clicking <Delete>, the content cannot be recalled.

③**<Delete All>** ..... Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

11. [Management] Menu

[Management]–[Administrator]

■ Administrator Password

Set the administrator password.

①Username..... Displays the administrator login ID (“admin”).

②Current Password ..... Enter the current password, when you change it. (Default: admin)
• The entered characters are displayed as an * (asterisk) or a • (dot).

③New Password ..... Enter a new password up to 31 characters.
• The entered characters are displayed as an * (asterisk) or a • (dot).

④New Password (confirm) Enter the new password again.

⑤<Apply> ..... Click to apply the entries.

⑥<Reset>..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

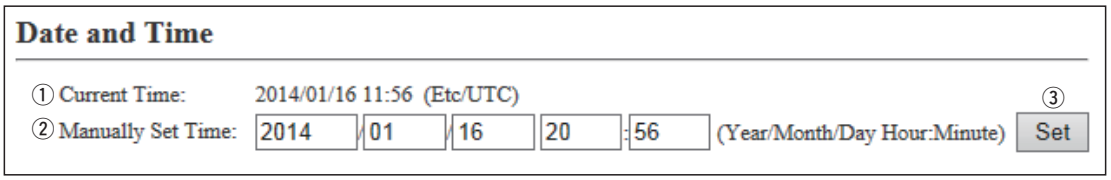
CAUTION
If you have forgotten the password, you cannot access the IP1000C’s setting screen again.
In this case, you have to initialize the IP1000C using the <INIT> button. See page 5-4 for details.

To prevent unauthorized access
You must be careful when choosing your password. A good policy is to occasionally change it.
• Choose one that is not easy to guess.
• Use numbers, characters and letters (both lower and upper case).

11. [Management] Menu (continued)

■Date and Time

You can set the IP1000C's internal clock time. (See Section 3 for details.)



①Current Time ..... Displays the current time.

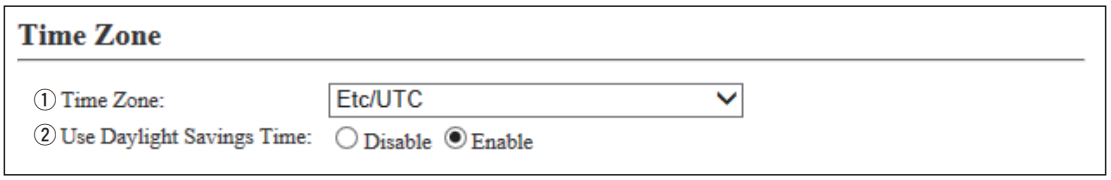
②Manually Set Time ..... Displays the time when you have opened this screen.
Note: Refresh the browser screen to refresh the time.

③<Set> ..... Click to set the internal clock to the time displayed in "Manually Set Time" item (②).
• Before clicking <Set>, refresh the browser screen.

11. [Management] Menu (continued)

■Time Zone

Select the appropriate Time Zone.



①Time Zone ..... Select the appropriate Time Zone. (Default: Etc/UTC)

②Use Daylight Savings Time Select "Disable" if not necessary. (Default: Enable)

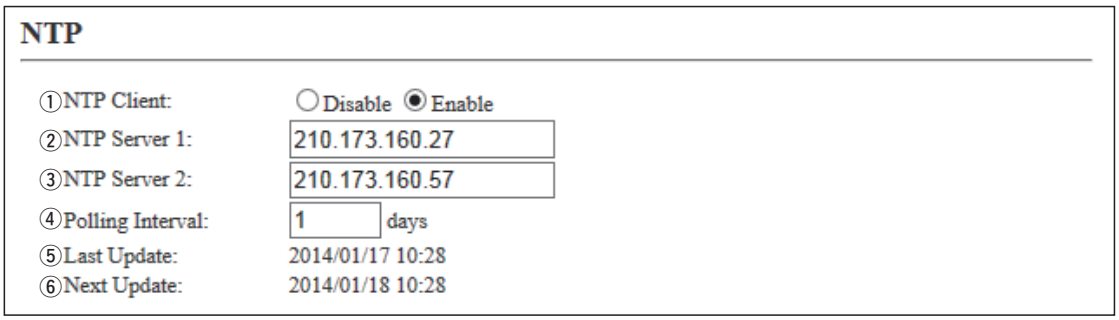
- If "Enable" is selected, the IP1000C automatically adjusts the time according to your time zone.
- If the Daylight Savings Time is not used in your area, this selection doesn't affect the time setting.

11. [Management] Menu (continued)

■NTP

The Automatic Clock Synchronize function automatically synchronizes the internal clock with the time server (NTP).

• To use this function, an internet connection and default gateway settings are necessary.



①NTP Client ..... Select “Enable” to use the Automatic Clock Synchronize function.
(Default: Enable)

②NTP Server 1 ..... Enter the time management server’s IP address.
(Default: 210.173.160.27)
• If the IP1000C cannot access this address, then the address set in the [NTP Server 2] (③) item is used.
Note: The default NTP servers are provided by INTERNET MULTIFEED Co.

③NTP Server 2 ..... Enter the second time management server’s IP address.
(Default: 210.173.160.57)

④Polling Interval ..... Enter the time synchronization interval. (Default: 1)
Range: 1 to 99 (day)

⑤Last Update ..... Displays the date and time when the IP1000C has last accessed the time management server.

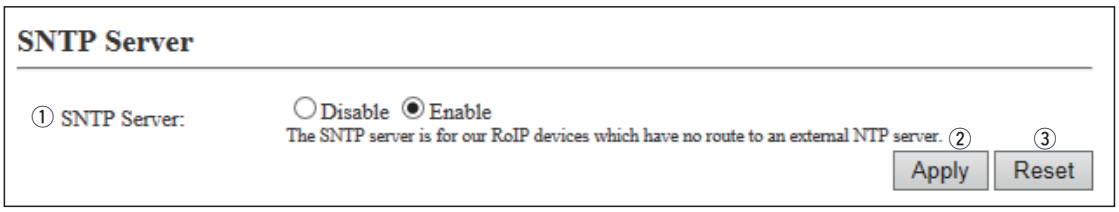
⑥Next Update ..... Displays the scheduled date and time when the IP1000C accesses the time management server next.

11. [Management] Menu (continued)

■SNTP Server

The SNTP server is for our RoIP device which have no route to an external Time server (NTP).

• To use this function, an internet connection and default gateway settings are necessary.



①**SNTP Server** …… Select “Enable” to use the SNTP function. (Default: Enable)

②**<Apply>** …… Click to apply the entries.

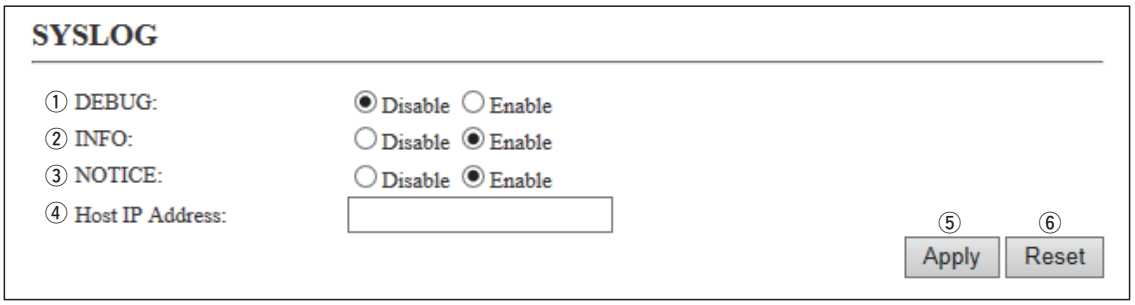
③**<Reset>**…… Click to restore the settings.

• You cannot restore after clicking <Apply>.

11. [Management] Menu (continued) [Management]–[SYSLOG]

■SYSLOG

Select the information to be saved to the SYSLOG host.



①**DEBUG** …… Select “Enable” to display the debug information. (Default: Disable)

②**INFO** …… Select “Enable” to display the INFO messages. (Default: Enable)

③**NOTICE**…… Select “Enable” to display the NOTICE messages. (Default: Enable)

④**Host IP Address**…… Enter the SYSLOG host’s address.

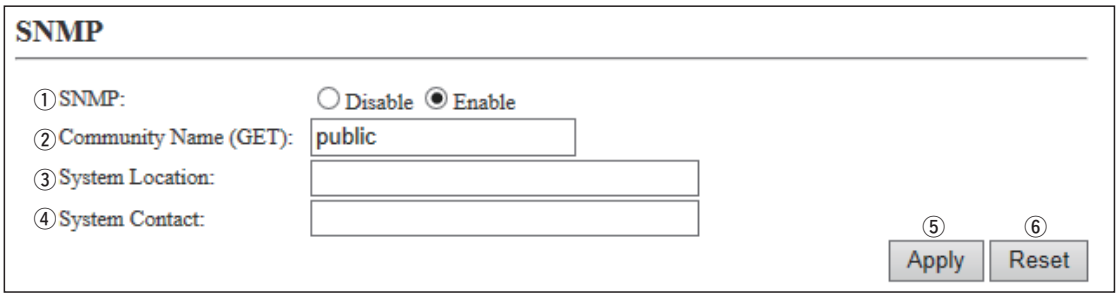
⑤**<Apply>** …… Click to apply the entries.

⑥**<Reset>**…… Click to restore the settings.
• You cannot restore after clicking <Apply>.

11. [Management] Menu (continued) [Management]–[SNMP]

■SNMP

Configure the SNMP function.



①**SNMP**..... Select “Enable” to use the SNMP function. (Default: Enable)

②**Community Name (GET)** ... Enter the Community name to get the SNMP community string. (Up to 31 characters) (Default: public)

③**System Location** ..... Enter the SNMP system location. (Up to 127 characters)

④**System Contact** ..... Enter the SNMP system contact. (Up to 127 characters)

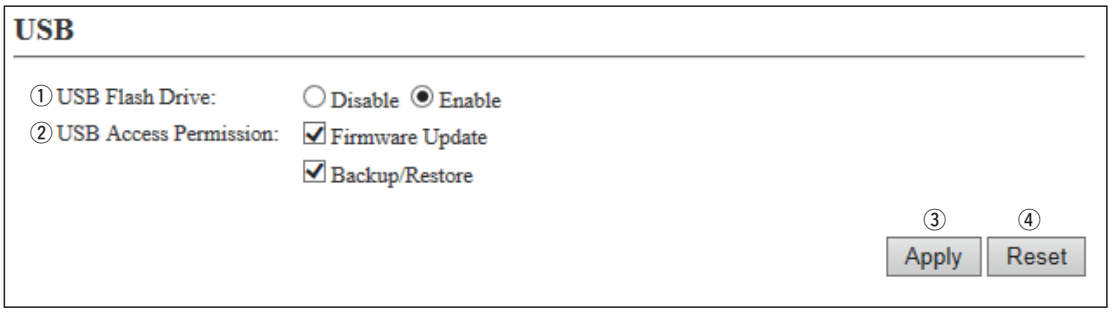
⑤**<Apply>** ..... Click to apply the entries.

⑥**<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

11. [Management] Menu (continued) [Management]–[USB]

■USB

Select the USB flash drive option.



①**USB Flash Drive** ..... Select "Enable" to use a USB flash drive. (Default: Enable)
Note: If you use the Automatic firmware update function or Automatic Setting Load function, select “Enable.”

②**USB Access Permission** ... Select the USB flash drive access option.
(Default: ☑ Firmware Update ☑ Backup/Restore)
- Firmware Update (p. 5-15)
- Backup/Restore Settings (p. 5-12)

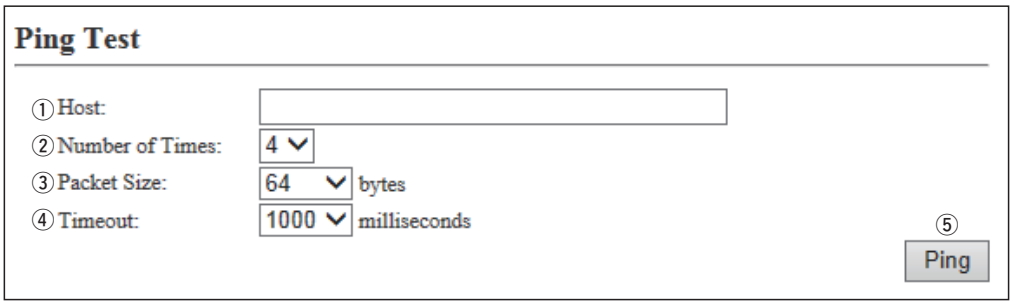
③**<Apply>** ..... Click to apply the entries.

④**<Reset>**..... Click to restore the settings.
- You cannot restore after clicking <Apply>.

11. [Management] Menu (continued) [Management]–[Network Test]

■Ping Test

Run the Ping test.



①**Host** ..... Enter the IP address to send the Ping packets to.

②**Number of Times** ..... Select the number of times to send. (Default: 4)

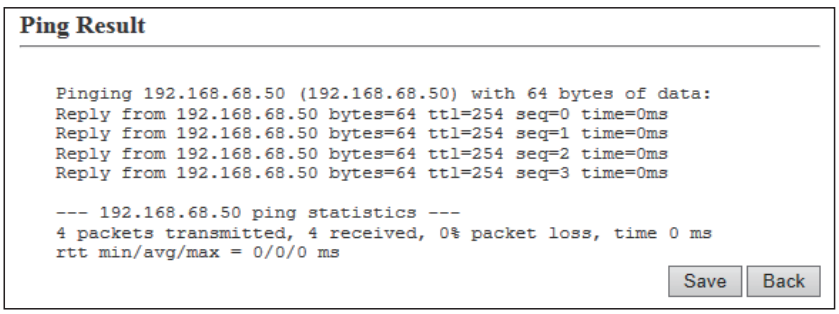
③**Packet Size** ..... Select the size of the packet's data part. (Default: 64)

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.

⑤**<Ping>** ..... Click to run the Ping test.

• The test result is displayed as shown below.



(This is only an example.)

• Click <Save> to save the result to a PC as a text file (extension: "txt").
Note: The file is saved as "ping_*host's address*.txt."

• Click <Back> to return to the Ping Test screen.

11. [Management] Menu (continued) [Management]–[Network Test]

■Traceroute Test

Run the Traceroute test.

①**Node** ..... Enter the node's (device's) IP address.

②**Max Hop Count** ..... Select the maximum hop number. (Default: 16)

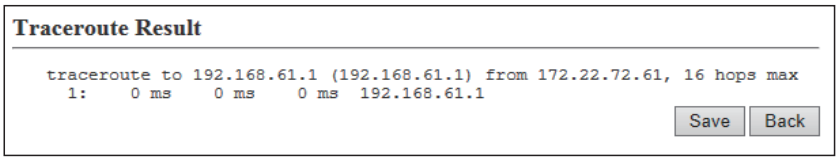
③**Timeout** ..... Select the response time. (Default: 3)

Note: If there is no response within the selected time, a time out error is returned.

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>** ..... Click to run the traceroute test.

• The test result is displayed as shown below.



(This is only an example.)

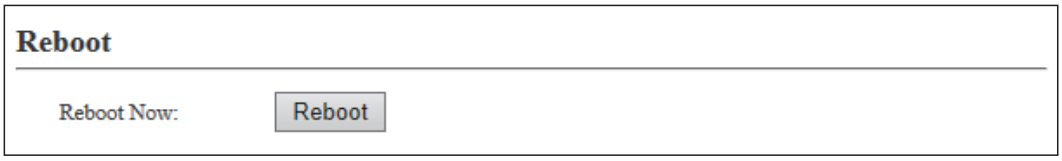
• Click to save the result to a PC as a text file (extension: “txt”).
• The file is saved as "tracert_*node's address*.txt."
• Click <Back> to return to the Traceroute Test screen.

11. [Management] Menu (continued) [Management]–[Reboot]

■Reboot

Click <Reboot> to reboot the IP1000C.

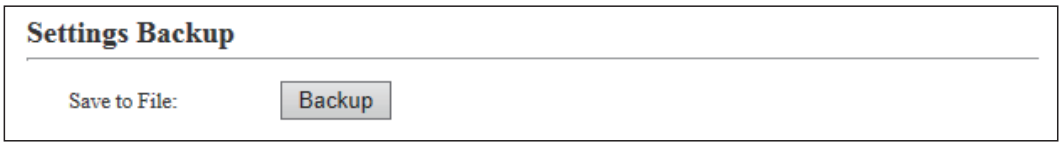
• When clicking <Reboot>, the "Do you want to reboot the system?" message appears. Click <OK> to continue.



11. [Management] Menu (continued) [Management]–[Settings Backup/Restore]

■Settings Backup

Save the IP1000C's settings to a PC as a backup.

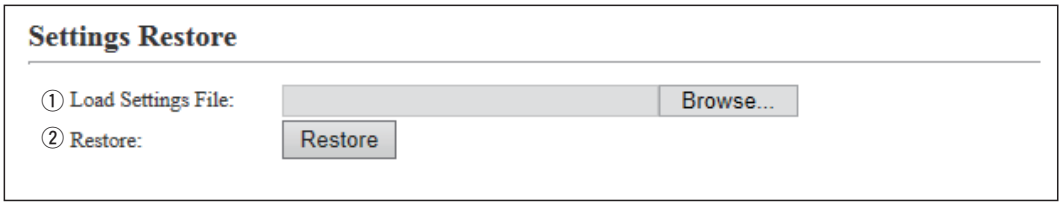


Save to File ..... Click <Backup> to save the settings to a PC as a backup file (Extension: sav).
See the topic below to load the saved file into the IP1000C.

NOTE
DO NOT write the saved file to any other devices.

■Settings Restore

Load the setting file (Extension: "sav") to the IP1000C.
Note: Loading takes a few minutes.



①**Load Settings from File**… Click <Browse...> to select the setting file.

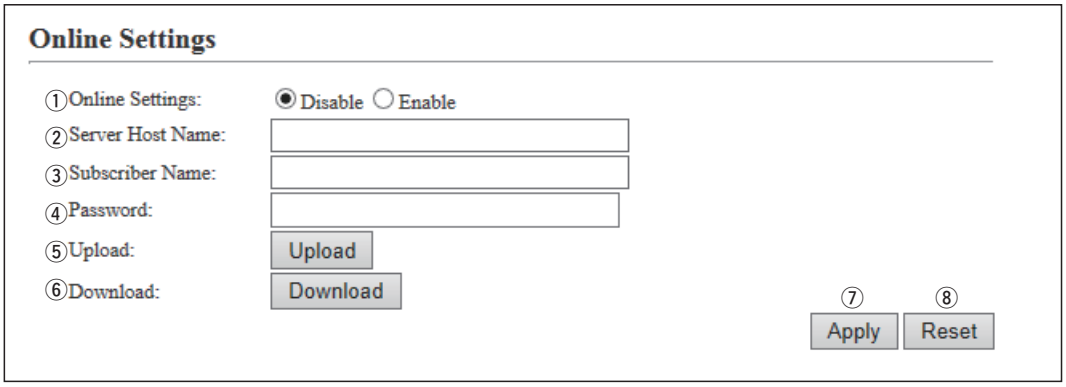
②**Restore**..... Click <Restore> to load the setting into the IP1000C.
Notes:
• The IP1000C's setting is overwritten.
• After loading, the IP1000C automatically reboots.
Caution: A modified setting file will damage the IP1000C.

11. [Management] Menu (continued)

■Online Settings

You can remotely configure the IP1000C, through the secured network path.

• An SFTP server is required for this function.



①**Online Settings** ..... Select "Enable" to use this function. (Default: Disable)

②**Sever Host Name** ..... Enter the SFTP server IP address or FQDN (Fully Qualified Domain Name) up to 128 characters.

③**Subscriber Name** ..... Enter the SFTP server username up to 128 characters.

④**Password** ..... Enter the SFTP server password up to 128 characters.

⑤**Upload** ..... Click to upload the IP1000C's setting file to the SFTP server.

⑥**Download**..... Click to download the IP1000C's setting file to the SFTP server.
• The IP1000C automatically reboots.

⑦**<Apply>** ..... Click to apply the entries.

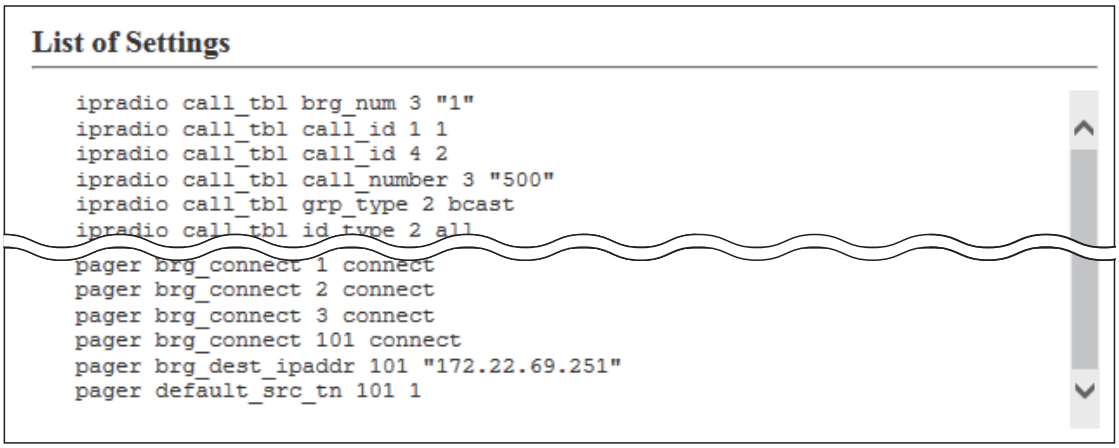
⑧**<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

11. [Management] Menu (continued)

■List of Settings

Displays the changed settings.

Note: The list is clear when the IP1000C is initialized.



(This is only an example.)

11. [Management] Menu (continued) [Management]–[Factory Defaults]

■Factory Defaults

Click <Restore> to return all settings to the factory default.

Note: If you cannot access the IP1000C's setting screen, initialize the IP1000C using the <INIT> button.
See page 5-4 for details.

NOTES

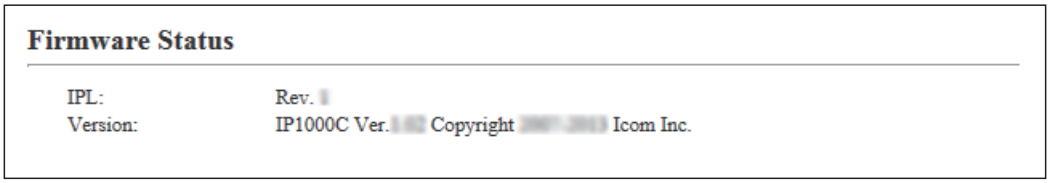
- After the IP1000C is initialized, the IP address is returned to the default (192.168.0.1).
- If the network part of the PC IP address is different from that of the IP1000C, you cannot access the IP1000C setting screen. In such case, change the PC IP address according to your network environment,

11. [Management] Menu (continued)

NOTES
- NEVER turn OFF the power until the updating has been completed. Otherwise, the IP1000C may be damaged.
- Ask your dealer for updated function or specification details.

■Firmware Status

Displays the firmware version.

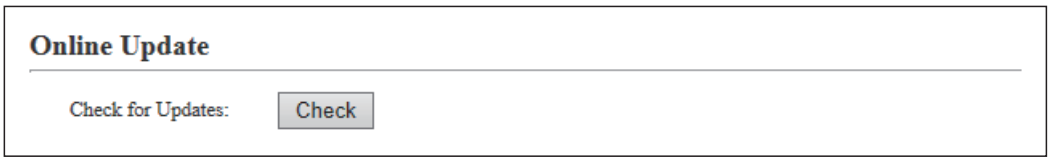


(This is only an example.)

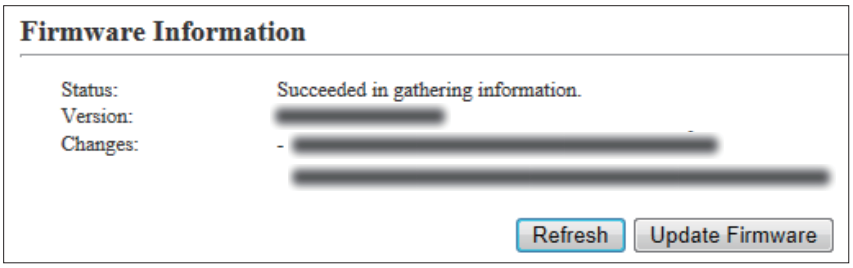
11. [Management] Menu (continued) [Management]–[Firmware Update]

■Online Update

Downloads the firmware through the internet, and automatically updates it.
Note: To use this function, an internet connection, DNS and default gateway settings are necessary.



Check for Updates ..... Click <Check> to access the update management server.
When the IP1000C has successfully accessed the server, the latest firmware version is displayed as shown below.



(This is only an example.)

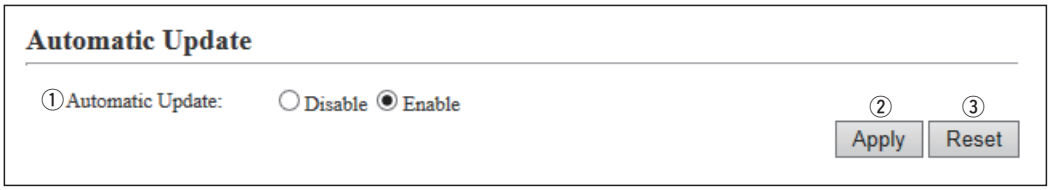
About the firmware information:

- When there is a newly updated firmware, the <Update Firmware> button is displayed.
- When there is no updated firmware, "Firmware already up-to-date" is displayed.
- When an error message appears, check the internet connectivity.

11. [Management] Menu (continued) [Management]–[Firmware Update]

■Automatic Update

The firmware can be automatically downloaded and updated.



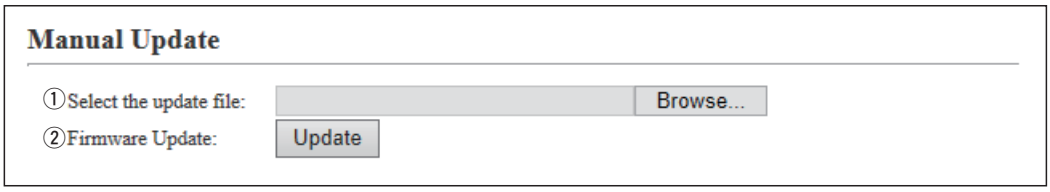
①**Automatic Update** ..... Select "Enable" to use the Automatic Update function. (Default: Enable)
• Select "Disable" if you don't desire to automatically update the firmware.

②**<Apply>** ..... Click to apply the entries.

③**<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

■Manual Update

The firmware can be updated using the saved firmware.



①**Update Firmware using File**

Click <Browse...> to select the firmware file (extension: "dat").
• The selected file appears in the "Update Firmware using File" item.

② **Firmware Update** ..... Click <Update> to update the firmware.
Note: After updating, the IP1000C automatically reboots.

MAINTENANCE

Section 5

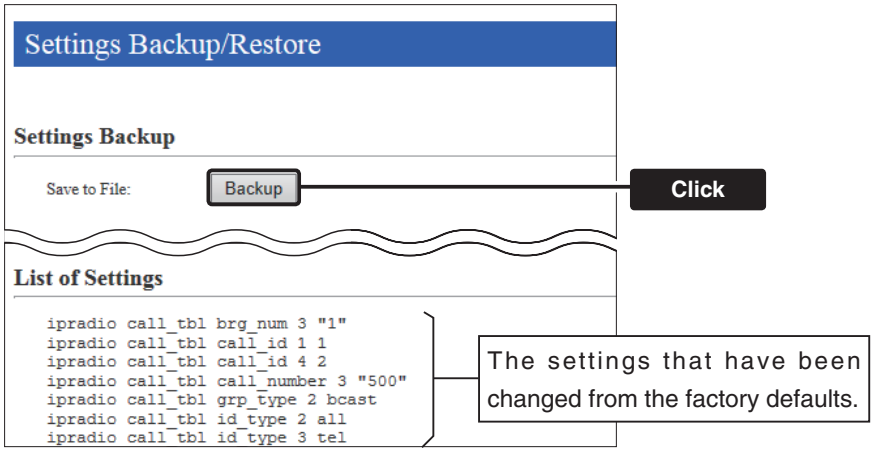
1. How to save the IP1000C's setting to a PC

You can save the IP1000C's settings of its setting screen to a PC or USB flash drive.
The saved settings can be used to recover the configuration.
• The settings can be directly loaded into the IP1000C from the USB flash drive.

■Saving the setting

1 Click [Management], then [Settings Backup/Restore].
• The [Settings Backup/Restore] screen appears.

2 Click <Backup>.
• The File Saving window appears.



3 Select a desired folder/location, then click [Save] in the File Saving window.
• The setting file (extension: "sav") is saved in the selected folder.
• The default file name is composed of the model name (IP1000C), version number and date.

2. How to load the saved file to an IP1000C

You can load the IP1000C's settings from a PC.

• The settings can be directly loaded into the IP1000C from a USB flash drive. (p. 5-12)

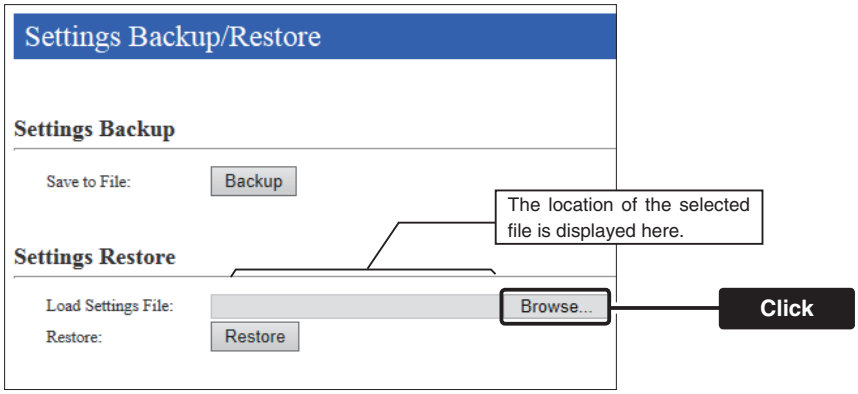
■ Reloading the settings file into the IP1000C

1 Click [Management], then [Settings Backup/Restore].

• The [Settings Backup/Restore] screen appears.

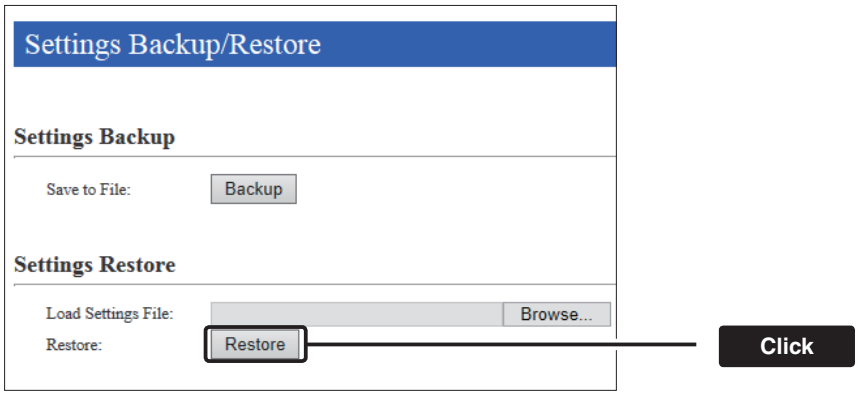
2 Click <Browse...>.

• The File Selection window appears.



3 Select the setting file (extension: "sav"), and then click <Restore>.

• After loading the file, the IP1000C automatically reboots.



NOTE:
DO NOT write the saved file to any other devices.

3. How to initialize the settings to the factory default

There two ways to initialize the IP1000C.

• Set the IP1000C's IP address again after the IP1000C is initialized.

A: Using the <INIT> button.

If you cannot access the IP1000C setting screen, initialize the IP1000C by pushing the <INIT> button.

B: Initialize on the IP1000C's setting screen.

If you can access the IP1000C setting screen, initialize the IP1000C on the setting screen. (p. 5-5)

A: Using the <INIT> button

Initializing clears all the settings.

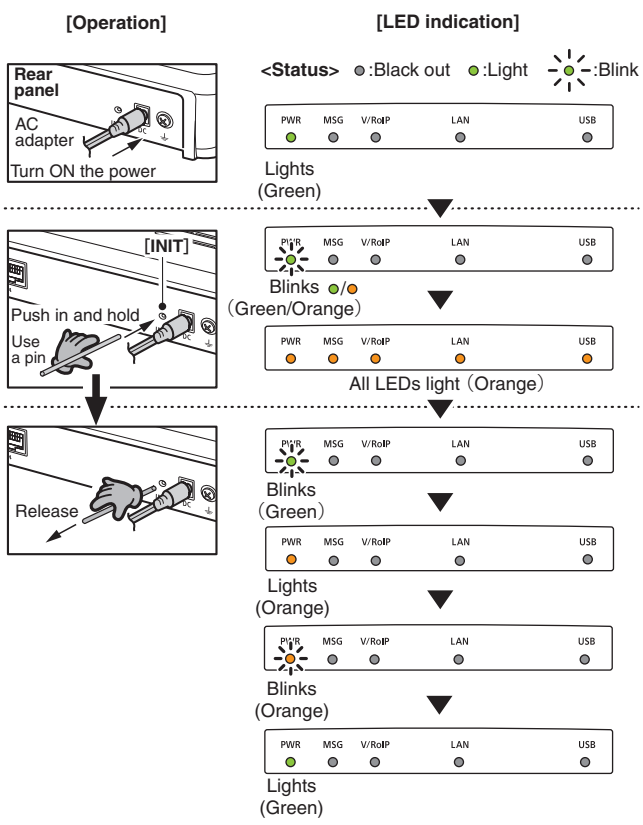
• If the network part of the PC IP address is different from that of the IP1000C, you cannot access the IP1000C setting screen. In such case, change the PC IP address according to the IP1000C address.
See the supplied "Precautions" leaflet for details.

1 Disconnect all cables from the IP1000C, and then connect the AC adapter.

• Verify that the [PWR] indicator lights green.

2 Push in and hold [INIT] with a pin on the rear panel until all indicators on the front panel light orange, and then release.

• When the initialization has been completed, the [PWR] indicator lights green.



About the initializing condition

You can restore all the IP1000C's settings. The IP1000C's IP address is set to "192.168.0.1," when initialized. Set the PC's IP address to "192.168.0.xxx." (You can set xxx to any number from 2 to 254.)

3. How to initialize the settings to the factory default (continued)

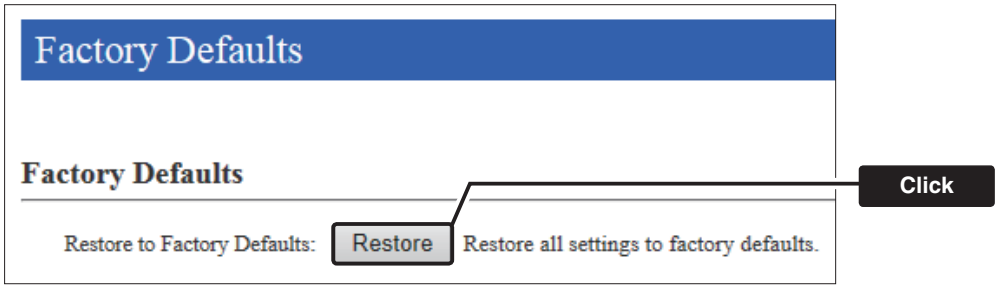
B: Using the IP1000C's setting screen

1 Click [Management], then [Factory Defaults].

• The [Factory Defaults] screen appears.

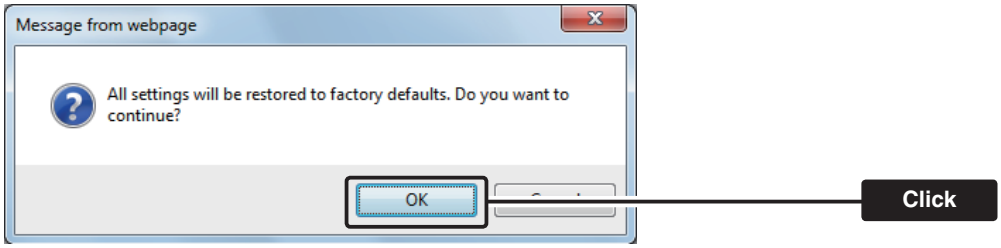
2 Click <Restore>.

• The warning window appears.



3 Click <OK>.

• The IP1000C automatically reboots.



About the initializing condition

You can restore all the IP1000C's settings. The IP1000C's IP address is set to "192.168.0.1," when initialized. Set the PC's IP address to "192.168.0.xxx." (You can set xxx to any number from 2 to 254.)

4. How to update the firmware

There are two ways to update the firmware.

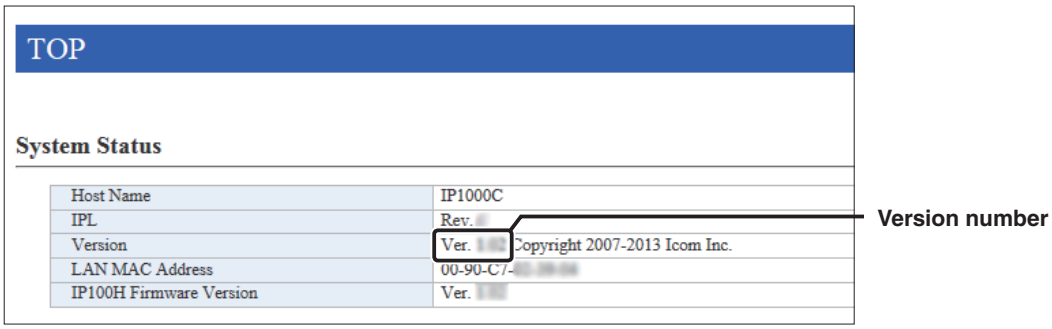
A: Updating on the setting screen.
Update the firmware on the setting screen.

B: Use the Firmware Update function. (p. 5-8)
The firmware can be automatically downloaded and updated.

- You can update the firmware using a USB flash drive. (p. 5-15)
- When [MSG] lights green, a firmware update is ready. See the “Precautions” leaflet for details.

■ About the Firmware

The firmware may be updated to improve the functions and specifications of the IP1000C.
Ask your dealer for updated function or specification details.



NOTE:
- NEVER turn OFF the power until the updating has been completed. Otherwise, the IP1000C may be damaged.
- If the firewall is running, stop it before updating the firmware. If you want to stop the firewall, ask your network administrator for the detail.
- Icom is not responsible on the consequence of the updating the firmware.

4. How to update the firmware (continued)

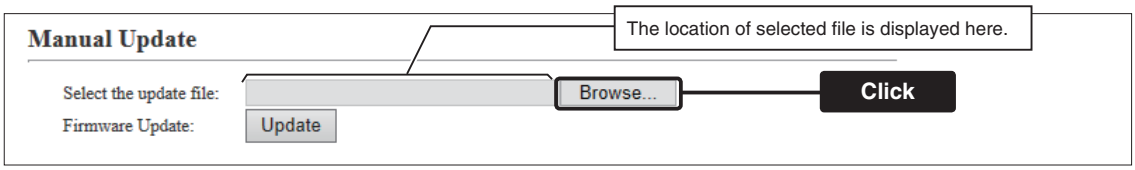
A: Update the firmware on the setting screen

We recommend that you save the current settings in the PC before updating the firmware. (p. 5-12)
Note: Some settings may be returned to their default after the firmware update. Check the Icom website for details.
• Restricting access to the setting screen is recommended. (p. 3-2)

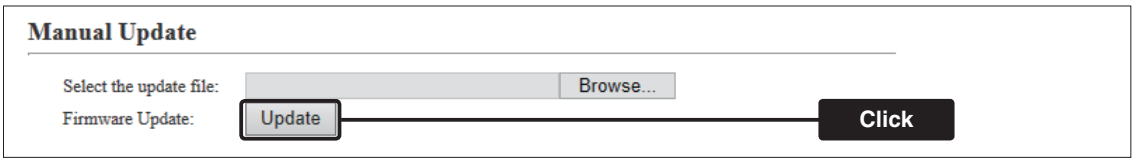
1 Download a new firmware (extension: “dat”) from the Icom website.

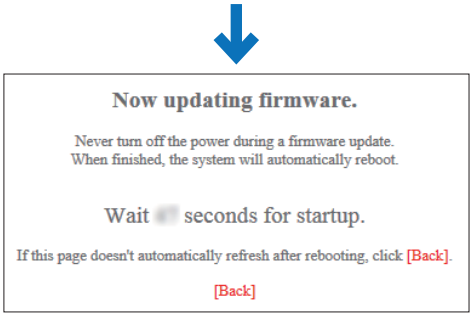
2 Click the [Management] menu, then [Firmware Update].
• The [Firmware Update] screen aeaprs.

3 Click <Browse...>, and then select the firmware file (Extension: dat).



4 Click <Update>.
• The "Now updating firmware" screen appears.





NOTE:
• NEVER turn OFF the power until the updating has been completed. Otherwise, the IP1000C may be damaged.
• The IP1000C’s IP address is set to “192.168.0.1,” when initialized by the firmware update. Set the PC’s IP address to “192.168.0.xxx.” (You can set xxx to any number from 2 to 254.)

4. How to update the firmware (continued)

B: Use the Firmware Update function

When [MSG] lights green, a firmware update is ready.

See the “Precautions” leaflet for details.

- To use this function, an internet connection, DNS and default gateway settings are necessary.
- We recommend to save the setting file as the backup. (p. 5-12)

5. About the Automatic Restore using a USB flash drive

You can clone the IP1000C's settings and firmware using a USB flash drive.

• See pages 5-12 to 5-16 for details.

About the USB flash drive:

- Before using the USB flash drive, save the content to a PC as a backup.
- The USB flash drive is not supplied. Purchase separately.
- A USB flash drive with biometric authentication, or one with password protection cannot be used.
- Turn OFF the IP1000C's power before inserting or removing the drive, to prevent data corruption.
- Either one of the USB slots accepts the drive, but insert only one drive at a time.
- Insert the drive securely.
- NEVER remove the USB flash drive or turn OFF the IP1000C's power, while transferring data. It will cause data corruption, or damage the USB flash drive. While transferring data, the [USB] LED alternately blinks orange and green.
- After the firmware updating is finished, check the firmware version on the setting screen to verify that the update was correctly done.
- When importing setting data from a USB flash drive to the IP1000C, the originally programmed setting data is automatically saved as "bakdata.sav" in the USB flash drive, as a backup.
- If both firmware and setting files are saved on a USB flash drive, the firmware and setting data are sequentially updated.

Supported USB specification:

Interface: USB 2.0
Device: USB flash drive (USB Mass Storage Class)
File format: FAT16/FAT32 (exFAT and NTFS are not supported.)
Note: Some USB flash drives are not guaranteed.

(Continued on the next page.)

5. About the Automatic Restore using a USB flash drive (continued)

[About the settings file name]

The settings file must be saved as “savedata.sav” on the flash drive.

• Only the settings file that is saved in the [Settings Restore] field can be used for the Automatic restore. See page 5-2 for details.
[Management] (menu) > [Settings Backup/Restore] (screen) > [Settings Restore] (field)

The firmware file, which is downloaded from Icom website, must be saved as “firmware.dat” on the flash drive.

[About the Automatic Settings Backup function]

The latest 10 backup files (revisions) are stored on the USB flash drive with the file name “bakdata_X.sav” (X=Revision number).

(Example)
The oldest backup file’s name: “bakdata_10.sav”

• The firmware is not automatically saved as a backup.
• The latest settings backup file is saved as “bakdata.sav” (with no revision number).
• If the content of settings file is the same as the IP1000C’s current settings, no setting backup file is saved.

(Continued on the next page.)

5. About the Automatic Restore using a USB flash drive (continued)

[How to clone the settings and the firmware using a USB flash drive.]

A USB flash drive can contain settings and firmware files for different IP1000Cs.

You need to create folders, whose names are each IP1000C's LAN MAC address (p. 4-5), and save the firmware and settings files to each folder.

Example: The IP1000C's LAN MAC address is "0090C7000001."

- Create the folder named "0090C7000001" on a USB flash drive, and then save the firmware and settings files to the folder.

  Insert the USB flash drive, into the IP1000C. Then the setting backup file is automatically created in the "0090C7000001" folder.

  The firmware and settings files are loaded from the "0090C7000001" folder.

  Note: The firmware and settings files in any other folders are not loaded.

- If inserting the flash drive (Figure 1 and 2 in the picture below) into the IP1000C (0090C7000002), the setting backup file is automatically created in the root directory as there is no folder whose name is IP1000C's LAN MAC address.

  The firmware and settings files in the root directory are loaded.

Figure 1

Create the "0090C7000001" folder on the USB flash drive, and then save the firmware or settings file to the folder.

If there is no folder for the IP1000C's MAC address. Firmware and settings backup files are saved in the root directory.
- You can create multiple folders and save the files into them.

(Example: "0090C7000001," "0090C7000002," "0090C7000003")

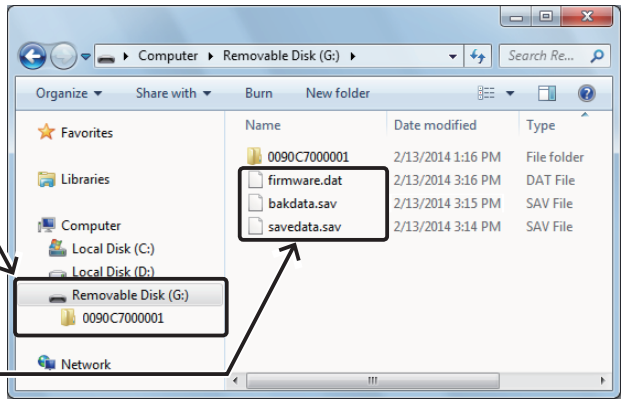
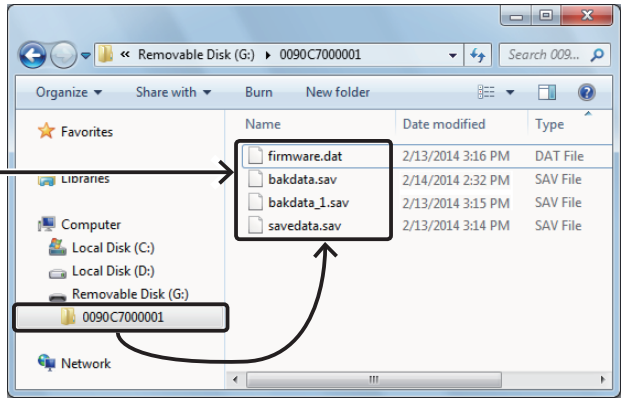


Figure 2

Files in the "0090C7000001" folder.



6. How to restore the configuration using a USB flash drive

You can clone the settings to the other IP1000Cs.
It is convenient when you sequentially configure multiple IP1000Cs.
Note: Before using a USB flash drive, see page 5-9.

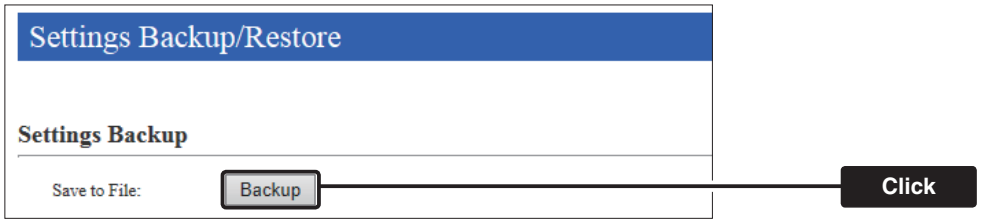
■Saving the settings file to a USB flash drive

1 Insert the flash drive securely into one of the PC's USB ports.

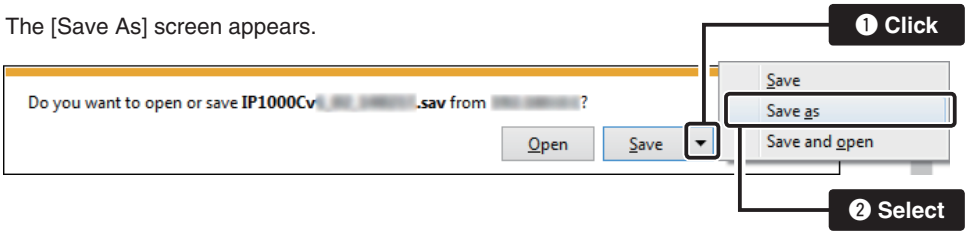
2 Open the IP1000C's setting screen.

3 Click [Management], then [Settings Backup/Restore].
• The [Settings Backup/Restore] screen appears.

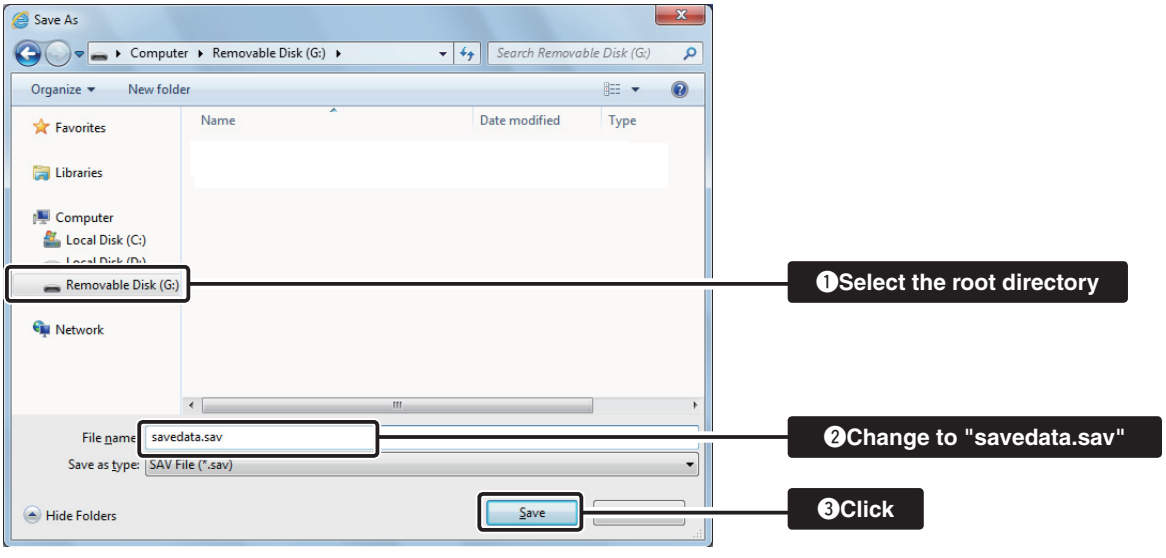
4 Click <Backup>.



4 Click "▼" of <Save>, and then select "Save as."
• The [Save As] screen appears.



5 Select the root directory of the USB flash drive, and save the settings file as "savedata.sav."
• Any other file name is not acceptable.



(Continued on the next page.)

6. How to restore the configuration using a USB flash drive (continued)

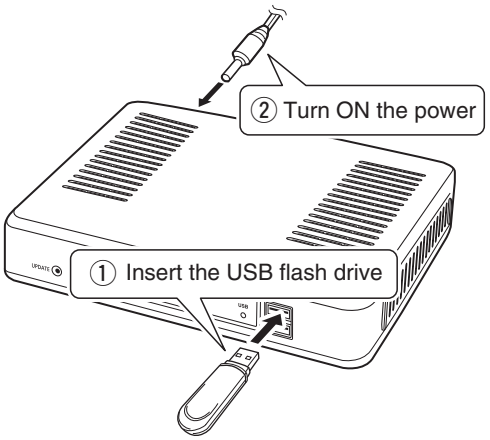
■ Loading the settings from the USB flash drive

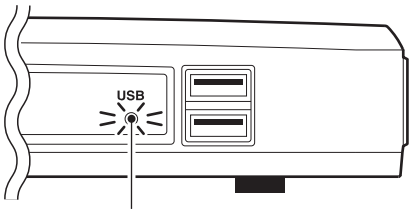
1 Remove the USB flash drive from the PC appropriately.

2 Prepare the IP1000C to load the settings.

3 Turn OFF the power.
NOTE: Turn OFF the IP1000C's power, before inserting the USB flash drive.

4 Insert the USB flash drive, that contains the setting data (savedata.sav), into a [USB] port, and then turn ON the power.
• While setting data, the [USB] LED alternately blinks orange and green.





Alternately blinks orange and green while accessing the device.

Note: NEVER remove the USB flash drive or turn OFF the IP1000C's power, while setting data. It will cause data corruption, or damage the USB flash drive.

(Continued on the next page.)

6. How to restore the configuration using a USB flash drive (continued)

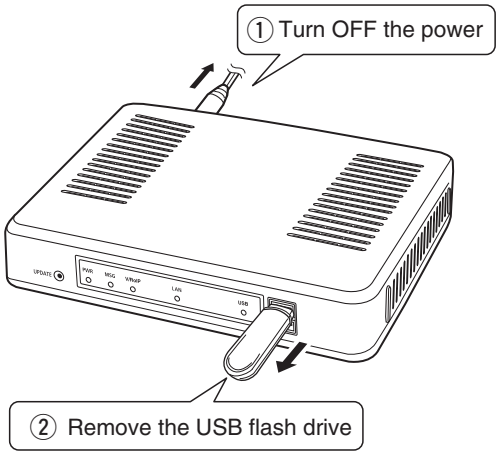
Loading the settings from the USB flash drive (continued)

5 When the all data has been loaded, the [USB] LED turns OFF, and the IP1000C automatically restarts. Verify that the [PWR] LED lights green, then turn OFF the power.

Then remove the USB flash drive from the IP1000C.

Note: The IP1000C's old setting data is automatically saved in the USB flash drive as "bakdata.sav."

Note: NEVER remove the USB flash while the IP1000C's power is ON.



NOTE:
If "Disable" is selected in the "USB Flash Drive" item on the [USB] screen, this function cannot be used. (p. 4-81)

7. How to update the firmware using a USB flash drive

The firmware update can be done by using a USB flash drive.
Note: Before using a USB flash drive, see page 5-9.

■ Updating the firmware

1 Download a new firmware (extension: “dat”) from Icom website.

2 Insert the USB flash drive to the PC.

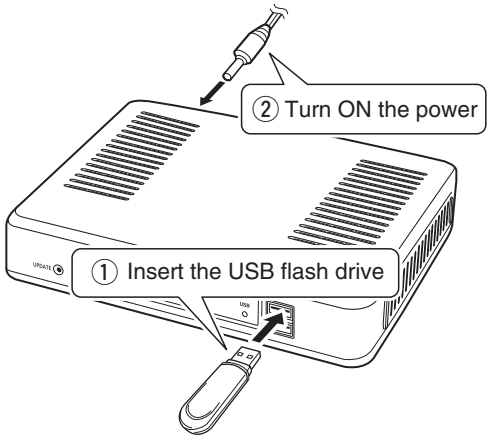
3 Select the root directory of the USB flash drive, and save the firmware file as “firmware.dat.“
- Any of other file name is not acceptable.
- If you made the folder name is the IP1000C’s LAN MAC address (example: “0090C7000001”), save the file to the folder.

4 Remove the USB flash drive from the PC appropriately.

5 Prepare the IP1000C to update the firmware.

6 Turn OFF the power.
Note: Turn OFF the IP1000C’s power, before inserting the USB flash drive.

7 Insert the USB flash drive to the [USB] port, and then turn ON the power.
- While transferring data, the [USB] indicator alternately blinks orange and green.



NOTE:
- NEVER turn OFF the power until the updating has been completed. Otherwise, the IP1000C may be damaged.
- Icom is not responsible on the consequence of the updating the firmware.

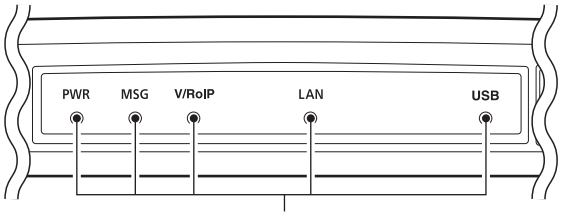
(Continued on the next page.)

7. How to update the firmware using a USB flash drive (continued)

Updating the firmware (continued)

8 All LEDs light orange while the firmware update is in progress.

Note: NEVER remove the USB flash drive or turn OFF the IP1000C's power.

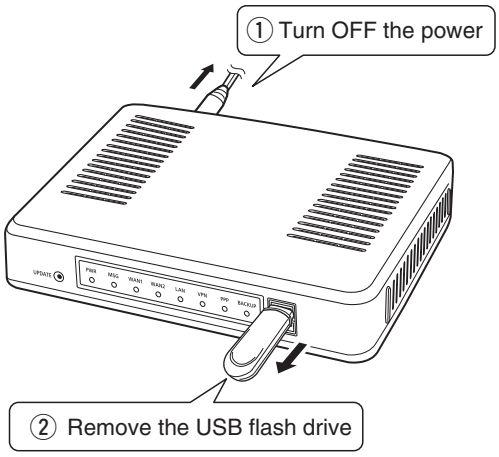


Lights orange while updating the firmware.

9 When the update has been finished, the IP1000C automatically reboots.

• After rebooting, verify that [PWR] lights green, and then turn OFF the power.

Note: NEVER remove the USB flash drive while the IP1000C's power is ON.



NOTE:
After the firmware updating is finished, check the firmware version on the setting screen to verify that the update was correctly done.

FOR YOUR INFORMATION

Section 6

6 FOR YOUR INFORMATION

1. Trouble shooting

If the IP1000C seems to be malfunctioning, please check the following before sending it to a service center.

The [PWR] LED does not light.

- **The AC adapter is not connected to the IP1000C.**
  - Verify that the AC adapter is securely connected.
- **The AC adapter is connected to the AC outlet interlocked with a PC.**
  - Connect the AC adapter to a different AC outlet.

The [LAN] LED does not light.

- **The Ethernet cable is not properly connected to the IP1000C.**
  - Verify that the Ethernet cable is securely connected.
- **The HUB or PC is turned OFF.**
  - Turn ON the HUB or PC.

You cannot access the IP1000C's setting screen.

- **The PC's IP address is incorrect.**
  - Manually set the PC's IP address after you set the IP1000C to the default setting.
- **The network part of PC's IP address is different from the IP1000C.**
  - Set the network part of PC's IP address to the same as the IP1000C.
- **A proxy server is used for the web browser setting.**
  - Set the web browser's proxy server setting to OFF.

The IP1000C's setting screen is not properly displayed.

- **The javascript or cookie functions are turned OFF.**
  - Set the javascript and cookie functions to ON.
- **Your browser is other than Microsoft Internet Explorer or the version is 8 or earlier.**
  - Use Microsoft Internet Explorer 9 or later.

The IP1000C cannot automatically update the firmware

- **The IP1000C's IP Address or DNS server's IP is not correctly set.**
  - Correctly set the "IP Address" item in the Network Settings menu. (See page 4-11 for details.)
    Network Settings (menu) > IP Address (screen) > IP Address (item)
- **The firewall is running.**
  - Stop the firewall.
    If you want to stop the firewall, ask your network administrator for details.

1. Trouble shooting (continued)

The IP100H displays the “Out of range” icon or “Connecting...”

• The distance between the IP100H and its wireless access point is too far.
- Move closer to the access point.

• The wireless access point does not turn ON.
- Turns ON the access point.

• The wireless LAN setting of the IP100H does not match the access point’s.
- Check the wireless LAN settings of the access point.
- Using the cloning software CS-IP100H, check and modify the wireless LAN settings of the IP100H.

• In the 5 GHz band operation, the access point is set a stealth SSID setting such as “Refuse ANY.”
- Turns OFF “Refuse ANY.”

The IP100H displays “Setting Error...”

(When the IP100H displays “In the range” icon.)

• The provisioning server settings of the IP100H are different than the connected the IP1000C.
- Using the cloning software CS-IP100H, check and modify the provisioning server settings.
- In the IP1000C software, check and modify the provisioning server settings of the IP100H.

• The IP1000C does not connect to the network.
- Check the connections between the IP1000C or Hub and check the LAN cables.

The IP100H cannot communicate with any other devices

• The setting of the Individual ID or Group ID is incorrect.
- Enter the correct Individual ID or Group ID.

• The Individual ID or Group ID is not registered on the ID list.
- Enter the “Destination ID/Phone Number” in the “ID List” item on the [ID List] screen.
- When using the RoIP gateway VE-PG3, check the bridge connection with the VE-PG3.

The IP100H cannot use the Area call function

• The function setting of the Area Call is set to “Disable.”
- Set the “Area Call” item in the Transceiver Settings screen. (p. 4-35)
- Reboot the IP100H and get the setting from the IP1000C.
- Push [FUNC] on the IP100H’s front panel, then turn ON the “Area Call” function.

• The wireless access point that the IP100H connects to in the Area Call, is not set.
- Enter the “Area Setting” item in the [Area Call] screen. (p. 4-25)

2. How to connect to the IP1000C using Telnet

For Windows® 7: Before performing the following procedure, turn ON [Telnet Client] on the [Turn Windows features on or off] window. ([Control Panel] > [Programs and Features] > [Turn Windows features on or off])

■ How to connect

①Start up Windows.
②Click the Start button (Logo button), and then click [Search program and files].
Input “telnet.exe” in the text box, and then push [Enter].
③The Telnet screen appears, then input the appropriate address, as shown below.
Microsoft Telnet>open IP1000C’s LAN IP address. (Example: open 192.168.0.1)
④Input login ID and password, then push [Enter].
login: admin
password: admin (The IP1000C’s default password)
⑤When the Telnet access is successful, “IP1000C #” is displayed on the Telnet screen.

■ How to use the [CONSOLE] port

The IP1000C can be configured using a terminal software. (Optional OPC-1402A is required.)
Set the COM port as shown below, to communicate with the IP1000C.

COM port settings:
• COM port number: The port number that the optional OPC-1402A is connected to.
• Bits per second: 115200 (bps)
• Data bits: 8
• Parity: None
• Stop bits: 1
• Flow control: None
After settings are completed, push [Enter] to display “IP1000C #.”

■ About Telnet commands

The following commands can be used with the Telnet function.

Command list …… Push the [Tab] key to display the Telnet command list.
After typing a Telnet command, push the [Tab] key to display the sub command list.

Command help …… After typing “help,” enter a command to display the command description.
Example: “help save” (the “save” command description is displayed.)

Automatic complement … After typing the first few characters of the command, push the [Tab] key. The rest of the characters for the command are automatically entered.
Example: “n” + [Tab] -> network
Suggested commands are displayed.
Example: “res” + [Tab] -> **res**et, **res**tart

3. Specifications

Note: All specifications are subject to change without notice.

■ General

Power supply:	12 V DC ±10% [Plug polarity: ⊖—◉—⊕]
	Less than 15 Watts
Usable condition:	Temperature 0 to +40°C; +32 to +104°F, Humidity 5–95% (At no condensation)
Dimension:	Approximately 232 (W) × 38 (H) × 168 (D) mm; 9.1 (W) × 1.5 (H) × 6.6 (D) in (projections not included)
Weight:	Approximately 0.8 kg; 28 oz (without the supplied accessories)
Regulatory Compliance:	FCC Part15 Subpart B/Canada ICES-003 [USA-11]
	EN55022/EN55024/EN61000-3-2/EN61000-3-3 [EUR-12], [EUR-14]
Interface:	LEDs (PWR, MSG, V/RoIP, LAN, USB)
	Buttons (UPDATE, INIT)
	[USB] port (USB 2.0) ×2

■ Communication Interfaces

Interface:	[LAN] port (RJ-45 type) × 4 (Auto MDI/MDI-X)
	• IEEE802.3/10BASE-T
	• IEEE802.3u/100BASE-TX
	• IEEE802.3ab/1000BASE-T
	[CONSOLE] port (RJ-11 type) × 1
	• RS-232C
Communication rate:	[LAN] port 10/100/1000 Mbps (Automatic switching, Full duplex)

All stated specifications are typical and subject to change without notice or obligation.

Count on us!

A-7125-3EX-0a

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