



INSTRUCTION MANUAL

IP ADVANCED RADIO SYSTEM
CONTROLLER

IP1000C

INTRODUCTION

1 BEFORE USING THE IP1000C

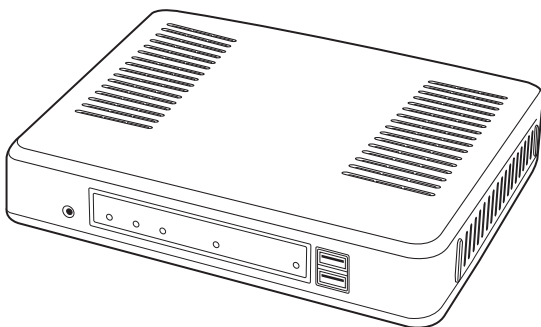
2 SETTING UP THE IP1000C SYSTEM

3 OTHER BASIC FUNCTIONS

4 ABOUT THE SETTING SCREEN

5 MAINTENANCE

6 FOR YOUR INFORMATION



Icom Inc.

INTRODUCTION

Thank you for choosing 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.

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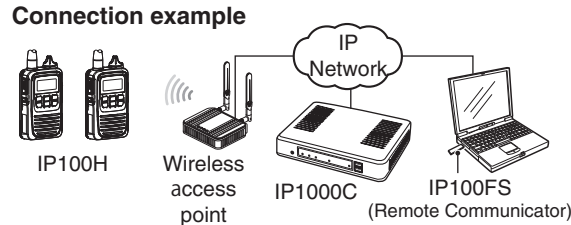
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INTRODUCTION

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.



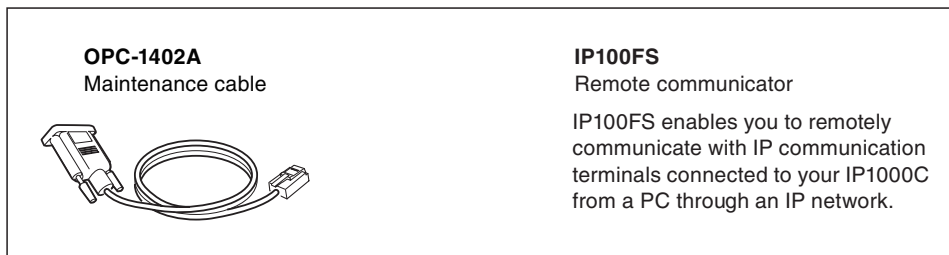
- A total of up to 100 IP100Hs IP COMMUNICATION TERMINAL and IP100FSs REMOTE COMMUNICATOR can be registered and used in the IP1000C system. (Depending on the IP1000C versions, only 20 terminals can be registered.)
 - The IP100FS enables you to remotely communicate with IP communication terminals connected 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, Talkgroup Call, Individual Call, and Telephone Call.
 - The Talkgroup Call is the terminal selects the group that it belongs to.
- In the All Call, Group Call and Talkgroup 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 with Icom's VE-PG3 (ver. 1.13 or later), you will be able to communicate with certain types of Icom transceivers. Also If you connect in bridge port with Icom's VE-PG3 (ver. 1.03 or later), you will be able to communicate using the VoIP router, which enables you make extension phone calls and outline phone calls.
 - Only the VE-PG3's bridge ports that are set in the converter mode are connectable.
- A total of up to 50 ID list and 10 messages can be programmed for 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.
- You can communicate with IP100Hs connected to the additional IP1000Cs on the network by using the [Additional Controller Link] function.
 - Use a VPN router such as Icom's SR-VPN1 between sites if necessary.

*This document is described based on the IP1000C firmware version 1.61.

INTRODUCTION

OPTIONS

As of January 2016



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
Management	DHCP Server	DHCP Server	DHCP Server	Disable
	Administrator	Administrator	Username	admin (fixed)
			Current Password:	admin (lower case)
	Date and Time	NTP	NTP Client	Enable
			SNTP Server	Enable
	USB	USB	USB Flash Drive	Enable
			USB Access	✓ Firmware Update
Permission			✓ 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

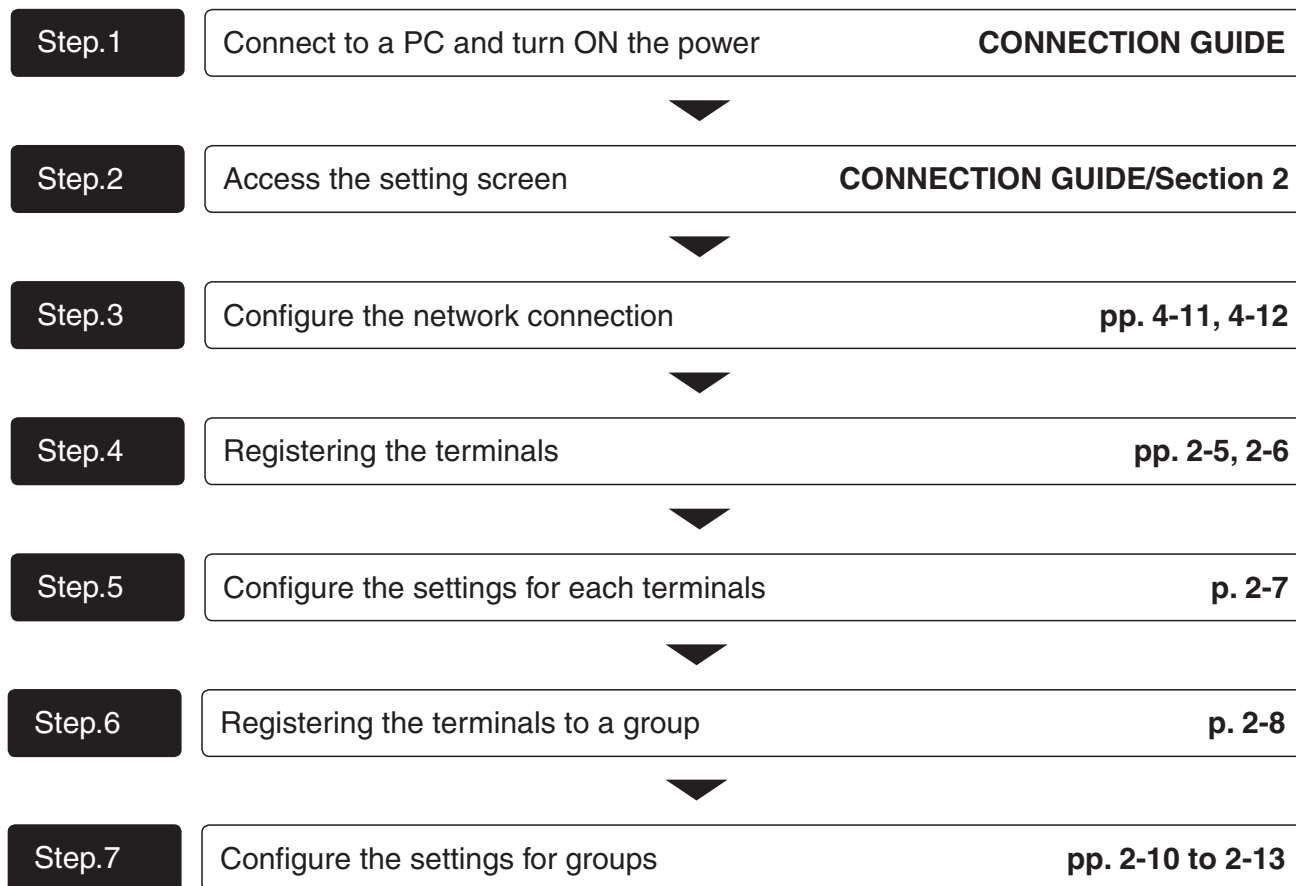
You must choose a strong password and change it occasionally.

- 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.

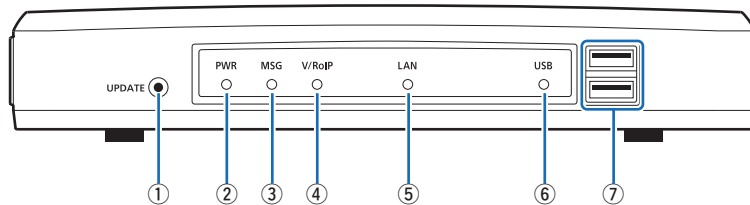


1. Panel description	1-2
■ Front panel	1-2
■ Rear panel	1-4
2. Feature description	1-5
■ About the basic connection	1-5
■ Connecting transceivers	1-6
■ Connecting a telephone and transceivers	1-6
■ Simplex and Full-Duplex	1-7
■ Multi communication	1-7
■ All Call and Group Call	1-8
■ Talkgroup Call	1-9
■ Individual Call	1-10
■ Calling mode	1-10
■ Priority Call and its priority	1-11
■ Area Call	1-12
■ Messages	1-13
■ About Status Settings	1-14

1 BEFORE USING THE IP1000C

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].....
- No light: The latest firmware is installed
 - 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)

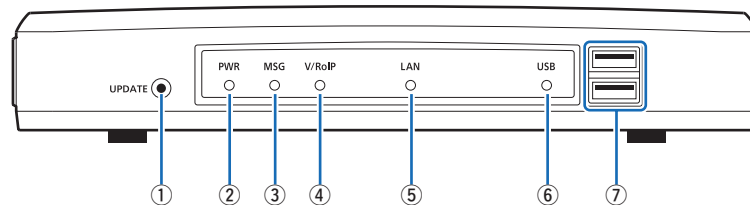
*³ When 1000BASE-T/10BASE-T/100BASE-TX are mixed, the [LAN] LED lights orange.

*⁴ The data communication status for each [LAN] port can be checked with the [LAN] LED on the rear panel. (p. 1-4)

1 BEFORE USING THE IP1000C

1. Panel description

■ Front panel (continued)



⑥ [USB]

- No light: A USB flash drive is not inserted.
- Lights green: Inserting a 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

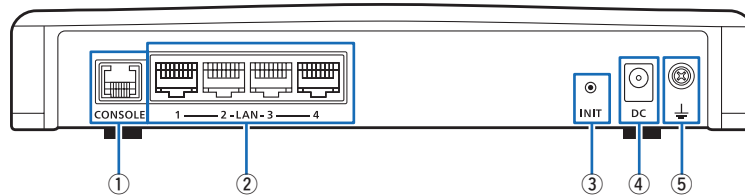
Insert a USB flash drive (purchase separately) to recover the configuration or to update the firmware. (p. 5-9)

- 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.

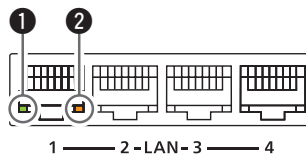
1 BEFORE USING THE IP1000C

1. Panel description (continued)

■ Rear panel



- ① [CONSOLE] port Connect an RS-232C serial communication interface to externally configure the IP1000C. (Optional OPC-1402A is required.)
(RJ-11 type)
- ② [LAN] ports Connect the network devices such as a HUB.
(RJ-45 type×4) [LED indication]



- Lights: LAN connected
Blinks: LAN data communicating
- ① Green : 1000BASE-T
② 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.
- ④ DC jack Connect the supplied AC adapter.
- ⑤ Ground terminal Connect to the ground.

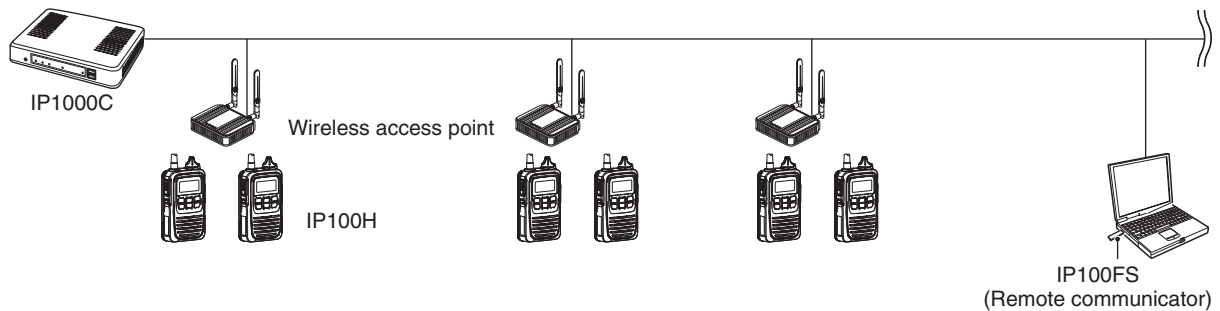
1 BEFORE USING THE IP1000C

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 website)

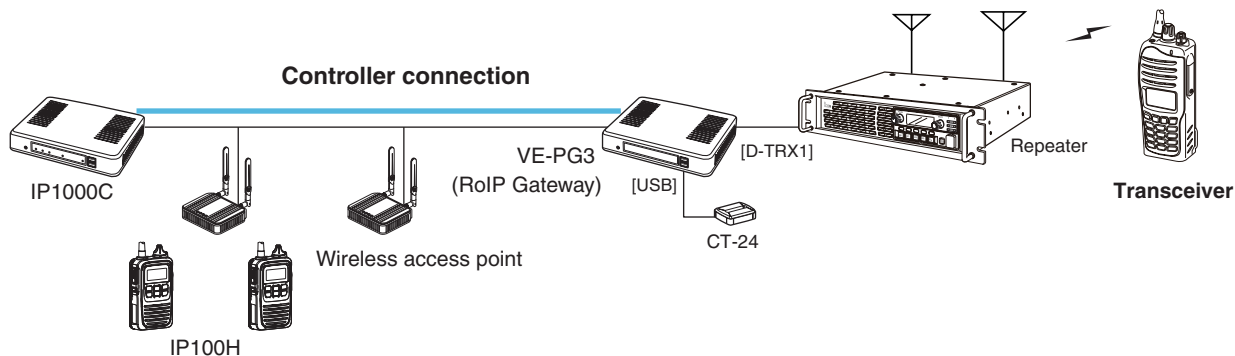
- Connect the cloning cables correctly according to the CS-IP100H instruction manual uploaded on the Icom's website. Read the instruction carefully and completely.

1 BEFORE USING THE IP1000C

2. Feature description (continued)

■ Connecting transceivers

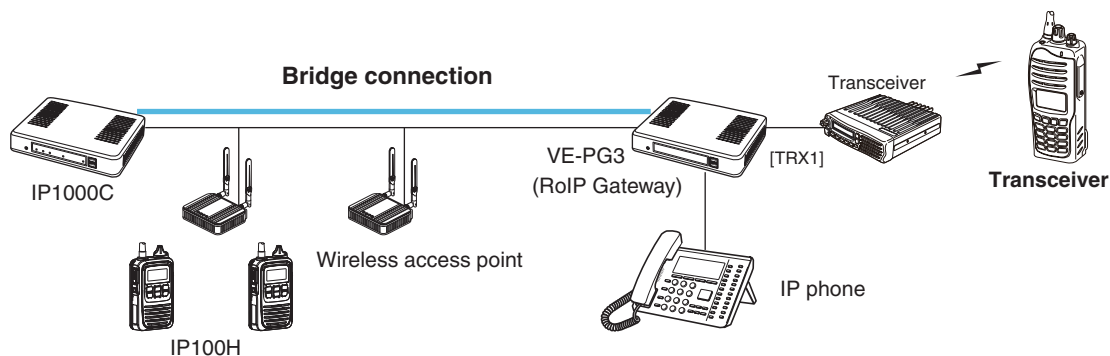
If you connect in controller connection with Icom's VE-PG3 (ver. 2.01 or later), you will be able to communicate with certain types of our transceivers.



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

■ Connecting a telephone and transceivers

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 out-line phone calls.



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

1 BEFORE USING THE IP1000C

2. Feature description (continued)

■ Simplex and Full-Duplex

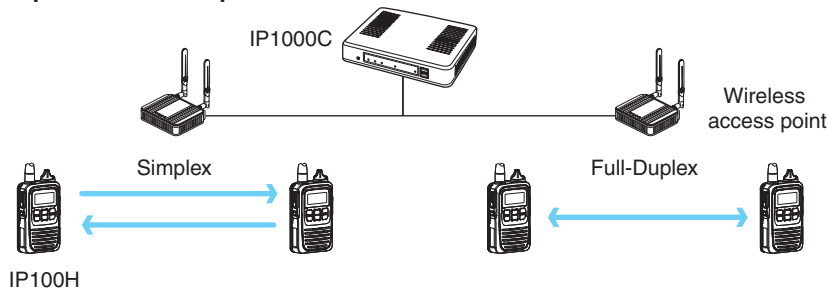
The IP1000C has two methods of communications (Simplex and Full-Duplex.)

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
HS-95	HEADSET	OPC-2006LS			✓	Enable
HS-97	THROAT MICROPHONE	OPC-2006LS			✓	Enable
HS-102	HEADSET	OPC-2359 ^{*3}	✓	✓	✓	Enable

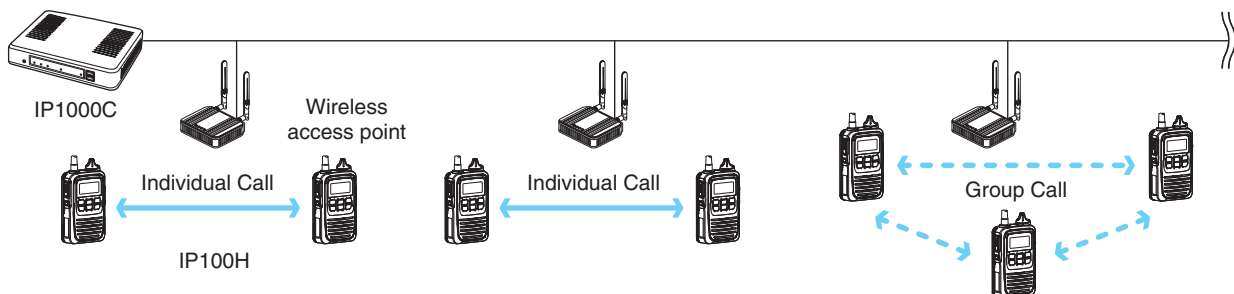
*1 When a headset that supports the VOX function is connected, the communication mode automatically changes between reception and transmission by verifying the communication voice.

*2 Select [VOX] on the HS-85.

*3 Receive by using the OPC-2359.

■ Multi communication

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

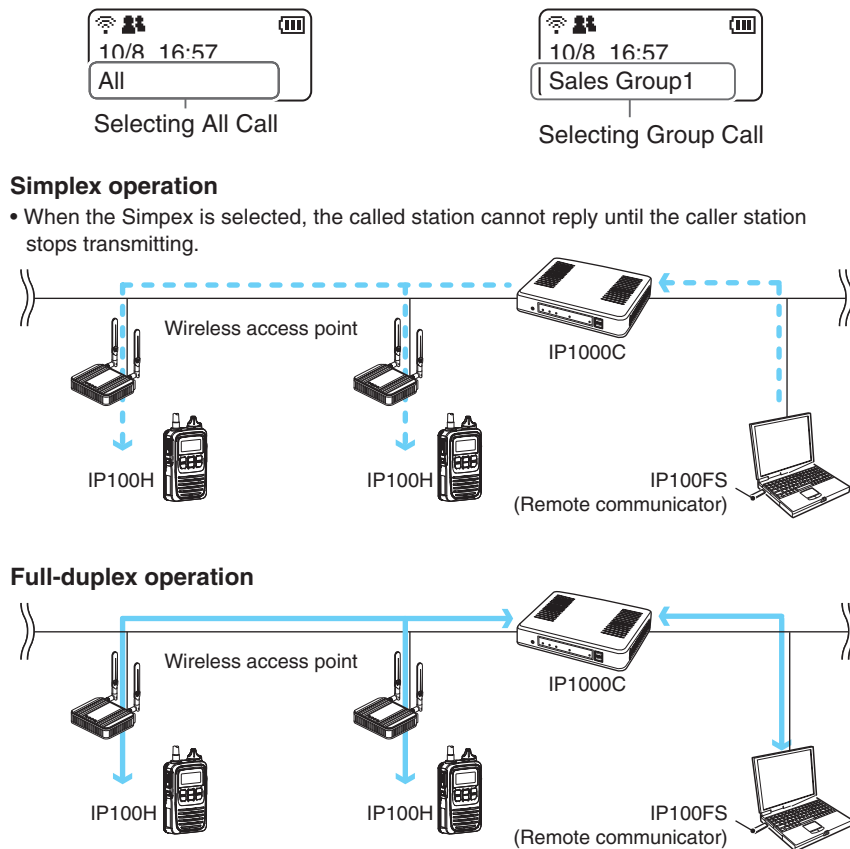


1 BEFORE USING THE IP1000C

2. Feature description (continued)

■ All Call and Group Call

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



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 ID List.

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

1 BEFORE USING THE IP1000C

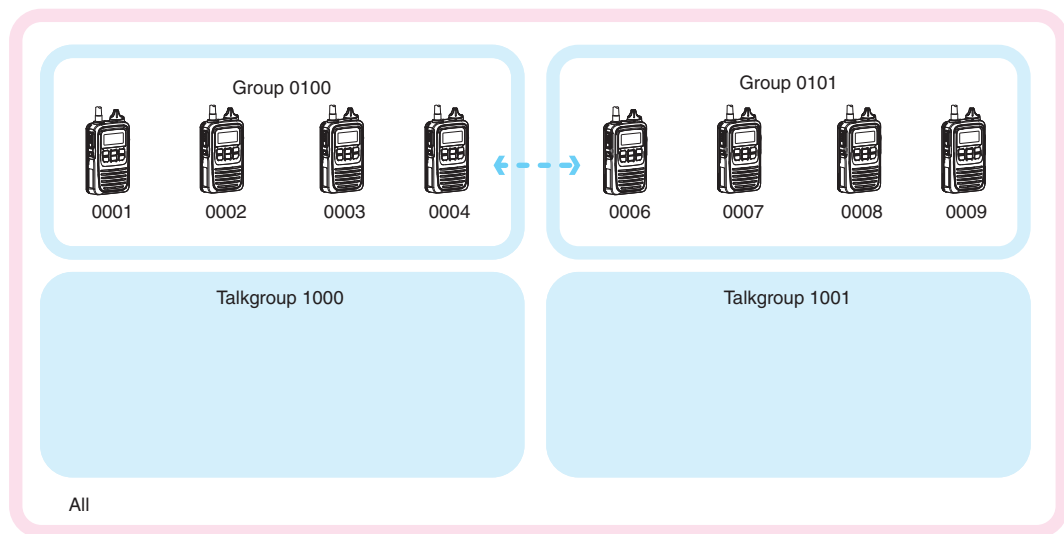
2. Feature description (continued)

■ Talkgroup Call

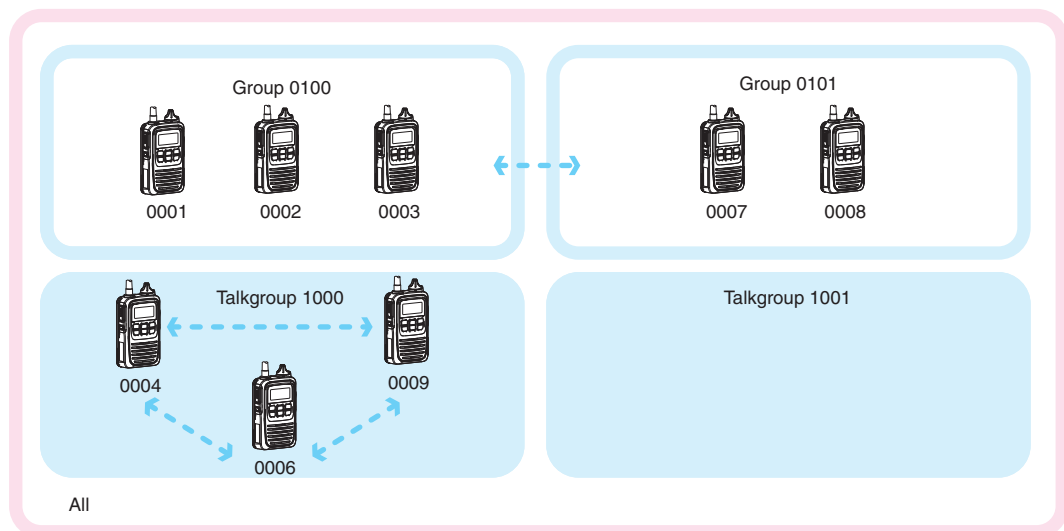
The Talkgroup Call function allows user to select the group that belong to it from previously registered groups in the IP1000C.

When users select Talkgroup 1000, terminals are excluded from the original groups, as illustrated below.

When Talkgroup is OFF



When Talkgroup is selected



- The Talkgroup Call is required to register the Talkgroups in the [Destination Settings] screen and [ID List] screen.
- Set to the IP1000C whether All Call includes the Talkgroup or not, or the Talkgroup Call calls the IP100FS or not.
- The ID List and the destination settings set in the IP1000C are commonly used in each group that the IP100H and IP100FS belong to.

1 BEFORE USING THE IP1000C

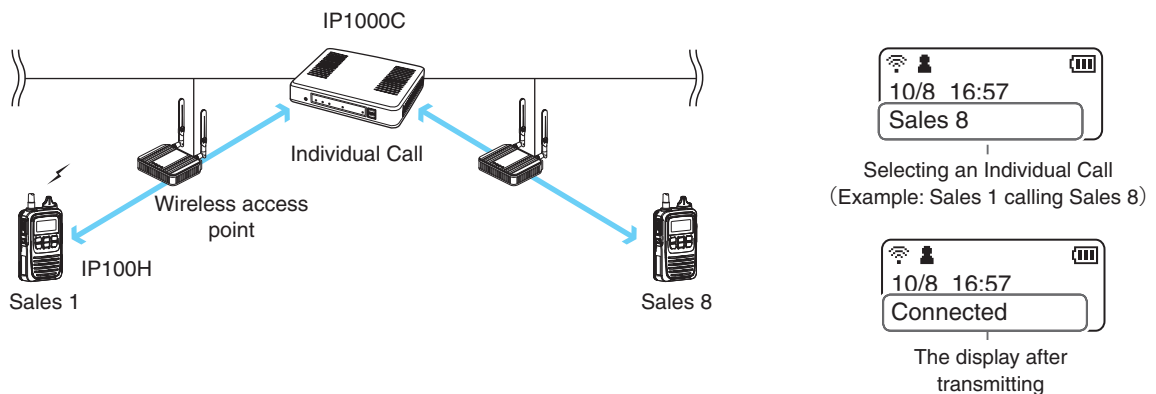
2. Feature description (continued)

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)

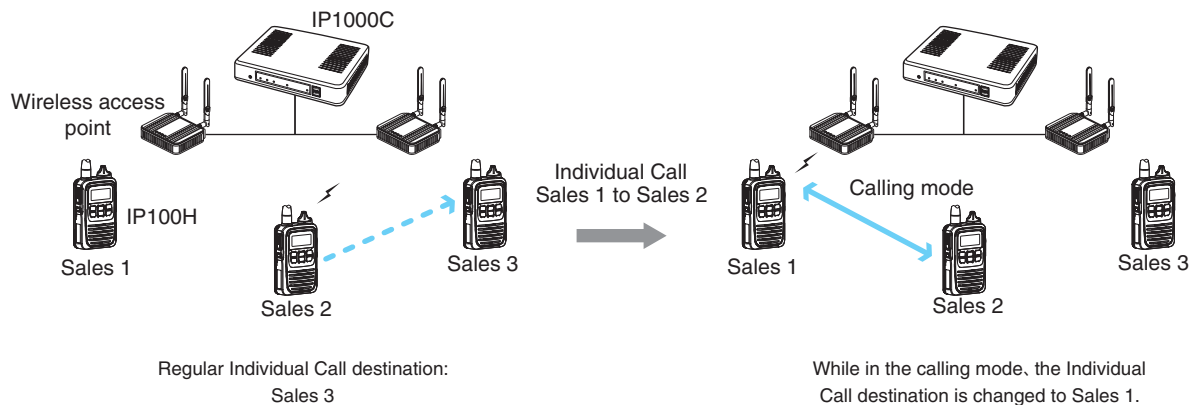
- If the IP100H that you are calling is out of range, “No response” is displayed.
- If desired, set the Receive Notification Tone in the [Common Settings] Screen in the [Common Settings] menu to notify a Call is received.



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.



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. 4-82)

- 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.

1 BEFORE USING THE IP1000C

2. Feature description (continued)

■ Priority Call and its priority

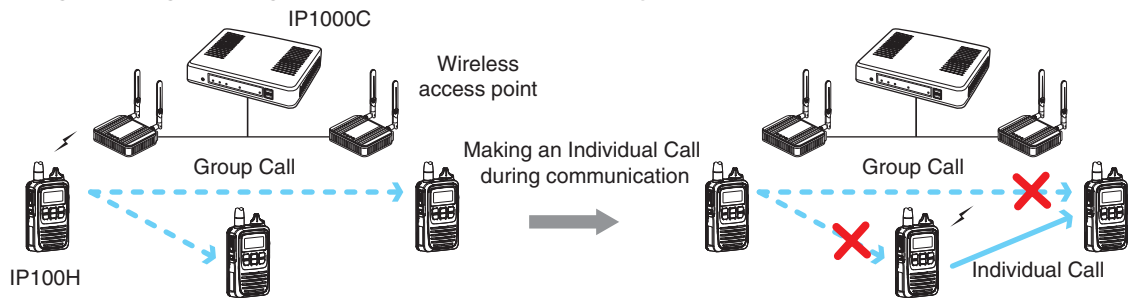
The Priority Call function is set to “Disable” in the default setting.

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

Priority level	Call type	Priority Call	Remarks
High ↑ ↓ Low	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	Disable	
	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



1 BEFORE USING THE IP1000C

2. Feature description (continued)

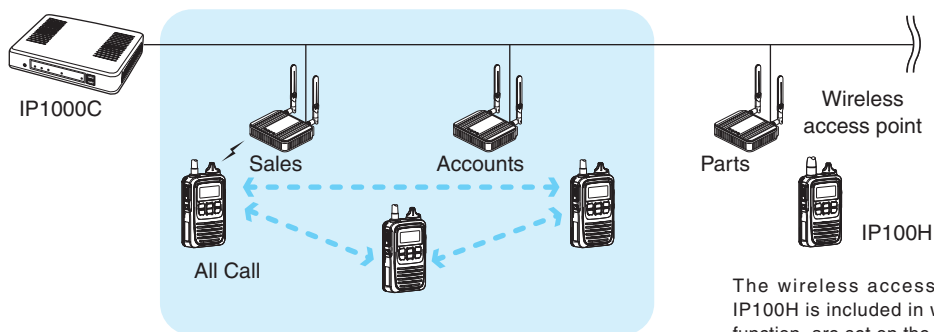
■ Area Call

This function is used when operating by limiting to a certain area.

(Default: Disable)

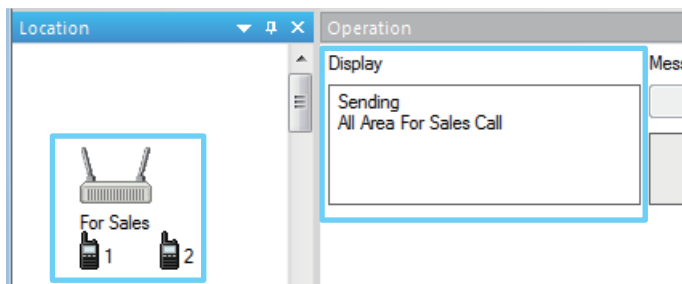
If you make an All Call or Group Call when Area Call in the IP100H is set to ON, the IP100H and IP100FS that are in the same area with the IP100H connected to the wireless access point are called.

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].

1 BEFORE USING THE IP1000C

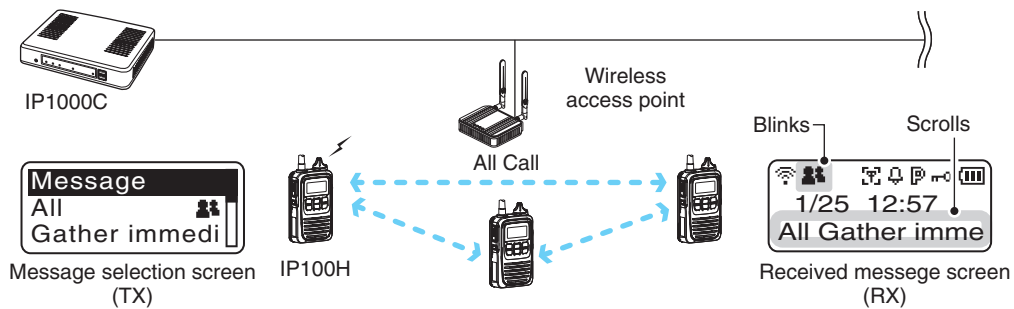
2. Feature description (continued)

■ Messages

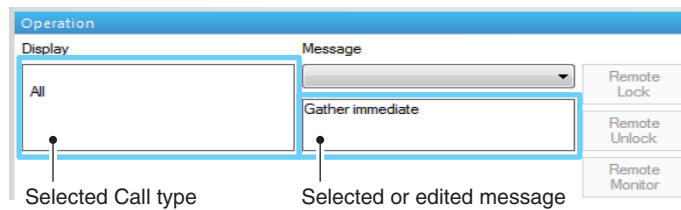
Set this function to send a message with the IP100H and IP100FS. (Default: Disable)

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 transmits a message



IP100FS transmits a message



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

1 BEFORE USING THE IP1000C

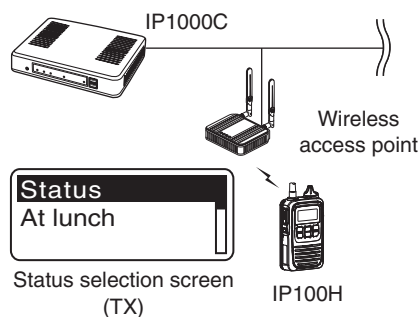
2. Feature description (continued)

■ About Status Settings

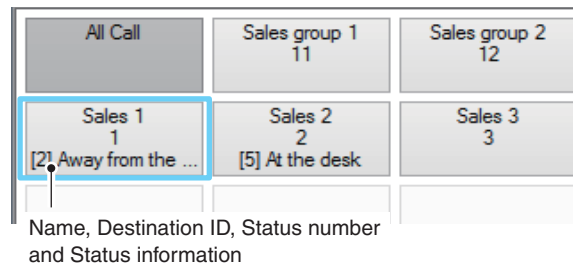
Set the Status to send the status information (Example: Away from the desk) from the IP100H. (Default: Disable)

- 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 Management] screen on the [Transceiver Settings] menu.

IP100H sends the Status



IP100FS One-Touch button



IP1000C Transceiver Management screen

Transceiver Management

<input type="checkbox"/> All	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current Status	Talkgroup	Location
<input type="checkbox"/>	1	IP100H	Sales 1	0001	Connected	192.168.0.12	Meeting	-	00-90-C7
<input type="checkbox"/>	2	IP100H	Sales 2	0002	Connected	192.168.0.10	Meeting	-	00-90-C7
<input type="checkbox"/>	3	IP100H	Sales 3	0003	Connected	192.168.0.11	Under a break	-	00-90-C7
<input checked="" type="checkbox"/>	4	IP100FS	IP100FS	0004	Disconnected	-	-	-	-

Status

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

1. Flow using IP100H	2-2
■ Prepare for connection and settings	2-2
■ About the Setting procedures	2-3
2. Transceiver settings	2-4
■ Registering the terminals	2-5
■ About confirming the registration and rebooting the IP100H	2-6
■ About the IP100H settings	2-7
■ About the Group calls	2-8
■ About the Talkgroup calls	2-9
■ About the ID list	2-10
■ About messages	2-11
■ About the status settings	2-12
■ About commonly use the ID list and message in the group	2-13
3. Bridge connection and Caller settings	2-14
4. Additional controller link	2-18

2 SETTING UP THE IP1000C SYSTEM

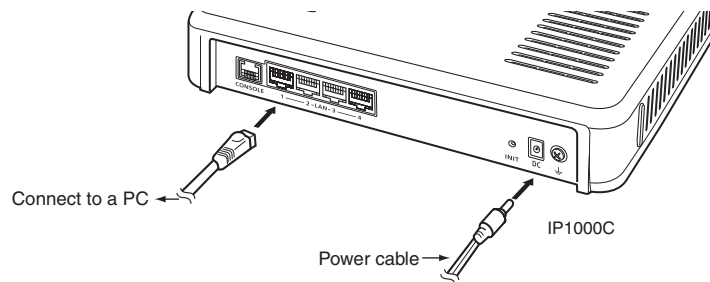
1. Flow using IP100H

■ 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].

2 SETTING UP THE IP1000C SYSTEM

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 presets

Register the IP100H or IP100FS to use into this IP1000C.

[Transceiver Registration] screen (pp. 2-5, 4-35)

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 32 characters can be programmed. (Up to 10 statuses.)

[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.

2 SETTING UP THE IP100C SYSTEM

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
- Priority Call
- Message
- Communication Method (Simplex/Full-duplex)
- Area Call
- 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. 4-53 to 4-55, 4-78 to 4-83)

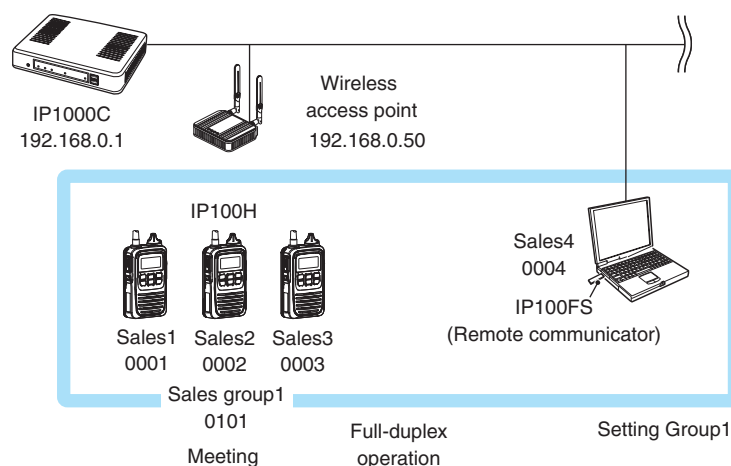
Depending on your system requirement, set the mic gain or assign the VOX function* on the [Transceiver Settings] screen, set common settings, such as the various notice tones, talkback settings on the [Common Settings] screen.

* The VOX function requires to connect an optional headset and connection cable.
Headset HS-94, HS-95, or HS-97 and Connection cable OPC-2006LS.
Or Headset HS-102 and Connection cable OPC-2359.

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 SETTING UP THE IP100C SYSTEM

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 <Add>.

Transceiver Settings

TRX No.: 1

Transceiver Model: IP100H

Name: Sales1

Unit ID: 0001

Security

Password: iptrx

Connection Port

Transceiver Port Number: 30000

Server Port Number: 30000

Profile

Profile: 1

Add

1 Enter

2 Click

This number is specified in the Common Settings field on the [Common Settings] screen.

- 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.)

Transceiver Setting Entry List

<input type="checkbox"/> All	TRX No.	Transceiver Model	Name	Unit ID	Password	Connection Port		Profile	ID List	M
						Transceiver	Server			
<input type="checkbox"/>	1	IP100H	Sales1	0001	iptrx	30000	30000	1	1	1
<input type="checkbox"/>	2	IP100H	Sales2	0002	iptrx	30000	30000	1	1	1
<input type="checkbox"/>	3	IP100H	Sales3	0003	iptrx	30004	30004	1	1	1
<input type="checkbox"/>	4	IP100FS	Sales4	0004	iptrx	-	30006	1	1	1

Apply Reset

Confirm

About the TRX Batch Setting

You can register a consecutive Destination ID collectively. You can also copy the Destination ID settings to other Destination ID settings.

TRX Batch Setting

Range: [] - [] Add

Refer to: Default

Profile: 1

* Enter Unit ID range.

* [Transceiver Settings] applies the initial value.

2 SETTING UP THE IP100C SYSTEM

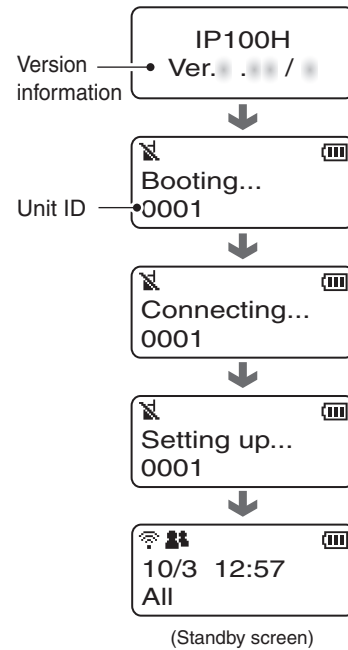
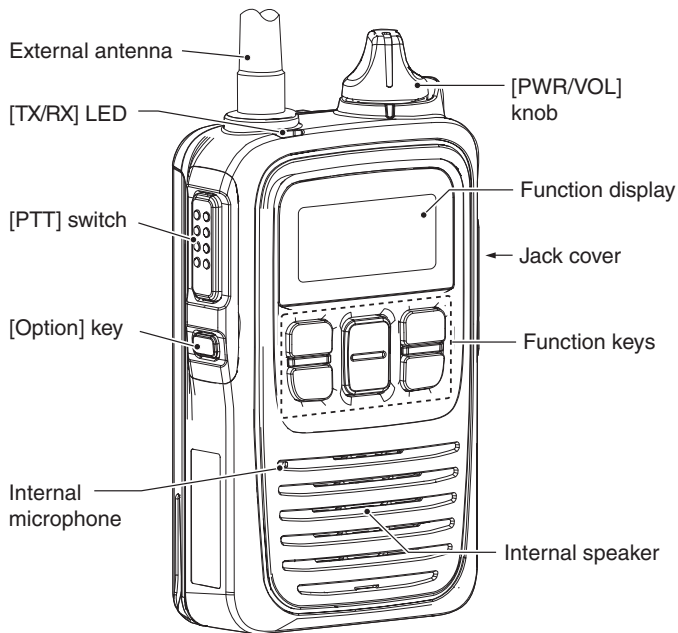
2. Transceiver settings (continued)

■ About confirming the registration and rebooting the IP100H

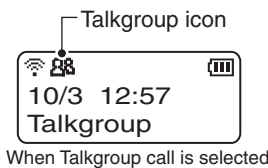
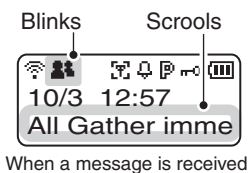
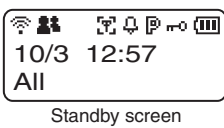
After the registration of the IP100H to the IP1000C is completed, program the IP100H using the CS-IP100H cloning software and a PC.

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.



About the display icons



- **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.
👤👤: Appears when Talkgroup 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 SETTING UP THE IP100C SYSTEM

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.

The screenshot shows the 'Transceiver Settings' screen. A callout box labeled '1 Select' points to the 'Unit ID' dropdown menu, which is set to '0001(Sales 1)'. Another callout box labeled '2 Enter' points to the 'Date and Time' radio button, which is selected. Other settings visible include 'Display Item' (Auto), 'Tx Inhibit' (Disable), 'PTT Lock' (Disable), 'Destination ID' (Enable), 'Received Call Notification' (Volume: 10, Notice Tone: Notification Beep), and 'Function Settings' (Communication Method: Full-Duplex, Priority Call: Disable, Area Call: Enable, Message: Enable).

- 3 Click <Apply>.

The screenshot shows the bottom of the 'Transceiver Settings' screen. It includes 'SYSLOG Severity' options (DEBUG, INFO, NOTICE) and an 'Apply' button. A callout box labeled 'Click' points to the 'Apply' button.

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

The screenshot shows the 'Transceiver Setting List' table. A callout box labeled 'Confirm' points to the table.

Transceiver Model	Name	Unit ID	Use ID List	Area Call	Message	Status	Option Key
IP100H	Sales 1	0001	Disable	Enable	Enable	Enable	One Touch
IP100H	Sales 2	0002	Enable	Enable	Enable	Enable	Message
IP100H	Sales 3	0003	Enable	Enable	Enable	Enable	No Function

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>.

Destination Setting

No.:

Name:

Call Type:

Destination ID:

Destination Group

Communication Type: Simplex Full-Duplex

Transceiver Selection

All 0001(Sales 1) 0002(Sales 2) 0003(Sales 3) 0004(Sales 4)

Additional Controller:

1 Enter

2 Select

3 Click

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

List of Destination Setting Entries (Group Call)

<input type="checkbox"/> All	No.	Name	Destination ID	Number of Transceivers	Additional Controller	
<input type="checkbox"/>	1	Sales group1	0101	3	Not Set	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/>	2	Sales group2	0201	2	Not Set	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Confirm

2 SETTING UP THE IP100C SYSTEM

2. Transceiver settings (continued)

■ About the Talkgroup calls

This topic describes registering IP100Hs or IP100FSs to a Talkgroup, and they communicate with the full-duplex operation between three or more members as meeting.

The Talkgroup Call function allows user to select the group that belong to it from previously registered groups in the IP100C.

After the settings have been changed, the IP100H needs to be rebooted.

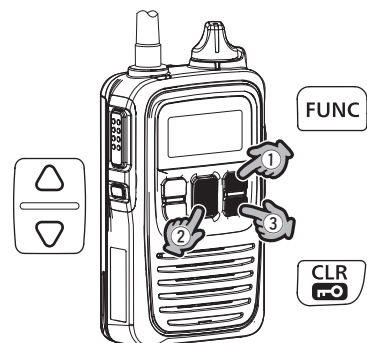
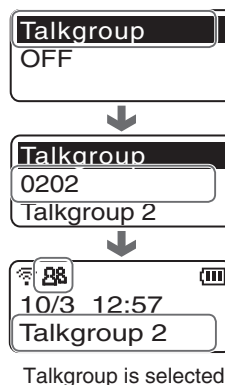
- 1 Click [Destination Settings].
 - The [Destination Settings] screen is displayed.
- 2 Enter the Talkgroup name, Call type and a 4 digit group ID in the “Destination Setting” field. Click <Apply>.

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

No.	Name	Destination ID	Additional Controller
3	Talkgroup 2	0202	Not Set

Selecting the Talkgroup call using the IP100H

- ① Push [FUNK] several times to select the Talkgroup.
 - Push [FUNK] selects the assigned functions such as Message, Status, Area Call, and so on.
- ② Push [▲] or [▼] to select the Talkgroup number.
- ③ Push [CLR/LOCK].
 - You can talk with the IP100Hs or IP100FSs that select the same group number. (Example 0202)
 - When you select the Talkgroup Call, you are excluded from original group. (p. 2-8)
 - When “OFF” is selected in step ②, the Talkgroup is released.



2 SETTING UP THE IP100C SYSTEM

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>.

ID List Common Settings

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

ID List

Add Type: Enter Individually Select From List

No.: 1

Name: Sales 1

Call Type: Individual

Destination ID: 0001

Apply Reset

1 Enter

2 Click

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

ID List Entries

No.	Name	Call Type	Destination ID/Phone Number
1	Sales 1	Individual	0001
2	Sales 2	Individual	0002
3	Sales 3	Individual	0003
4	IP100FS	Individual	0004
5	Sales group1	Group	0101

Edit Delete

Edit Delete

Edit Delete

Edit Delete

Edit Delete

Delete All

Confirm

2 SETTING UP THE IP100C SYSTEM

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.

Message Group

Message Group Number: * If you change this item, the screen automatically updates to the selected list.

Messages(Sales 1)

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

Apply

1 Enter

2 Click

2 SETTING UP THE IP1000C SYSTEM

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.

Status Settings

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

Apply

1 Enter

2 Click

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 [Profile].
 - The [Profile] screen is displayed.
- 2 Select the profile number in the “Profile” field.
 - The profile number setting (example: 1) is specified in the “Profile” item on the [Transceiver Registration] screen in each IP100H.
- 3 Select the “ID List” and “Message List” in the “Profile” field.

Profile

No.: 1 ▼ * If you change this item, the screen automatically updates to the selected profile.

Name:

Wireless LAN

Wireless LAN: Transceiver's Setting ▼

Common Settings

ID List: 1 (Sales 1) ▼

Message List: 1 (Sales 1) ▼

Registration

Registration Interval: 60 seconds

Registration Retry Interval (If failed): 10 seconds

Number of Registration Retries (If failed): 2

Calling Notice Tone

Select the specified ID list group on the [ID List] screen (p. 2-9) or message group on the [Message] screen (p. 2-10).

- 4 Click <Apply>.

Disable Enable

Apply

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

Profile List

No.	Name	Wireless LAN	ID List Number	Common Message Group
1		Transceiver's Setting	1	1 (Sales 1)

2 ▼ Add

Edit Delete

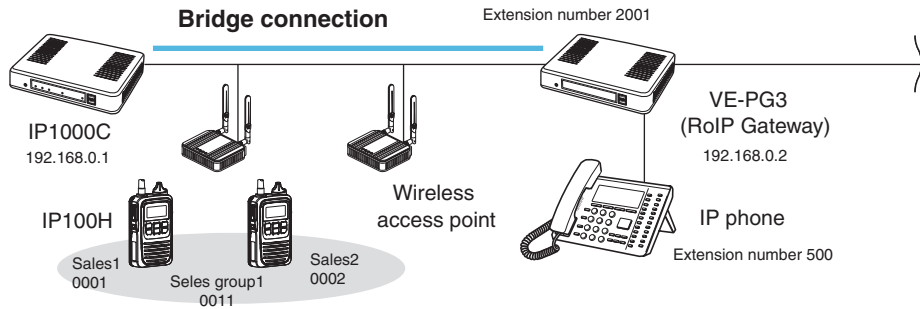
Delete All

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 1.13 or less 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 [Telephone Gateway Interconnection] field. (Example: 192.168.0.2)
[RoIP Server Settings] (menu) > [Telephone Gateway Interconnection] (screen) > [Telephone Gateway Interconnection] (field)

Telephone Gateway Interconnection	
No.:	1
Destination Address:	192.168.0.2
Destination Port Number:	21530
Service Port Number:	21530

This number is the same as the "Telephone Gateway Interconnection Number" item in the [Destination Setting] field.

2. After setting the "Call Type" item to "Telephone," select the "Telephone Gateway Interconnection 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 [Telephone Gateway Interconnection] field. (Example: 1)
 - Enter the VE-PG3's extension number. (Example: 500)

Destination Setting	
No.:	2
Name:	500 (IP Phone)
Call Type:	Telephone
Destination Phone Number:	500
Telephone Gateway Interconnection Number:	1

This number is the same as the "No." item in the [Telephone Gateway Interconnection Number] field.

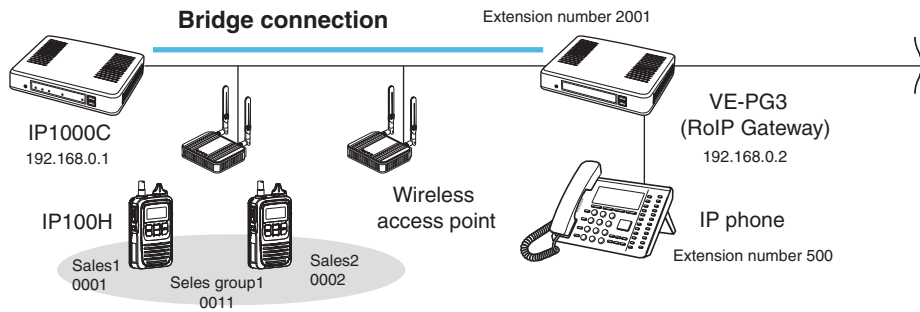
3. After setting the "Call Type" item to "Telephone," enter the "Destination Phone Number" item.
[Common Settings] (menu) > [ID List] (screen) > [ID List] (field)
 - Enter the VE-PG3's extension number. (Example: 500)

ID List Common Settings	
ID List Common Setting Number:	1 (6 Entries)
* If you change this item, the screen automatically updates to the selected list.	
ID List	
Add Type:	<input checked="" type="radio"/> Enter Individually <input type="radio"/> Select From List
No.:	6
Name:	500 (IP Phone)
Call Type:	Telephone
Destination Phone Number:	500

(Continued to next page)

2 SETTING UP THE IP100C SYSTEM

3. Bridge connection and Caller settings (continued)



About the IP100C settings (Continued)

4. Confirm the [Clear Down during Telephone Call] item in the [Transceiver Settings] field is set to "Enable."
[Transceiver Settings] (menu) > [Transceiver Settings] (screen) > [Transceiver Settings] (field)

Transceiver Settings

Unit ID:

Display

Display Item: Date and Time Name

BackLight:

Transmission

Tx Inhibit: Disable Enable

PTT Lock: Disable Enable

Destination ID

PTT Call at Stand-by: Disable Enable * The last-used ID display is hidden, if disabled.

Use ID List: Disable Enable First Call ID:

Call Type:

Key Assignment

Option Key:

Clear Down during Telephone Call: Disable Enable

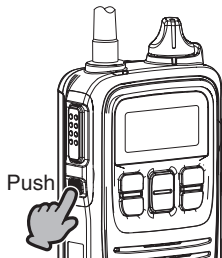
Target Availability Check

Target Availability Check: Disable Enable

Key-Touch Beep

Key-Touch Beep: Disable Enable Volume:

When "Clear Dwon" is selected in the [Option Key] item, the [Clear Down during Telephone Call] item is not displayed.



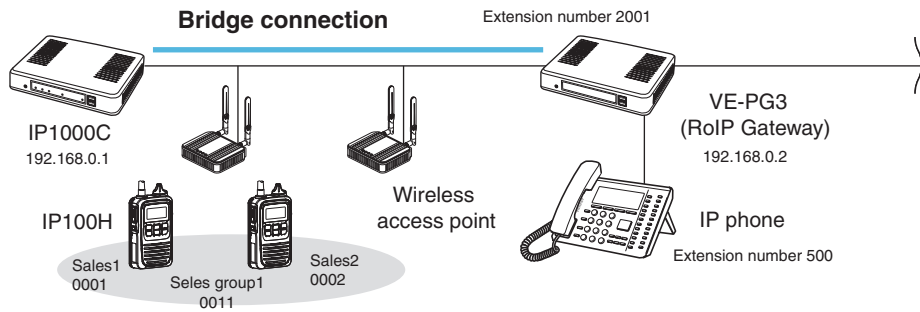
Before the target telephone is picked up, or during phone call, pushing [Option] terminates the phone call.

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

(Continued to next page)

2 SETTING UP THE IP1000C SYSTEM

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 Coding. (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."

Bridge Connection	
Destination IP Address:	192.168.0.1
Destination Port Number:	21530
Service Port Number:	21530
Voice Coding:	G.711u Signaling
Connection Status:	Not Connected Connect Refresh
Bridge Communication	
Encryption:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Talk-Back:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable Talk-Back Time 5 sec
Default Callee ID	
Default Callee ID:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Call Type:	Group
Destination Prefix ID:	
Destination ID:	11
My Station Prefix ID:	
My Station ID:	1
Bridge Control	
Priority Receive:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
PTT Cancel:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Notice Tone to the Transceiver	
Reception Notice:	Not used
Calling Notice Tone:	Notice Tone 2
Send Connect Success Tone:	Notice Tone 2
Disconnect Notice Tone:	Notice Tone 3
Send Connect Failure Tone:	Notice Tone 3
Notice Tone Volume:	0 dB
PTT Control Type from the Telephone	
PTT Control Type:	VOX
Call Control Type to the Telephone	
Call Control Type:	RTP

After settings in this screen are completed, click <Apply>. Then click <Connect>.

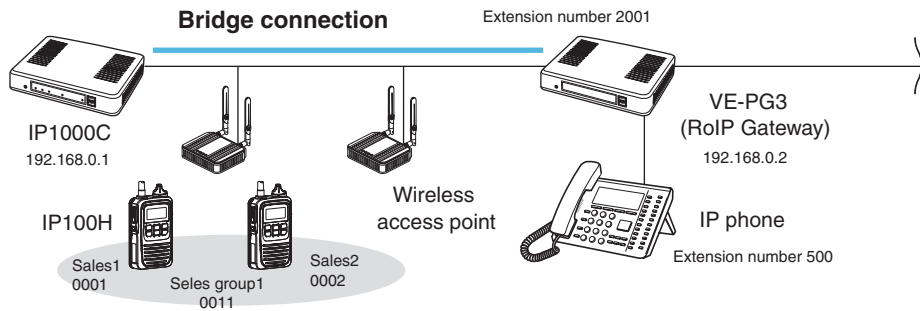
"Default Callee ID" item is set to "Enable," set the Destination settings below.

Set the PTT control or Call Control types according to your requirements.

(Continued to next page)

2 SETTING UP THE IP100C SYSTEM

3. Bridge connection and Caller settings (continued)



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

5. Enter the extension number of the [Bridge 1] port in the [Extension] field. (Example: 2001)

[Extension Connect] (menu) > [Extension Connect] (screen) > [Extension] (field)

Extension	
Extension Number:	2001
Port Type:	Bridge 1
Radio System Group:	None
Outgoing Line Priority:	IP Line ⇒ LINE
Outgoing Line (IP Line):	None
Outgoing Line (LINE):	None
Outgoing Line (Peer to Peer):	None
Default Call Destination Number:	
DID Call:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable

The "Port Type" item must be set to the same port as the one set in step 1.

6. Enter the extension number of the IP phone in the [Extension] field. (Example: 500)

[Extension Connect] (menu) > [Extension Connect] (screen) > [Extension] (field)

Extension	
Extension Number:	500
Port Type:	SIP Phone(Automatic Detection)
Password:	500
Outgoing Line Priority:	IP Line ⇒ LINE
Outgoing Line (IP Line):	None
Outgoing Line (LINE):	None
Outgoing Line (Peer to Peer):	None
MAC Address:	

Enter the IP phone's MAC address

- 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.

2 SETTING UP THE IP1000C SYSTEM

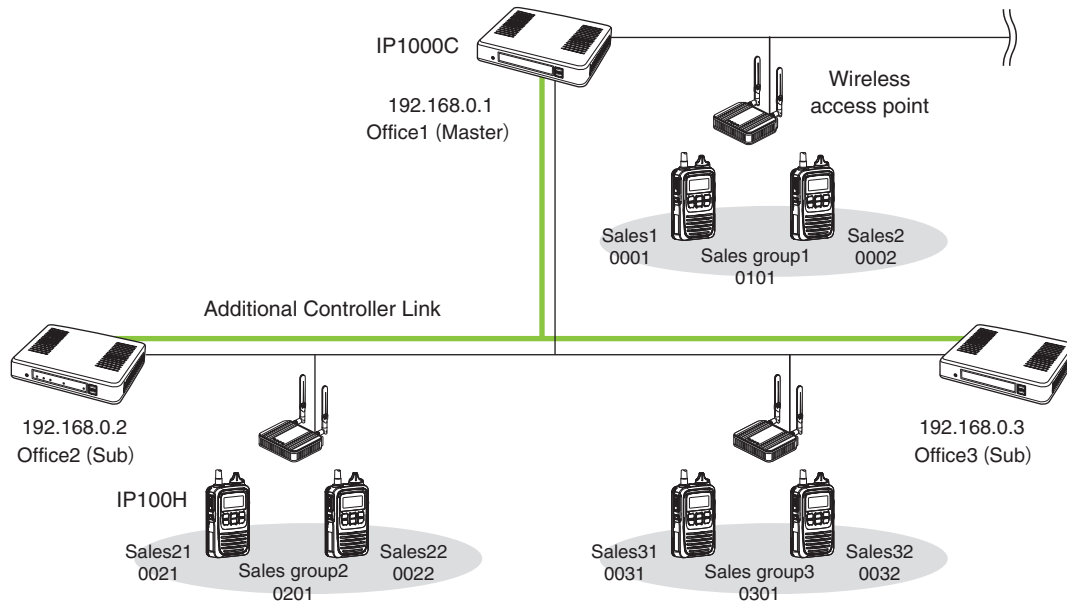
4. Additional controller link

The Additional Controller Link function allows you to communicate another sites.

*Up to 10 sub IP1000Cs can be connected to a master IP1000C.

*Use a VPN router, such as Icom's SR-VPN1, between sites if necessary.

IP100H makes a Group Call with the Additional Controller Link



About the Office1 setting (Master)

1. Select "Enable" in the [Additional Controller] item, and "Master" in the [Controller Mode] item.

Then click <reboot> to reboot the IP1000C.

[RoIP Settings] (menu) > [RoIP Settings] (screen) > [Additional Controller Settings] (field)

Additional Controller Settings

Additional Controller: Disable Enable

Controller Mode: Sub Master

Service Port Number:

2. Enter a name and a destination IP address. (Example: Office2 (Sub) and Office3 (Sub))

[RoIP Server Settings] (menu) > [Additional Controller Link] (screen) > [Additional Controller Settings] (field)

Link Setting

No.:

Name:

Destination Address:

Destination Port Number:

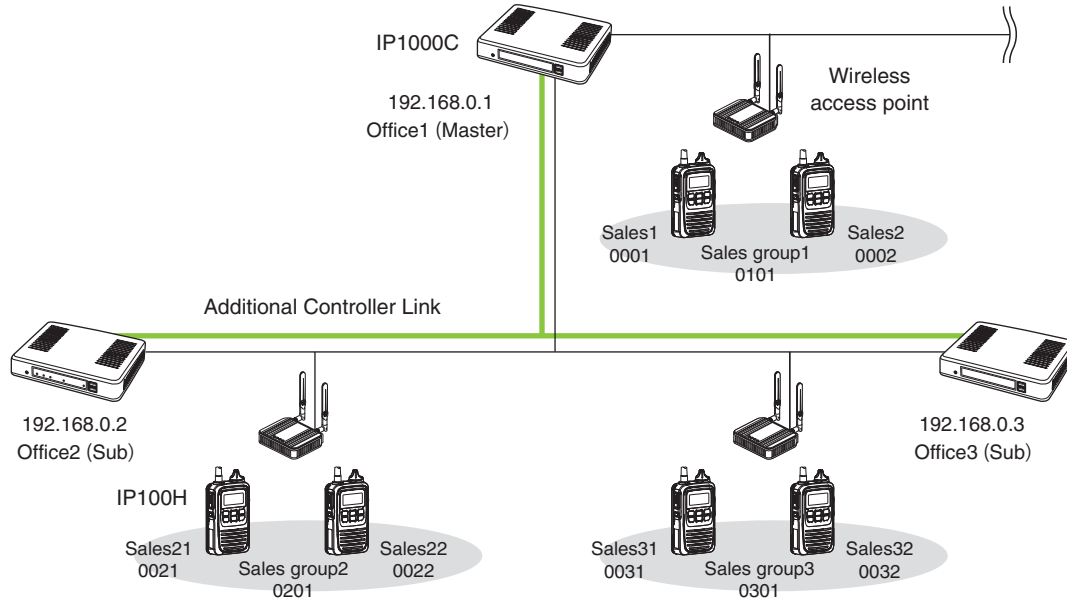
Linked Controller List

No.	Name	Destination Address	Destination Port Number		
1	Office2 (Sub)	192.168.0.2	32000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
2	Office3 (Sub)	192.168.0.3	32000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

2 SETTING UP THE IP100C SYSTEM

4. Additional controller link (continued)

IP100H makes a Group Call with the Additional Controller Link



About the Office1 setting (Master) – continued

3. Select “Group” in the [Call Type] item and enter a destination ID. Select controllers in the [Additional Controller] item. (Refer to an example below.)

[Destination Settings] (menu) > [Destination Settings] (screen) > [Destination Settings] (field)

Destination Setting

No.:

Name:

Call Type:

Destination ID:

Destination Group

Communication Type: Simplex Full-Duplex

Transceiver Selection

0001(Sales1) 0002(Sales2) 0003(IP100FS)

Additional Controller:

1(Office2 (Sub)) 2(Office3 (Sub))

List of Destination Setting Entries (Group Call)

<input type="checkbox"/> All	No.	Name	Destination ID	Number of Transceivers	Additional Controller		
<input type="checkbox"/>	1	Sales group1	0101	3	Not Set	Edit	Delete
<input type="checkbox"/>	2	Office2 (Sub) 0201	-	-	Set	Edit	Delete
<input type="checkbox"/>	3	Office3 (Sub) 0301	-	-	Set	Edit	Delete

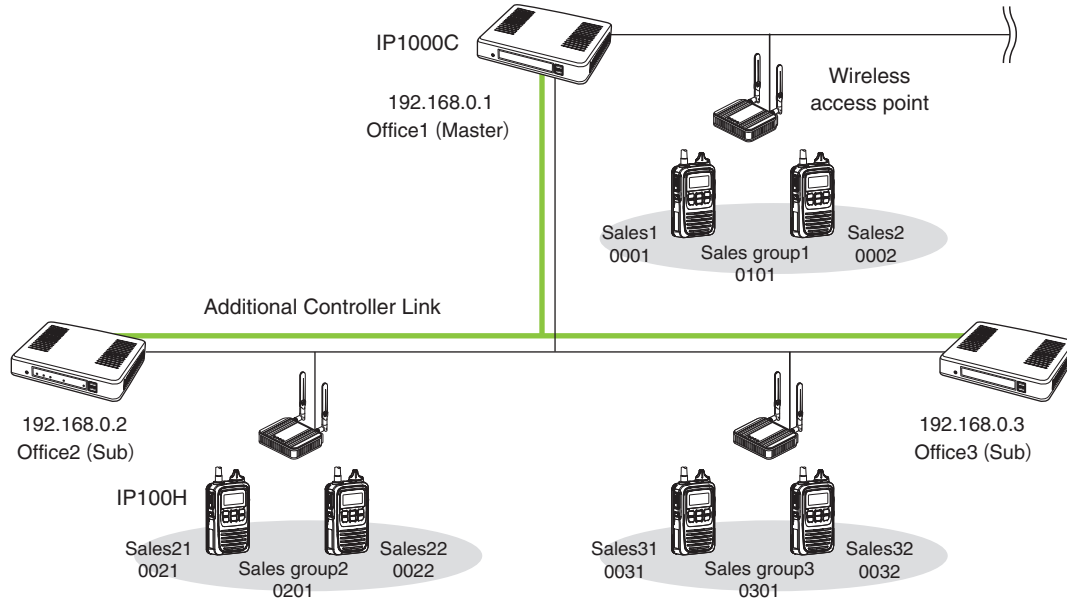
Select only Office2 when you do not make a call from Office3 to Office2 using the group number “0201.”

The number of transceivers in a site, and any additional controllers that are set, are displayed.

2 SETTING UP THE IP100C SYSTEM

4. Additional controller link (continued)

IP100H makes a Group Call with the Additional Controller Link



About the Office2 setting (Sub)

1. Select "Enable" in the [Additional Controller] item, and "Sub" in the [Controller Mode] item. Then click <reboot> to reboot the IP100C.

[RoIP Settings] (menu) > [RoIP Settings] (screen) > [Additional Controller Settings] (field)

Additional Controller Settings

Additional Controller: Disable Enable

Controller Mode: Sub Master

Service Port Number:

2. Enter a name and a destination IP address. (Example: Office1 (Master) and Office3 (Sub))

[RoIP Server Settings] (menu) > [Additional Controller Link] (screen) > [Additional Controller Settings] (field)

Link Setting

No.:

Name:

Destination Address:

Destination Port Number:

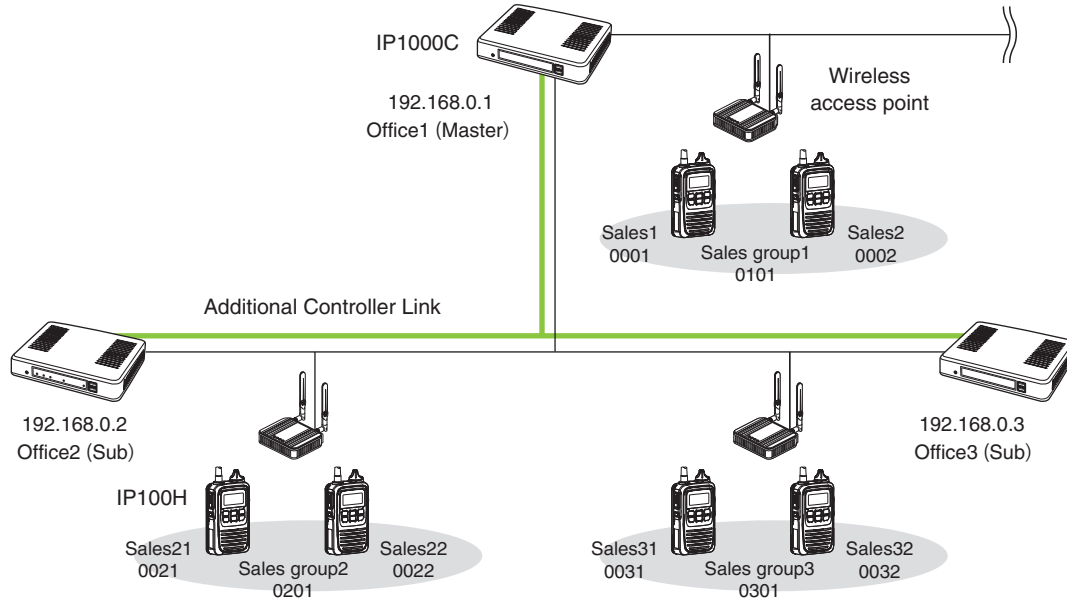
Linked Controller List

No.	Name	Destination Address	Destination Port Number		
1	Office1 (Master)	192.168.0.1	32000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
2	Office3 (Sub)	192.168.0.3	32000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

2 SETTING UP THE IP100C SYSTEM

4. Additional controller link (continued)

IP100H makes a Group Call with the Additional Controller Link



About the Office2 setting (Sub) – continued

3. Select “Group” in the [Call Type] item and enter a destination ID. Select controllers in the [Additional Controller] item. (Refer to an example below.)

[Destination Settings] (menu) > [Destination Settings] (screen) > [Destination Settings] (field)

Destination Setting

No.: 1

Name: Sales group2 (Addition)

Call Type: Group

Destination ID: 0201

Destination Group

Communication Type: Simplex Full-Duplex

Transceiver Selection: 0001(Sales21) 0002(Sales22)

Additional Controller: 1(Office1 (Master))

Select Master in the [Additional Controller] item for other IP100Cs (Sub).

List of Destination Setting Entries (Group Call)

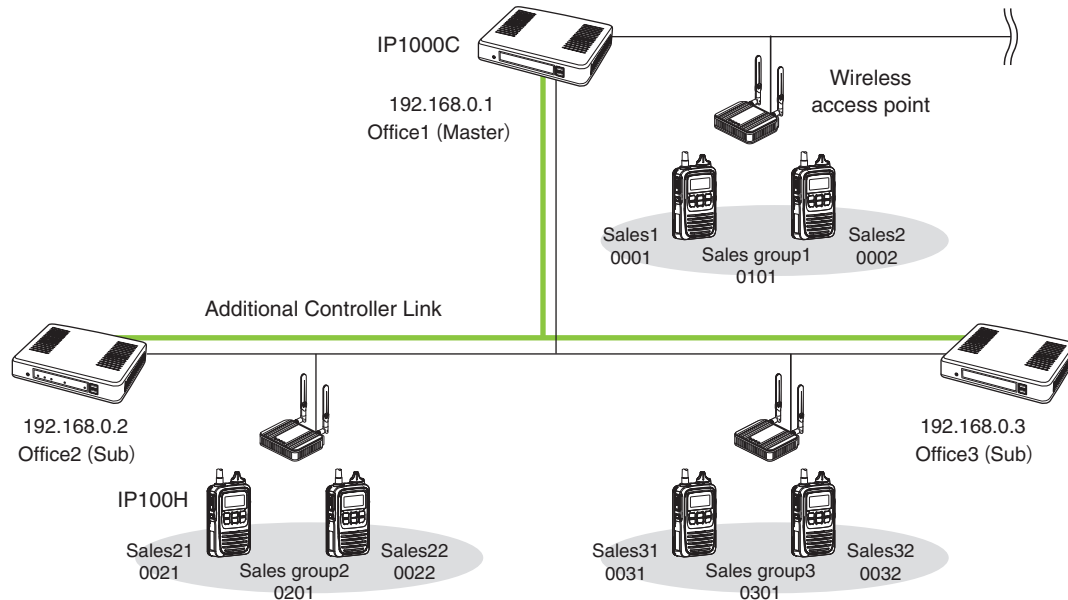
<input type="checkbox"/> All	No.	Name	Destination ID	Number of Transceivers	Additional Controller
<input type="checkbox"/>	1	Sales group2 (Additional)	0201	-	Set

The number of transceivers in a site, and any additional controllers that are set, are displayed.

2 SETTING UP THE IP100C SYSTEM

4. Additional controller link (continued)

IP100H makes a Group Call with the Additional Controller Link



About the Office3 setting (Sub)

1. Select "Enable" in the [Additional Controller] item, and "Sub" in the [Controller Mode] item. Then click <reboot> to reboot the IP100C.

[RoIP Settings] (menu) > [RoIP Settings] (screen) > [Additional Controller Settings] (field)

Additional Controller Settings

Additional Controller: Disable Enable

Controller Mode: Sub Master

Service Port Number:

2. Enter a name and a destination IP address. (Example: Office1 (Master) and Office2 (Sub))

[RoIP Server Settings] (menu) > [Additional Controller Link] (screen) > [Additional Controller Settings] (field)

Link Setting

No.: ▼

Name:

Destination Address:

Destination Port Number:

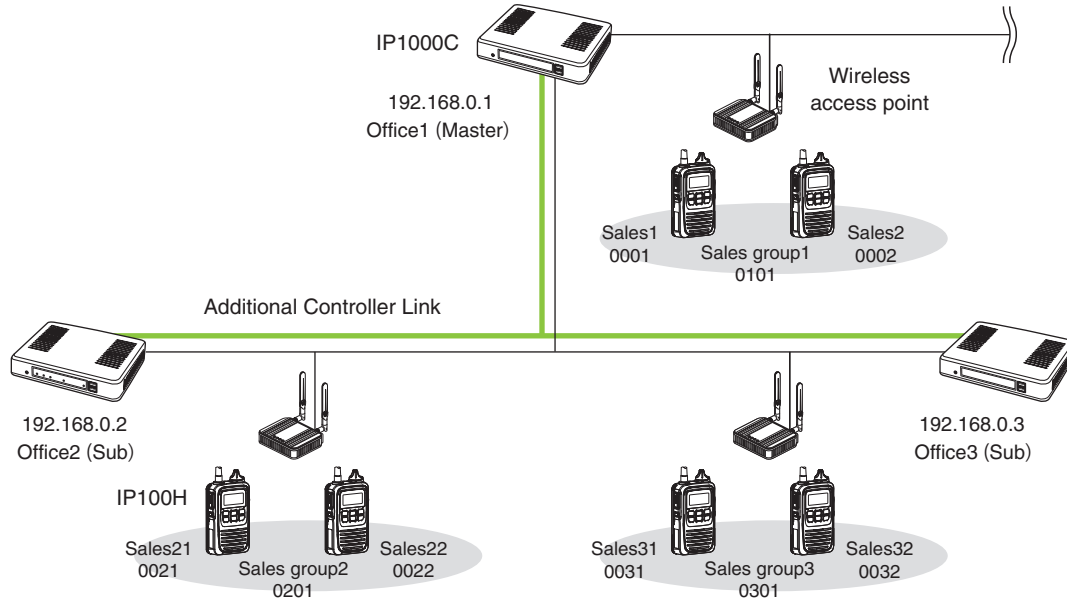
Linked Controller List

No.	Name	Destination Address	Destination Port Number		
1	Office1 (Master)	192.168.0.1	32000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
2	Office2 (Sub)	192.168.0.2	32000	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

2 SETTING UP THE IP100C SYSTEM

4. Additional controller link (continued)

IP100H makes a Group Call with the Additional Controller Link



About the Office3 setting (Sub) – continued

3. Select “Group” in the [Call Type] item and enter a destination ID. Select controllers in the [Additional Controller] item. (Refer to an example below.)

[Destination Settings] (menu) > [Destination Settings] (screen) > [Destination Settings] (field)

Destination Setting

No.: 1

Name: Sales group2 (Additional)

Call Type: Group

Destination ID: 0201

Destination Group

Communication Type: Simplex Full-Duplex

Transceiver Selection

0001(Sales31) 0002(Sales32)

Additional Controller: 1(Office1 (Master))

Select Master in the [Additional Controller] item for other IP100C (Sub).

List of Destination Setting Entries (Group Call)

<input type="checkbox"/> All	No.	Name	Destination ID	Number of Transceivers	Additional Controller
<input type="checkbox"/>	1	Sales group2 (Additional)	0201	-	Set

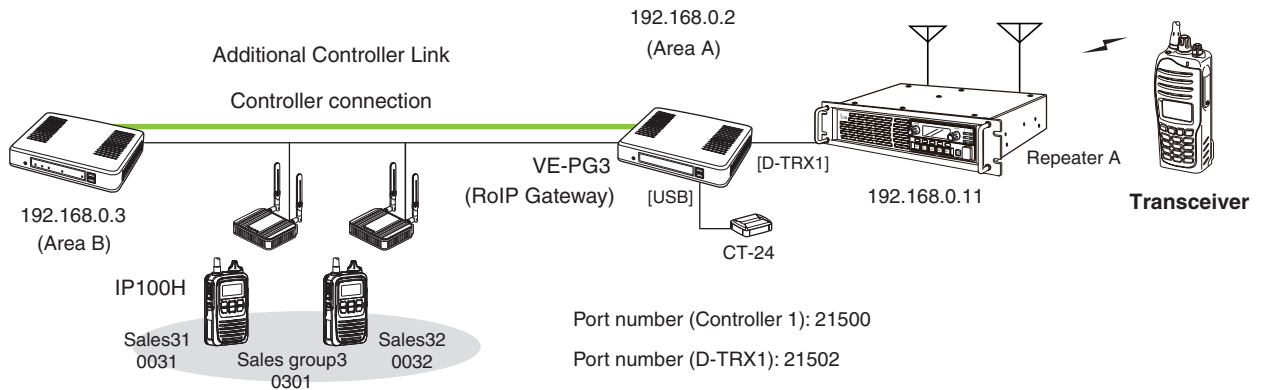
The number of transceivers in a site, and any additional controllers that are set, are displayed.

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3

The Additional Controller Link function allows you to communicate with the digital transceiver in the IDAS system.

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the IP1000C settings

1. Select "Enable" in the [Additional Controller] item, and "Master" in the [Controller Mode] item.

Then click <reboot> to reboot the IP1000C.

[RoIP Settings] (menu) > [RoIP Settings] (screen) > [Additional Controller Settings] (field)

- When several IP1000Cs are linked and use All call or Group call between the controllers, the IP1000C whose Controller mode is set to "Sub" cannot link to the bridge mode's VE-PG3 to additional controller. In that case, the VE-PG3 must be linked to the IP1000C whose Controller mode is set to "Master."

Additional Controller Settings	
Additional Controller:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Controller Mode:	<input type="radio"/> Sub <input checked="" type="radio"/> Master
Service Port Number:	<input type="text" value="32010"/>

2. Enter a name and a destination IP address. (Example: VE-PG3 (Area A))

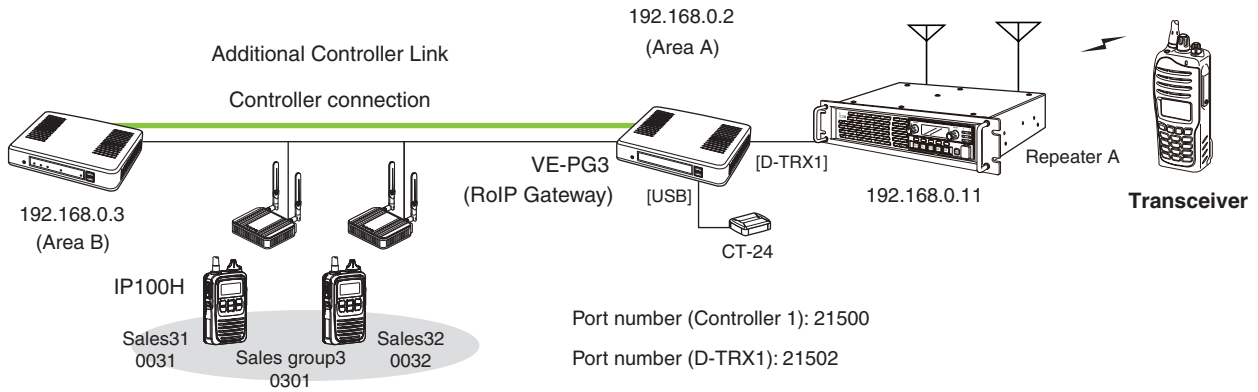
[RoIP Server Settings] (menu) > [Additional Controller Link] (screen) > [Additional Controller Settings] (field)

Link Setting	
No.:	<input type="text" value="3"/> ▼
Name:	<input type="text" value="VE-PG3 (Area A)"/>
Destination Address:	<input type="text" value="192.168.0.2"/>
Destination Port Number:	<input type="text" value="32010"/>
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3 (continued)

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the IP1000C settings (Continued)

3. Select "Group" in the [Call Type] item and enter a destination ID. Select controllers in the [Additional Controller] item. (Refer to an example below.)

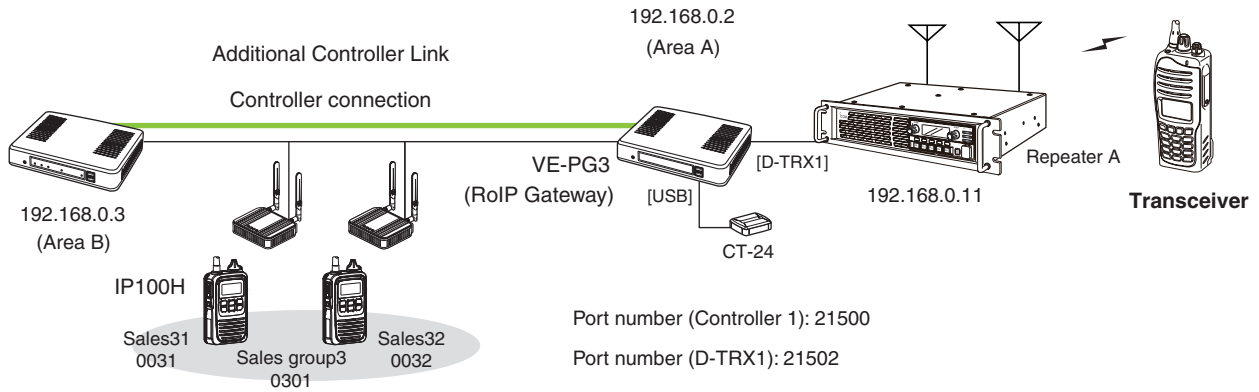
[Destination Settings] (menu) > [Destination Settings] (screen) > [Destination Settings] (field)

Destination Setting	
No.:	1
Name:	
Call Type:	Group
Destination ID:	0301
Destination Group	
Communication Type:	<input type="radio"/> Simplex <input checked="" type="radio"/> Full-Duplex
Transceiver Selection	
<input type="checkbox"/> All	<input checked="" type="checkbox"/> 0031(Sales 31) <input checked="" type="checkbox"/> 0032(Sales 32)
Additional Controller:	
<input type="checkbox"/> All	<input checked="" type="checkbox"/> 3(VE-PG3 (Area A))
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3 (continued)

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the VE-PG3 settings (Bridge mode)

1. Select "Unicast" in the IP Communication Mode of the connected port. (Example: Digital Transceiver 1 (D-TRX1))
Select "Unicast" in the IP Communication Mode of the Controller 1, and then check the Check box for the CT-24 Assignment.

[Operating Mode] (menu) > [Operating Mode] (screen) > [IP Communication Mode] (field)

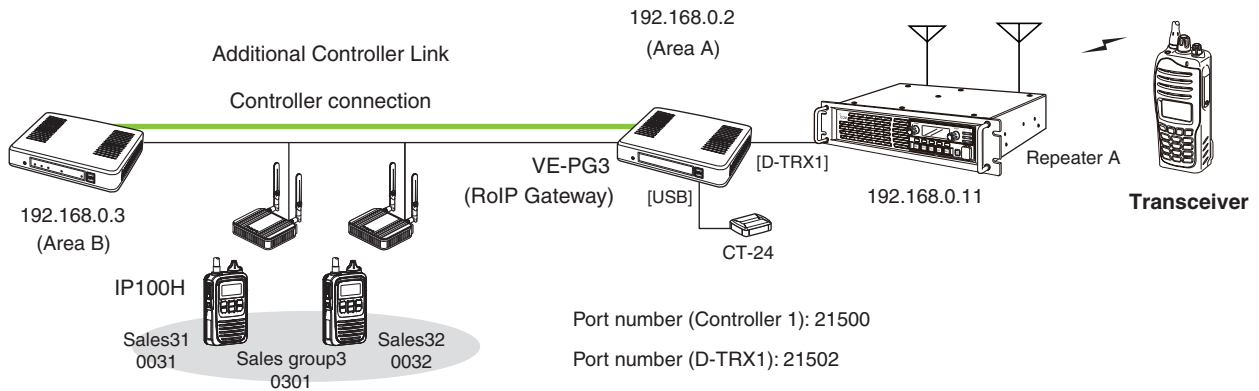
- After the IP Communications have been changed, the VE-PG3 needs to be rebooted.

IP Communication Mode		
Port	IP Communication Mode	CT-24 Assignment
Transceiver 1 (TRX1)	Multicast ▼	<input type="checkbox"/>
Transceiver 2 (TRX2)	Multicast ▼	<input type="checkbox"/>
Digital Transceiver 1 (D-TRX1)	Unicast ▼	<input type="checkbox"/>
Digital Transceiver 2 (D-TRX2)	Unicast ▼	<input type="checkbox"/>
Digital Transceiver 3 (D-TRX3)	Unicast ▼	<input type="checkbox"/>
Digital Transceiver 4 (D-TRX4)	Unicast ▼	<input type="checkbox"/>
EXT Input 1 (EXT1)	Unicast ▼	<input type="checkbox"/>
EXT Output 1 (EXT1)	Unicast ▼	<input type="checkbox"/>
EXT Input 2 (EXT2)	Unicast ▼	<input type="checkbox"/>
EXT Output 2 (EXT2)	Unicast ▼	<input type="checkbox"/>
Controller 1	Unicast ▼	<input checked="" type="checkbox"/>
Controller 2	Unicast ▼	<input type="checkbox"/>
Controller 3	Unicast ▼	<input type="checkbox"/>
Controller 4	Unicast ▼	<input type="checkbox"/>
Emergency Notice	Unicast ▼	<input type="checkbox"/>

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3 (continued)

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the VE-PG3 settings (Bridge mode) (continued)

- After selecting the “Port Type” item to “Digital Transceiver 1 (D-TRX1)” in the [Bridge Connection Point] field, enter the IP address of the VE-PG3. (Example: 192.168.0.2)

Enter the Connection Port Number. (Example: 21500)

- Enter the “My Station Port Number” same as the Connection Port number of the Controller 1. (Example: 21502)

Select the Voice Coding. (Example: AMBE+2)

[Bridge Connection] (menu) > [Bridge Connection] (screen) > [Bridge Connection Point] (field)

- Make sure the using port number for connection don't duplicate with another connection.

Bridge Connection Point

Port Type:	Digital Transceiver 1 (D-TRX1) ▼
SelCall in Bridge Connection:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Connection IP Address:	192.168.0.2
Connection Port Number:	21500
My Station Port Number:	21502
Voice Codec:	AMBE+2 ▼

- After selecting the “Port Type” item to “Controller 1” in the [Bridge Connection Point] field, enter the IP address of the VE-PG3. (Example: 192.168.0.2)

Enter the Connection Port Number. (Example: 21502)

- Enter the “My Station Port Number” same as the Connection Port number of the Digital Transceiver 1 (D-TRX1). (Example: 21500)

Select the Voice Coding. (Example: AMBE+2)

[Bridge Connection] (menu) > [Bridge Connection] (screen) > [Bridge Connection Point] (field)

- Make sure the using port number for connection don't duplicate with another connection.

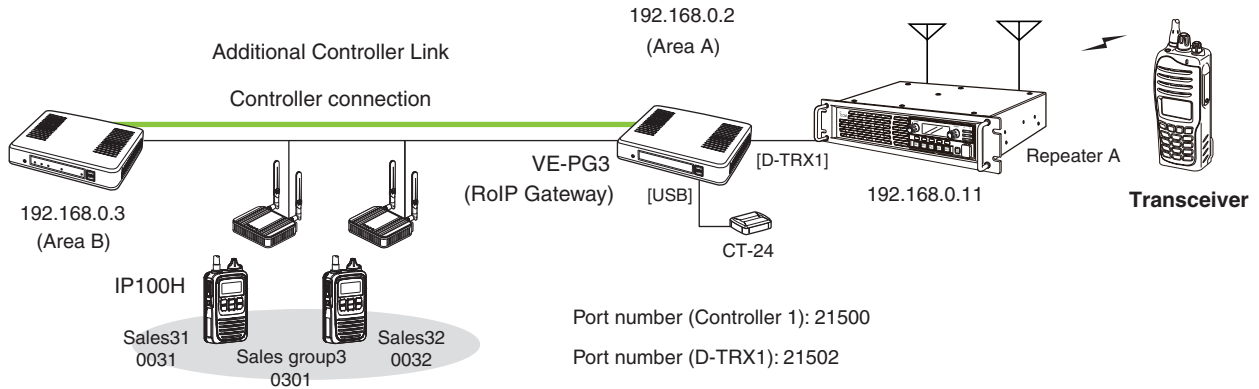
Bridge Connection Point

Port Type:	Controller 1 ▼
SelCall in Bridge Connection:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Connection IP Address:	192.168.0.2
Connection Port Number:	21502
My Station Port Number:	21500
Voice Codec:	AMBE+2 ▼

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3 (continued)

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the VE-PG3 settings (Bridge mode) (continued)

3. Confirm Digital Transceiver1 (D-TRX1) port setting, then click <Connect>.

- Confirm "Not connected" changes to "During transmit."

Confirm Controller 1 port setting, then click <Connect>.

- Confirm "Not connected" changes to "During transmit."

List of Bridge Connection Point Entries

Port Type	Connection IP Address	Port Number		Voice Codec	Connection Status			
		Connection	My Station			Connect	Edit	Delete
Digital Transceiver 1 (D-TRX1)	192.168.0.2	21500	21502	AMBE+2	Not connected	Connect	Edit	Delete
Controller 1	192.168.0.2	21502	21500	AMBE+2	Not connected	Connect	Edit	Delete

Refresh

Delete All

Confirm the setting, then click <Connect>.

List of Bridge Connection Point Entries

Port Type	Connection IP Address	Port Number		Voice Codec	Connection Status			
		Connection	My Station			Disconnect	Edit	Delete
Digital Transceiver 1 (D-TRX1)	192.168.0.2	21500	21502	AMBE+2	During transmit	Disconnect	Edit	Delete
Controller 1	192.168.0.2	21502	21500	AMBE+2	During transmit	Disconnect	Edit	Delete

Refresh

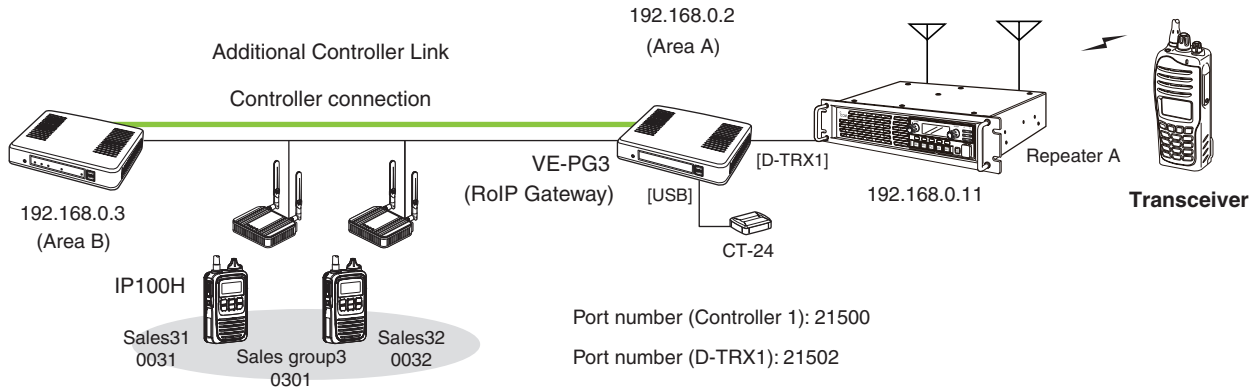
Delete All

Confirm "Not connected" changes to "During transmit"

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3 (continued)

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the VE-PG3 settings (Bridge mode) (continued)

4. Select the "Mode" item to "NXDN Conventional" in the [Digital Transceiver Model] field. (Example: NXDN Conventional)
[Port Settings] (menu) > [Digital Transceiver 1] (screen) > [Digital Transceiver Model] (field)
5. Enter the IP address of the repeater in the [Digital Transceiver Connection] field. (Example: 192.168.0.11)
Enter the TCP Port Number (Example: 41200), or the UDP Port Number. (Example: 41220)
[Port Settings] (menu) > [Digital Transceiver 1] (screen) > [Digital Transceiver Connection] (field)
 - Make sure the using port number for connection don't duplicate with another connection.

Digital Transceiver Model

Mode: *Each setting is initialized after changing.

Digital Transceiver Connection

Repeater Address:

TCP Port Number:

UDP Port Number:

Connect Key:

Packet Encryption: Disable Enable

Unit

Unit ID:

Talkgroup

Talkgroup ID:

RAN

RX RAN:

TX RAN: Appointment

Encryption

Encryption: Disable Enable

Status

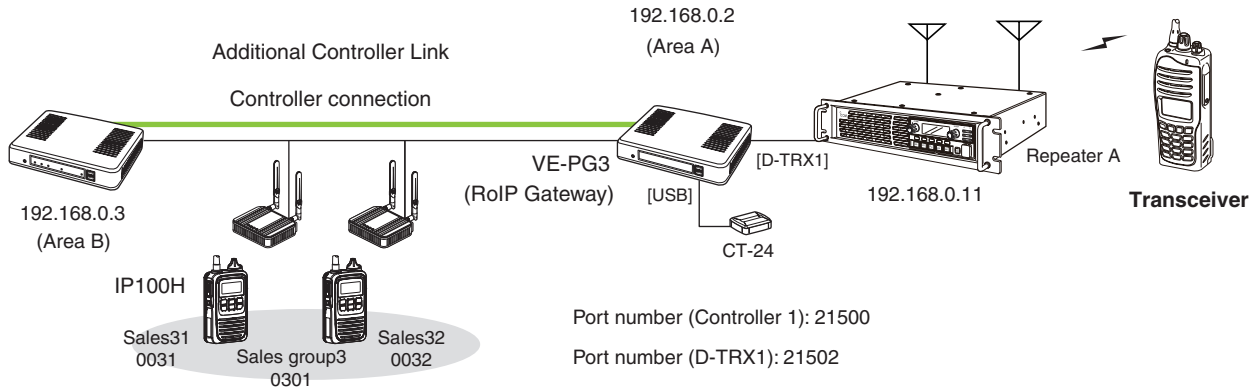
Connection Status:

After settings in this screen are completed, click <Apply>. Then click <Connect>.

2 SETTING UP THE IP1000C SYSTEM

5. Additional controller link with VE-PG3 (continued)

IP100H makes a Group Call with the Additional Controller Link (VE-PG3)



About the VE-PG3 settings (Bridge mode) (continued)

6. Enter the IP address of the IP1000C in the [Controller Connection] field. (Example: 192.168.0.3)

Enter the Controller Port Number same as the IP1000C' Service port number in the Link setting field (Example: 32000).

Enter the Local Port Number same as the IP1000C' Destination Port number in the Additional Controller Settings field. (Example: 32010)

[Port Settings] (menu) > [Controller 1] (screen) > [Controller Connection] (field)

- Make sure the using port number for connection don't duplicate with another connection.

Controller Connection	
Controller Address:	192.168.0.3
Controller Port Number:	32000
Local Port Number:	32010
Connection Status:	Not connected Connect Refresh
Controller Communication	
Encryption:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Default Callee ID	
Call Type:	Group
Tenant Number:	1
Destination ID:	0301
My Station ID:	0201

After settings in this screen are completed, click <Apply>. Then click <Connect>.

7. Select the call type and enter Destination ID. (Example: 0301)

Enter the My Station ID (Example: 0201).

1. How to restrict access	3-2
■ Setting password	3-2
2. How to set the IP1000C's internal clock time	3-3
■ Setting date and time (Manual setting)	3-3
■ Setting date and time (Automatic setting)	3-3
3. Using the DHCP function	3-4

3 OTHER BASIC FUNCTIONS

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).

Administrator

Administrator Password

Username: admin

Current Password: ●●●●●●

New Password: ●●●●●●

New Password (confirm): ●●●●●●

Enter

Apply Reset

- 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)

3 OTHER BASIC FUNCTIONS

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.

Date and Time

Date and Time

Current Time: 2015/03/23 02:55 (Etc/UTC)

Manually Set Time: 2015 / 03 / 23 11 : 57 (Year/Month/Day Hour:Minute)

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.

Time Zone

Time Zone: Etc/UTC

Use Daylight Savings Time: Disable Enable

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

NTP

NTP Client: Disable Enable

NTP Server 1: 210.173.160.27

NTP Server 2: 210.173.160.57

Polling Interval: 1 days

Last Update: ---/---/---

Next Update: 2014/02/09 09:17

SNTP Server

SNTP Server: Disable Enable

The SNTP server is for our RoIP devices which have no route to an external NTP server.

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

3 OTHER BASIC FUNCTIONS

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.”

The screenshot shows the 'DHCP Server' configuration page. The 'DHCP Server' status is set to 'Enable'. The 'IP Pool Start Address' is 192.168.0.10, 'Pool Size' is 128, and 'Subnet Mask' is 255.255.255.0. The 'Lease Time' is 72 hours. There are 'Apply' and 'Reset' buttons at the bottom right. Three callout boxes with arrows point to the 'Enable' radio button (labeled '1 Click'), the IP Pool Start Address field (labeled '2 Enter'), and the 'Apply' button (labeled '3 Click').

- 3 Click <Reboot>.
 - When you are asked to reboot the IP1000C, follow the instructions.

The screenshot shows a 'Reboot' dialog box with the text 'A reboot is required to apply all the new settings.' and a 'Reboot' button. A callout box with an arrow points to the 'Reboot' button, labeled 'Click'.

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.

1. About the setting screen	4-4
2. [TOP] Menu	4-5
■ System Status	4-5
■ Network Status	4-5
■ Port Status	4-6
■ TRX Status	4-6
3. [Information] Menu	4-7
■ SYSLOG	4-7
■ Memory Usage	4-8
■ Traffic Statistics	4-9
4. [Network Settings] Menu.....	4-10
■ Host Name	4-10
■ IP Address	4-11
■ DHCP Server	4-12
■ Static DHCP	4-14
■ Static DHCP Table	4-14
■ Routing Table	4-15
■ Static Routing	4-16
■ List of Static Routing Entries	4-16
5. [RoIP Settings] Menu	4-17
■ Additional Controller Settings	4-17
■ VoIP Extension	4-18
6. [Tenant (Fleet) Settings] Menu	4-21
■ Tenant (Fleet)	4-21

(Continued to the next page.)

4 ABOUT THE SETTING SCREEN

(Continued from the previous page)

7. [RoIP Server Settings] Menu	4-22
■ Telephone Gateway Interconnection	4-22
■ Telephone Gateway Interconnection Entry List	4-23
■ Telephone Gateway Interconnection Group	4-24
■ Telephone Gateway Interconnection Group Entry List	4-25
■ Link Setting	4-26
■ Linked Controller List	4-27
■ Area Setting	4-28
■ Access Point Search	4-29
■ Area Entry List	4-30
8. [Transceiver Settings] Menu	4-31
■ Transceiver Management	4-31
■ Transceiver Settings	4-33
■ Transceiver Setting Entry List	4-35
■ TRX Batch Setting	4-36
■ Transceiver Settings	4-37
■ Transceiver Setting List	4-62
9. [Common Settings] Menu	4-63
■ Wireless LAN	4-63
■ List of Wireless LAN Entries	4-68
■ ID List Common Settings	4-69
■ ID List Detail Settings	4-69
■ Save or Write the ID List Setting	4-70
■ ID List	4-71
■ ID List Entries	4-72
■ Message Group	4-73
■ Message Group Detail	4-73
■ Save or Write the Message Setting	4-74
■ Messages	4-75
■ Status Settings	4-76
■ Profile List	4-77
■ Profile	4-78

(Continued to the next page.)

4 ABOUT THE SETTING SCREEN

(Continued from the previous page)

10. [Destination Settings] Menu	4-86
■ Destination Setting	4-86
■ List of Destination Setting Entries (All Call)	4-95
■ List of Destination Setting Entries (Group Call)	4-95
■ List of Destination Setting Entries (Talkgroup Call)	4-96
■ List of Destination Setting Entries (Individual Call)	4-97
■ List of Destination Setting Entries (Telephone)	4-98
11. [Management] Menu	4-99
■ Administrator Password	4-99
■ Date and Time	4-100
■ Time Zone	4-101
■ NTP	4-102
■ SNTP Server	4-103
■ SYSLOG	4-104
■ SNMP	4-105
■ USB	4-106
■ Ping Test	4-107
■ Traceroute Test	4-108
■ Reboot	4-109
■ Settings Backup	4-110
■ Settings Restore	4-110
■ Online Settings	4-111
■ List of Settings	4-112
■ Factory Defaults	4-113
■ Firmware Status	4-114
■ Online Update	4-115
■ Automatic Update	4-116
■ Manual Update	4-116

4 ABOUT THE SETTING SCREEN

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 hidden.

Setting screen

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

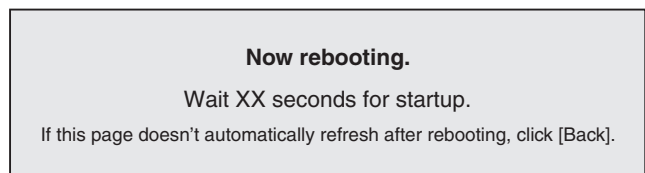
Setting buttons

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.



- 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.

■ System Status

Displays the firmware version and MAC addresses.

System Status	
Host Name	IP1000C
IPL	Rev. [REDACTED]
Version	Ver. [REDACTED] Copyright [REDACTED] Icom Inc.
LAN MAC Address	[REDACTED]
IP100H Firmware Version	Ver. [REDACTED]

(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 [TRX status] field. (p. 4-6).

■ Network Status

Displays the network information such as IP address.

Network Status	
LAN IP Address	[REDACTED]
DHCP Server	Disabled

(This is only an example.)

4 ABOUT THE SETTING SCREEN

2. [TOP] Menu (continued)

[TOP]

■ Port Status

Displays the communication rate and mode for each port.

Port Status	
LAN 1	1000BASE-T full-duplex
LAN 2	Disconnected
LAN 3	Disconnected
LAN 4	Disconnected

(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.

■ TRX Status

Displays the registered IP100Hs' or IP100FSs' information such as the Registration status, IP Address, and Version.

TRX Status						
Tenant (Fleet) 1						
TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Version
1	IP100H	Sales 1	0001	Connected	192.168.0.11	Ver. 1.47
2	IP100H	Sales 2	0002	Connected	192.168.0.12	Ver. 1.47
3	IP100H	Sales 3	0003	Connected	192.168.0.10	Ver. 1.47
4	IP100FS	Sales 4	0004	Disconnected	-	-

(This is only an example.)

■SYSLOG

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

SYSLOG

Current Time: JAN 07 2014 11:23:36 (Uptime: 0 days 12:37:49)

① Severity: DEBUG INFO NOTICE

②
③

Time	Severity	Description
JAN 06 22:46:19	INFO	NTPC: Synchronize system time to MON JAN 06 22:46:19 2014
JAN 06 22:45:45	NOTICE	IP1000C Ver.1.02

④

(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.

4 ABOUT THE SETTING SCREEN

3. [Information] Menu (continued)

[Information]–[Statistics]

■ Memory Usage

Displays a statistical graph of the memory usage.

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

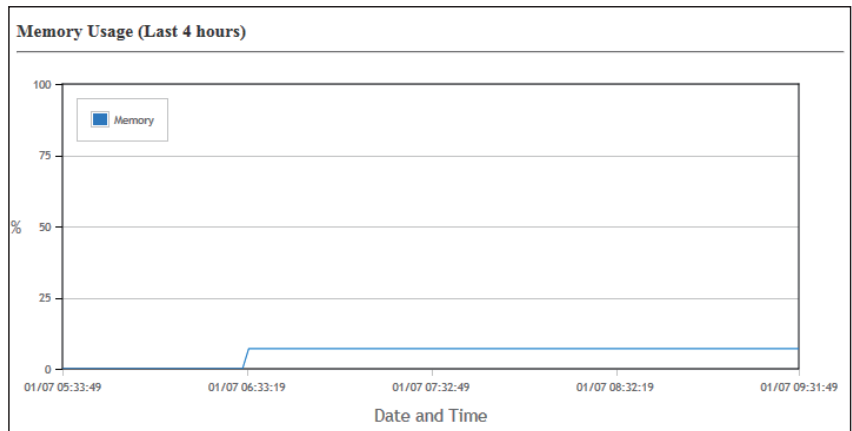
Memory Usage

① Plot Interval: 2 minutes ▾

② Automatic Refresh: Disable Enable

③ **Open**

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

4 ABOUT THE SETTING SCREEN

3. [Information] Menu (continued)

[Information]–[Statistics]

Traffic Statistics

Displays the traffic graph for LAN port.

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

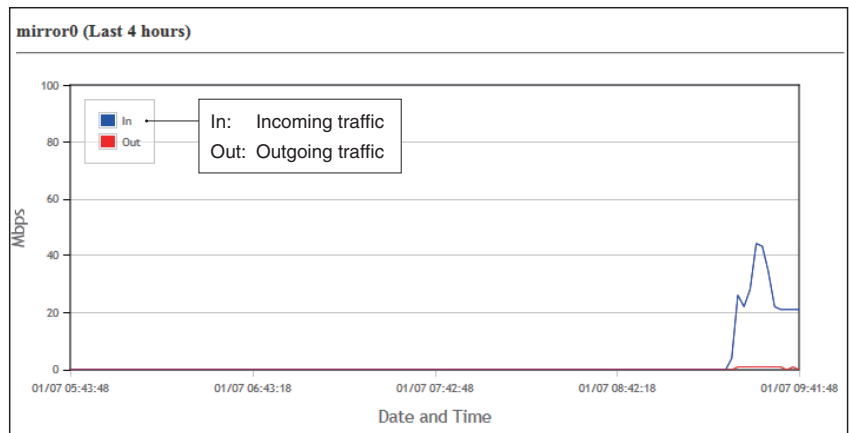
Traffic Statistics

① Plot Interval: 2 minutes ▾

② Automatic Refresh: Disable Enable

③ **Open**

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

■ **Host Name**

Enter the host name.

Host Name	
Host Name:	<input type="text" value="IP1000C"/>

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 “-.”

■ IP Address

Enter the IP1000C's IP Address.

IP Address	
① IP Address:	<input type="text" value="192.168.0.1"/>
② Subnet Mask:	<input type="text" value="255.255.255.0"/>
③ Default Gateway:	<input type="text"/>
④ Primary DNS Server:	<input type="text"/>
⑤ Secondary DNS Server:	<input type="text"/>
⑥ <input type="button" value="Apply"/> ⑦ <input type="button" value="Reset"/>	

- ① **IP 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)

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

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

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

- ⑤ **Secondary 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>.

DHCP Server

Configure the DHCP Server function.

DHCP Server

① DHCP Server: Disable Enable

② IP Pool Start Address:

③ Pool Size:

④ Subnet Mask:

⑤ Lease Time: hours

⑥ Domain Name:

⑦ Default Gateway:

⑧ Primary DNS Server:

⑨ Secondary DNS Server:

⑩ Primary WINS Server:

⑪ Secondary WINS Server:

- ① **DHCP Server** Select “Enable” to use the DHCP Server function. (Default: Disable)
- ② **IP Pool Start Address** ... Enter the IP pool start address. (Default: 192.168.0.10)
- ③ **Pool 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.
- ④ **Subnet 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)
- ⑤ **Lease Time** Enter the lease time period. (Default: 72)
 • Range: 1–9999 (hours)
- ⑥ **Domain Name** Enter the network address domain name. (Up to 127 characters)

■ DHCP Server (continued)

DHCP Server

① DHCP Server: Disable Enable

② IP Pool Start Address:

③ Pool Size:

④ Subnet Mask:

⑤ Lease Time: hours

⑥ Domain Name:

⑦ Default Gateway:

⑧ Primary DNS Server:

⑨ Secondary DNS Server:

⑩ Primary WINS Server:

⑪ Secondary WINS Server:

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

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

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

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

- ⑪ **Secondary 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>.

■ Static DHCP

Enter MAC and static IP addresses to the DHCP server.

- You can enter up to 32 entries.

Static DHCP		
MAC Address	IP Address	
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

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.

Static DHCP Table		
MAC Address	IP Address	
00-90-C7-12345678	192.168.0.150	<input type="button" value="Delete"/>

(This is only an example.)

<Delete>

Click <Delete> to remove the entry.

■ Routing Table

Displays the routing information.

① Destination	② Subnet Mask	③ Gateway	④ Interface	⑤ Owner
127.0.0.1	255.255.255.255	127.0.0.1	lo0	host
192.168.0.0	255.255.255.0	192.168.0.1	mirror0	misc
192.168.0.1	255.255.255.255	192.168.0.1	lo0	host

(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 **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 ABOUT THE SETTING SCREEN

4. [Network Settings] Menu (continued)

[Network Settings]–[Static Routing]

■ Static Routing

Enter the static routing destinations.

- You can enter up to 32 entries.

Static Routing			
① Destination	② Subnet Mask	③ Gateway	④
192.168.10.0	255.255.255.0	192.168.0.254	Add

(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

List of Static Routing Entries			
Destination	Subnet Mask	Gateway	
192.168.10.0	255.255.255.0	192.168.0.254	Delete

(This is only an example.)

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

■ Additional Controller Settings

Configure the Additional Controller Settings.

Additional Controller Settings

① Additional Controller: Disable Enable

② Controller Mode: Sub Master

③ Service Port Number:

Example: The default of the [Additional Controller] item is “Disable.” ② and ③ appear when selecting “Enable” in the [Additional Controller] item.

- ① **Additional Controller.....** Select “Enable” in the [Additional Controller] item to communicate with additional IP1000Cs. (Default: Disable)
When selecting “Enable,” you can communicate with the IP100Hs and the IP100FS registered to additional controllers.
* Register the destination controller on the [Additional Controller Link] item in the [RoIP Server Settings] menu.
• When using this Additional Controller Settings, you can link to the bridge mode’s VE-PG3 for communication.
- ② **Controller Mode** Select “Master” for one master IP1000C. Select [Sub] for the other IP1000Cs (up to 10 IP1000Cs). (Default: Sub)
When several IP1000Cs are linked and use All call or Group call between the controllers, the IP1000C whose Controller mode is set to “Sub” cannot link to the bridge mode’s VE-PG3 to additional controller. In that case, the VE-PG3 must be linked to the IP1000C whose Controller mode is set to “Master.”
- ③ **Service Port Number** Enter the port number for receiving audio signals.
Range: “2” to “65534” (only even numbers) (Default: 32000)
• 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.

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	<p>VoIP Extension</p> <hr/> <p>① Receive Buffer Type: <input checked="" type="radio"/> Static <input type="radio"/> Dynamic</p> <p>② Receive Buffer Size: <input type="text" value="40"/> milliseconds</p> <p>③ TOS Type: <input type="text" value="Not Used"/></p> <p style="text-align: right;">⑤ <input type="button" value="Apply"/> ⑥ <input type="button" value="Reset"/></p>
TOS Type: TOS	<p>VoIP Extension</p> <hr/> <p>① Receive Buffer Type: <input checked="" type="radio"/> Static <input type="radio"/> Dynamic</p> <p>② Receive Buffer Size: <input type="text" value="40"/> milliseconds</p> <p>③ TOS Type: <input type="text" value="TOS"/></p> <p>④ Media (RTP): Priority Level <input type="text" value="7"/> Service Type <input type="text" value="0"/> (HEX):E0</p> <p style="text-align: right;">⑤ <input type="button" value="Apply"/> ⑥ <input type="button" value="Reset"/></p>
TOS Type: Diffserv	<p>VoIP Extension</p> <hr/> <p>① Receive Buffer Type: <input checked="" type="radio"/> Static <input type="radio"/> Dynamic</p> <p>② Receive Buffer Size: <input type="text" value="40"/> milliseconds</p> <p>③ TOS Type: <input type="text" value="Diffserv"/></p> <p>④ Media (RTP): DSCP <input type="text" value="56"/> (HEX):E0</p> <p style="text-align: right;">⑤ <input type="button" value="Apply"/> ⑥ <input type="button" value="Reset"/></p>

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

- ① **Receive 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.
- ② **Receive 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.”

4 ABOUT THE SETTING SCREEN

5. [RoIP Settings] Menu

[RoIP Settings]—[VoIP Extension]

VoIP Extension (continued)

TOS Type: Not used

VoIP Extension

① Receive Buffer Type: Static Dynamic

② Receive Buffer Size: 40 milliseconds

③ TOS Type: Not Used

⑤ Apply ⑥ Reset

TOS Type: TOS

VoIP Extension

① Receive Buffer Type: Static Dynamic

② Receive Buffer Size: 40 milliseconds

③ TOS Type: TOS

④ Media (RTP): Priority Level 7 Service Type 0 (HEX):E0

⑤ Apply ⑥ Reset

TOS Type: Diffserv

VoIP Extension

① Receive Buffer Type: Static Dynamic

② Receive Buffer Size: 40 milliseconds

③ TOS Type: Diffserv

④ Media (RTP): DSCP 56 (HEX):E0

⑤ Apply ⑥ Reset

③ TOS 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.

4 ABOUT THE SETTING SCREEN

5. [RoIP Settings] Menu

[RoIP Settings]–[VoIP Extension]

VoIP Extension (continued)

TOS Type: Not used

VoIP Extension

① Receive Buffer Type: Static Dynamic

② Receive Buffer Size: 40 milliseconds

③ TOS Type: Not Used

⑤ Apply ⑥ Reset

TOS Type: TOS

VoIP Extension

① Receive Buffer Type: Static Dynamic

② Receive Buffer Size: 40 milliseconds

③ TOS Type: TOS

④ Media (RTP): Priority Level 7 Service Type 0 (HEX):E0

⑤ Apply ⑥ Reset

TOS Type: Diffserv

VoIP Extension

① Receive Buffer Type: Static Dynamic

② Receive Buffer Size: 40 milliseconds

③ TOS Type: Diffserv

④ Media (RTP): DSCP 56 (HEX):E0

⑤ Apply ⑥ Reset

④ **Media (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>.

■ Tenant (Fleet)

The tenant (fleet) 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 (fleets).

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

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

- The tenant (fleet) 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>.

■ Telephone Gateway Interconnection

Set the Telephone Gateway Interconnection with a VE-PG3.

Telephone Gateway Interconnection

① No.: ▼

② Destination Address:

③ Destination Port Number:

④ Service Port Number:

(This is only an example.)

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

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

- ③ **Destination 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.

- ④ **Service 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>.

■ Telephone Gateway Interconnection Entry List

The list of the registered device for the Telephone Gateway Interconnection.

No.	Destination IP Address	Destination Port Number	Service Port Number	①	②
1	172.22.69.251	21530	21530	Edit	Delete
2	172.22.69.251	21532	21532	Edit	Delete
3	172.22.69.251	21534	21534	Edit	Delete
4	172.22.69.251	21536	21536	Edit	Delete

③
Delete All

(This is only an example.)

- ① <Edit> Click to edit the setting on the [Telephone Gateway Interconnection] field.
- ② <Delete> Click to delete the selected entry.
 - 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.

■ Telephone Gateway Interconnection Group

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

Telephone Gateway Interconnection Group

① No.: ▼

② Name:

③ Telephone Gateway Interconnection Number

1 ▼	2 ▼	3 ▼	4 ▼	▼	▼	▼	▼	▼	▼
▼	▼	▼	▼	▼	▼	▼	▼	▼	▼

(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 **Telephone Gateway Interconnection Number**
 Select the Telephone Gateway Interconnection 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>.

4 ABOUT THE SETTING SCREEN

7. [RoIP Server Settings] Menu (continued) [RoIP Server Settings]–[Telephone Gateway Interconnection]

■ Telephone Gateway Interconnection Group Entry List

The list of the registered Telephone Gateway Interconnection group.

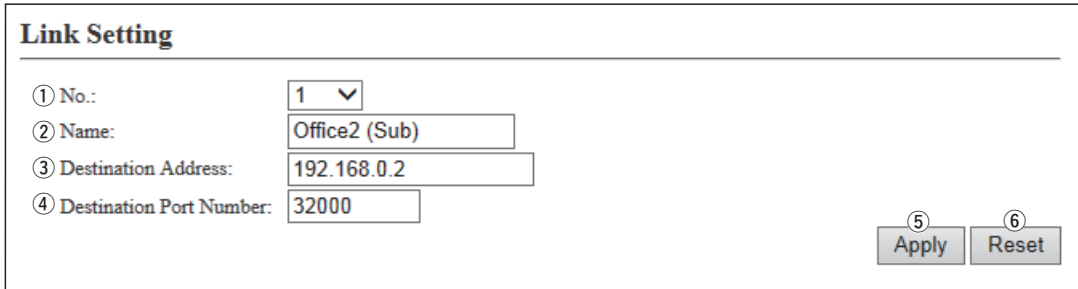
Telephone Gateway Interconnection Group Entry List				
No.	Name	Telephone Gateway Interconnection Number	①	②
1	PG3 Bridge numbers	1 2 3 4	Edit	Delete
				③
				Delete All

(This is only an example.)

- ① <Edit> Click to edit the setting on the [Telephone Gateway Interconnection Group] field.
- ② <Delete> Click to delete the selected entry.
• 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.

■ Link Setting

This is a setting to link with other IP1000Cs or VE-PG3s (Bridge mode).



(This is only an example.)

- ① **No.** Select a number from 1 to 100 to register the IP1000Cs or VE-PG3s (Bridge mode) to establish a link.
 - Up to 100 links can be made.

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

- ③ **Destination Address** Enter the destination device's IP address or domain name. (Up to 63 characters)

- ④ **Destination Port Number** Enter the destination IP1000C's service port number of the Additional Controller Settings (p. 4-17).
Range: "2" to "65534" (only even numbers)
 - The set port number (RTP) and the port number +1 (RTCP) are used for the communication.

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

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

■ Linked Controller List

The [Linked Controller List] is a list of the destination IP addresses and port numbers registered to this IP1000C.

Linked Controller List					
No.	Name	Destination Address	Destination Port Number	①	②
1	Office2 (Sub)	192.168.0.2	32000	Edit	Delete
2	Office3 (Sub)	192.168.0.3	32000	Edit	Delete
				③ Delete All	

(This is only an example.)

- ① <Edit> Click to edit the setting on the [Link Setting] field.
- ② <Delete> Click to delete the selected entry.
 - 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.

■ 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.

Area Setting

① No.: ▼

② Name:

③ BSSID

00-90-C7- [REDACTED]	00-90-C7- [REDACTED]		

④ ⑤

(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.

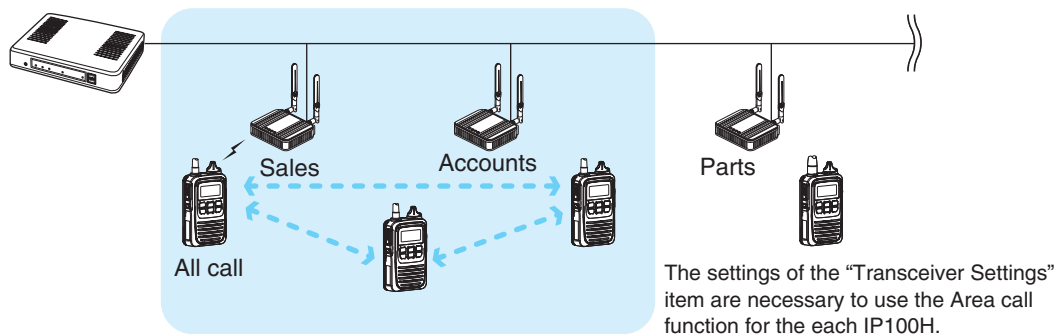
- ④ **<Apply>** Click to apply the entries.

- 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.



Access Point Search

The IP1000C can search an access point on the network to register the access point for Area Call.

*Icom guarantees this function only for the AP-90M, the AP-90M will be on sale soon. (as of January 2016)

Access Point Search

① IP Address Range: -

②	Host Name	IP Address	BSSID	③	④	
<input type="checkbox"/> All	AP-90M	192.168.0.10	00-90-C7- <small>XXXXXXXXXX</small>	3	3	⑤
<input type="checkbox"/>	AP-90M	192.168.0.11	02-90-C7- <small>XXXXXXXXXX</small>	3	3	⑤

⑥ Apply selection

(This is only an example.)

- ① **IP Address Range** Click the <Search> button after entering the IP address range of the access points.
The searched access point information will be displayed in the list.
- ② **Selection Box** Click a selection box to add a check mark for registering a searched access point.
*By clicking the [All] Box, you can select or cancel all access points in the list.
- ③ **Name** An area name, which is selected in the [Number] item is displayed.
*An area name is registered on the [Number] item in the [Area] setting.
- ④ **Number** Select an area to register from a “Number” item of [Area Setting].
- ⑤ **<Add>** Click the <Add> button to register a searched access point in the [access point Search] setting.
- ⑥ **<Apply selection>** Click the <Apply selection> button to register a selected access point in the selection box (②) item.

4 ABOUT THE SETTING SCREEN

7. [RoIP Server Settings] Menu (continued)

[RoIP Server Settings]–[Area Call]

■ Area Entry List

The list of the registered Area setting.

Area Entry List				
No.	Name	BSSID	①	②
1	Sales1	00-90-C7- <small>XXXXXXXXXX</small>	Edit	Delete
2	Sales2	00-90-C7- <small>XXXXXXXXXX</small>	Edit	Delete
3	Sales_Dept	00-90-C7- <small>XXXXXXXXXX</small> 00-90-C7- <small>XXXXXXXXXX</small> 00-90-C7- <small>XXXXXXXXXX</small>	Edit	Delete
5	Account	00-90-C7- <small>XXXXXXXXXX</small> <small>XXXXXXXXXX</small>	Edit	Delete
7	Parts	<small>XXXXXXXXXX</small>	Edit	Delete
				③ Delete All

(This is only an example.)

- ① <Edit> Click to edit the setting on the [Area Setting] field.
- ② <Delete> Click to delete the selected entry.
• 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.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]—[Transceiver Management]

■ Transceiver Management

The IP1000C can monitor the registered IP100Hs and IP100FSs. And if necessary, the IP1000C can reboot the registered IP100Hs at the same time.

Transceiver Management										
										Refresh
①	②	③	④	⑤	⑥	⑦				
<input type="checkbox"/> All	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current Status	Talkgroup	Location	⑧ Version
<input type="checkbox"/>	1	IP100H	Sales 1	0001	Connected	192.168.0.11	Meeting	202 (Talkgroup 2)	00-90-████████	Ver. 1.47
<input type="checkbox"/>	2	IP100H	Sales 2	0002	Connected	192.168.0.12	Meeting	202 (Talkgroup 2)	00-90-████████	Ver. 1.47
<input type="checkbox"/>	3	IP100H	Sales 3	0003	Connected	192.168.0.10	Under a break	-	00-90-████████	Ver. 1.47
<input type="checkbox"/>	4	IP100FS	Sales 4	0004	Disconnected	-	-	-	-	-

Manual Reboot

⑨ Manual Update: Disable Enable

⑩ Manual Reboot:

(This is only an example.)

*An IP100H is displayed in bold when the setting is changed and the reboot is required.

- ① **Selection Box** Click a selection box to add a check mark for the IP100H to reboot.
 *You cannot select the IP100FS, or the IP100H that “Disconnected” in the [Registration Status] is displayed.
 *By clicking the [All] Box, you can select or cancel all IP100Hs in the list.

- ② **Registration 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.”
 - When the IP100H is remotely locked by the IP100FS, and it cannot communicate with others or cannot transmit, “Transmit and receive disabled” or “Transmit disabled” is displayed.
 - When the IP1000C sends the reboot command to the IP100H from the [Transceiver Management] menu, the following status are displayed: “Receiving reboot command,” “Reboot command reception success,” “Reboot command reception failed,” “Ready to reboot” “Rebooting,” “Updating,” “Update failed,” “Downloading,” “Status notification failed,” and “Low battery.”

- ③ **IP Address** Displays the IP Addresses of the IP100Hs or IP100FSs.
 - While the “Registration Status” displays “Disconnected,” “-” is displayed.

- ④ **Current 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.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]—[Transceiver Management]

Transceiver Management (continued)

Transceiver Management										
⑦ Refresh										
①	②	③	④	⑤	⑥	⑧				
<input type="checkbox"/> All	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current Status	Talkgroup	Location	Version
<input type="checkbox"/>	1	IP100H	Sales 1	0001	Connected	192.168.0.11	Meeting	202 (Talkgroup 2)	00-90-████████	Ver. 1.47
<input type="checkbox"/>	2	IP100H	Sales 2	0002	Connected	192.168.0.12	Meeting	202 (Talkgroup 2)	00-90-████████	Ver. 1.47
<input type="checkbox"/>	3	IP100H	Sales 3	0003	Connected	192.168.0.10	Under a break	-	00-90-████████	Ver. 1.47
<input type="checkbox"/>	4	IP100FS	Sales 4	0004	Disconnected	-	-	-	-	-

Manual Reboot

⑨ Manual Update: Disable Enable

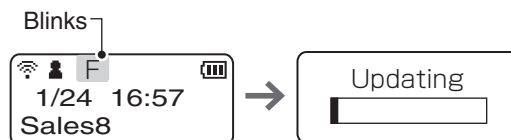
⑩ Manual Reboot:

(This is only an example.)

*An IP100H is displayed in bold when a setting is changed, a reboot is required.

- ⑤ **Talkgroup**..... Displays the Talkgroup IDs that are selected by the IP100Hs or IP100FSs.
 - While the IP100H or IP100FS does not select the Talkgroup, or “Registration Status” displays “Disconnected,” “-” is displayed.
- ⑥ **Location** Displays the BSSIDs of the wireless access points that the IP100Hs are connected to.
 - While the “Registration Status” displays “Disconnected,” “-” is displayed.
- ⑦ **<Refresh>**..... Click the <Refresh> button to renew [Registration Status].
- ⑧ **Version** Displays the version of the IP100Hs or IP100FSs that are registered to the IP1000C.
 - While the “Registration Status” displays “Disconnected,” “-” is displayed.
- ⑨ **Manual Update** Select “Enable” to manually update the IP100H firmware when the IP1000C sends the reboot command (⑩) to the IP100H.

When the IP100H is ready to update the firmware, “F” blinks on the display and then the IP100H automatically reboots and starts the firmware update.



* When the IP100H has failed preparation of firmware update, the IP100H does not reboot automatically. If necessary, send reboot command to the IP100H.

- ⑩ **Manual Reboot** Click the <Execute> button to reboot all of the IP100Hs that are selected in the selection box (①).

■ Transceiver Settings

Registers or edits the IP100H or IP100FS settings.

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

Transceiver Settings

① TRX No.:	<input type="text" value="1"/>	
② Transceiver Model:	<input type="text" value="IP100H"/>	
③ Name:	<input type="text" value="Sales1"/>	
④ Unit ID:	<input type="text" value="0001"/>	
Security		
⑤ Password:	<input type="text" value="iptrx"/>	
Connection Port		
⑥ Transceiver Port Number:	<input type="text" value="30000"/>	
⑦ Server Port Number:	<input type="text" value="30000"/>	
Profile		
⑧ Profile:	<input type="text" value="1"/>	

(This is only an example.)

- | | |
|----------------------------------|--|
| ① TRX 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. |
| ② Transceiver Model | Select either the IP100H or IP100FS. (Default: IP100H) |
| ③ Name | Enter the transceiver name. (Up to 31 characters) |
| ④ Unit ID | Enter the 4 digit individual number between 0001 to 9999. (Default: 0001) |
| ⑤ Password | Enter the password to access to the IP1000C. (Default: iptrx)
• Up to 12 characters, lower or upper letters, numbers, symbols can be used. |
| ⑥ Transceiver 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. |

4 ABOUT THE SETTING SCREEN

■ Transceiver Settings (continued)

Transceiver Settings

① TRX No.:

② Transceiver Model:

③ Name:

④ Unit ID:

Security

⑤ Password:

Connection Port

⑥ Transceiver Port Number:

⑦ Server Port Number:

Profile

⑧ Profile:

⑨ ⑩

(This is only an example.)

- ⑦ **Server 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.
- ⑧ **Profile**

Select the Profile number that the IP100H or IP100FS belongs to. (Default: 1)

 - 1 to 100 are selectable.
 - Set the Profile setting in the [Common Settings] menu, such as ID list, message or Receive notification tone settings.
- ⑨ **<Add>**

Click to add the entries.
- ⑩ **<Reset>**.....

Click to restore the settings.

 - You cannot restore after clicking <Add>.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu (continued)

[Transceiver Settings]–[Transceiver Registration]

■ Transceiver Setting Entry List

The list of the registered IP100Hs or IP100FSs.

Transceiver Setting Entry List												
① <input type="checkbox"/> All	TRX No.	Transceiver Model	Name	Unit ID	Password	Connection Port		Profile	ID List	Message List	② Delete	
						Transceiver	Server					
<input type="checkbox"/>	1	IP100H ▾	Sales 1	0001	iptrx	30000	30000	1 ▾	1 (Sales 1)	1 (Sales 1)	Delete	
<input type="checkbox"/>	2	IP100H ▾	Sales 2	0002	iptrx	30002	30002	1 ▾	1 (Sales 1)	1 (Sales 1)	Delete	
<input type="checkbox"/>	3	IP100H ▾	Sales 3	0003	iptrx	30004	30004	1 ▾	1 (Sales 1)	1 (Sales 1)	Delete	
<input type="checkbox"/>	4	IP100FS ▾	Sales 4	0004	iptrx	-	30006	1 ▾	1 (Sales 1)	1 (Sales 1)	Delete	
						Apply	Reset	Delete	Delete All			
						③	④	⑤	⑥			

(This is only an example.)

- ① **Selection Box** Click a selection box to add a check mark to delete an entry.
*By clicking the [All] box, you can select or cancel all entries in the list.

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

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

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

- ⑤ **<Delete>** Click to delete an entry, which you select in the selection box.
*After an entry is deleted, the entry cannot be recalled.

- ⑥ **<Delete All>** Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

TRX Batch Setting

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

TRX Batch Setting	
① Range:	<input type="text"/> - <input type="text"/> <input type="button" value="Add"/> * Enter Unit ID range.
② Refer to:	Default <input type="button" value="v"/> * [Transceiver Settings] applies the initial value.
③ Profile:	1 <input type="button" value="v"/>

- ① **Range** Enter a range of collective Destination IDs.
<Add>
 By clicking the <Add> button, you can register a consecutive Destination IDs collectively in the box.
 * If a Destination ID is already registered, “Duplicate IDs” is displayed.

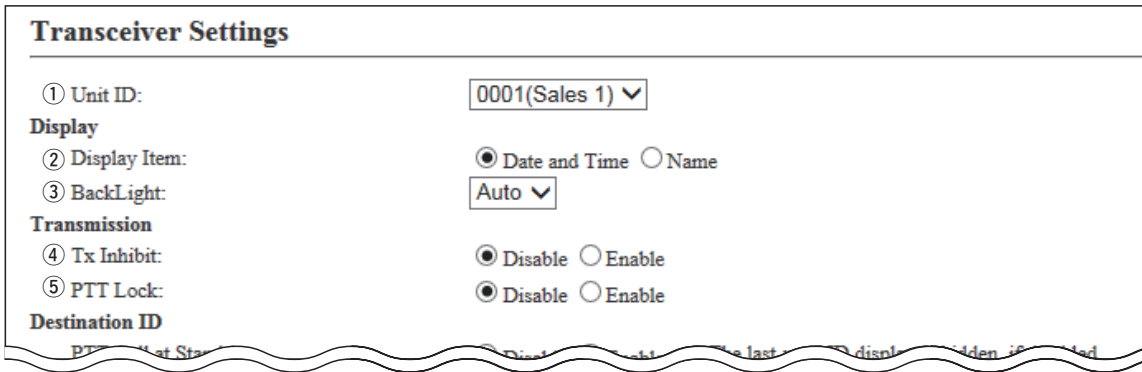
- ② **Refer to** Select the default settings or the programmed settings to refer to.
 (Default: Default)

- ③ **Profile** Select a profile number, which IP100Hs or IP100FSs belong to. (Default: 1)
 • 1 to 100 are selectable.
 You can set an ID List, Message List, or Notification beep setting of each profile in the [Common Settings] menu.

■ 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.)

- ① **Unit 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.

- ② **Display Item**..... Select whether the IP100H displays the Date and Time or its Name in the standby mode. (Default: Date and Time)
 - If the “Name” item on the [Transceiver Registration] screen has not been entered, and this setting is set to “Name,” the IP100H displays the individual number.

- ③ **BackLight**..... Select the IP100H backlight function. (Default: Auto)
 - **OFF**
The backlight does not light.
 - **ON**
The backlight lights continuously.
 - **Auto**
The backlight lights when an operation is performed, and goes out after 5 seconds.

- ④ **Tx Inhibit** Select “Enable” to inhibit the IP100H’s transmission. (Default: Disable)
 - *When this setting is set to “Enable,” the IP100H cannot also transmit with an optional microphone or using VOX function as well.

- ⑤ **PTT Lock** Select “Enable” to lock the IP100H’s PTT switch. (Default: Disable)
 - * When this setting is set to “Enable,” the IP100H cannot transmit by holding its PTT switch, but it can be transmitted with an optional microphone or using VOX function as well.

■ Transceiver Settings (continued)

(This is only an example.)

⑥ **PTT Call at Stand-by**

Select whether the IP100H displays the Destination ID (Call type) in the standby mode or not. (Default: Enable)

• **Enable**

The Destination ID (Call type) is displayed on the standby mode.

*When the PTT on the IP100H is pushed, the IP100H calls the displayed ID (Call type).

• **Disable**

The Destination ID (Call type) is not displayed on the standby mode.

*The Destination ID (Call type) is displayed when you select the ID using function keys.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]—[Transceiver Settings]

■ Transceiver Settings (continued)

(This is only an example.)

⑦ **Use 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

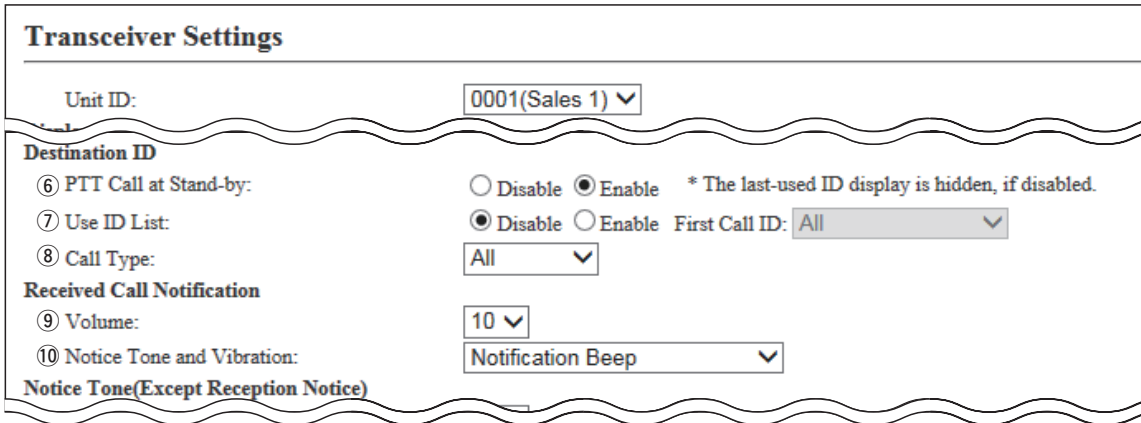
When you push [Address] on the IP100H, the Call Type will change.



(Address) key

- Select the All or ID number (1 to 50) that the IP100H displays after power ON.
- When “Disable” is selected on the [Add All Call to ID List] item, you cannot select an All call using the [Address] key.
- The ID list is select the Common Setting screen.

■ Transceiver Settings (continued)

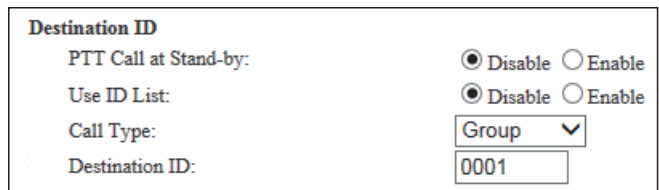


(This is only an example.)

⑧ **Call 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 (⑦) is selected “Enable,” this item is not displayed.

⑨ **Volume**

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.

⑩ **Notice Tone and Vibration**

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.

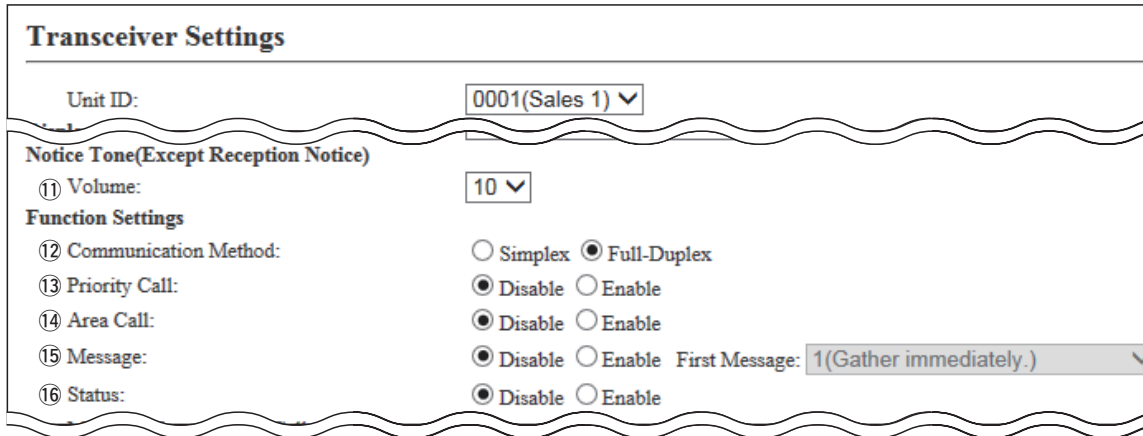
• **Vibration**

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.

■ Transceiver Settings (continued)



(This is only an example.)

⑪ Volume

(Except Reception Notice)

Set the beep level when the IP100H transmits a Call or connecting to the IP1000C to between 0 and 32. (Default: 10)

- When this setting is set to “0,” the notification beep becomes OFF.

* Depending on the [Common Settings], the IP100H sounds beeps when the IP100H is transmitting or connecting to the IP1000C.

⑫ Communication Method

Select the communication method that the IP100H uses.

(Default: Full-Duplex)

• **Simplex**

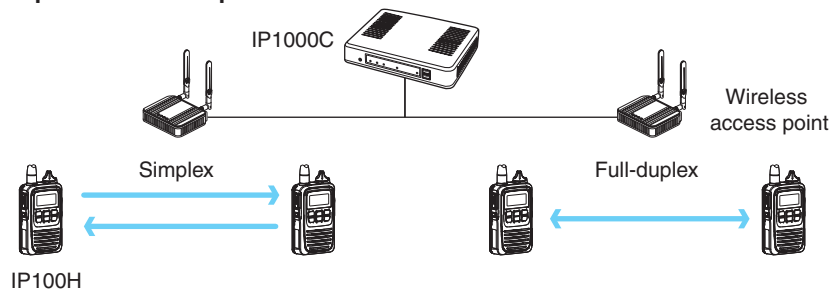
Toggles the transmission (Talker) and reception (Listener) by turns for communication.

• **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

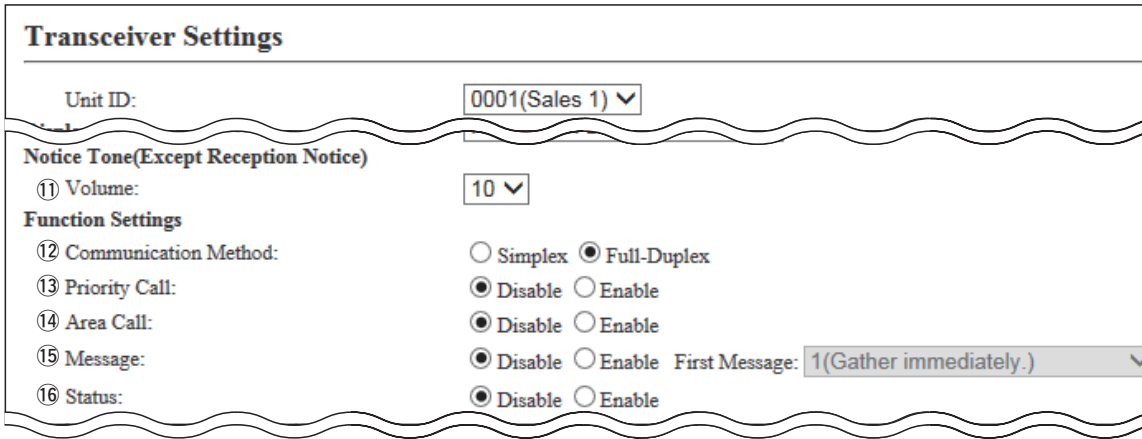


4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]—[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

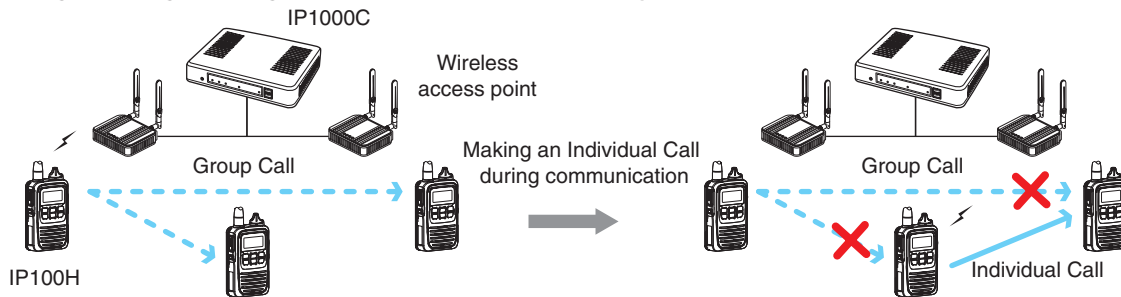
⑬ **Priority Call** Select whether the IP100H uses the Priority Call or not. (Default: Disable)

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

Priority level	Call type	Priority Call	Remarks
High ↑ ↓ Low	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	Disable	
	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

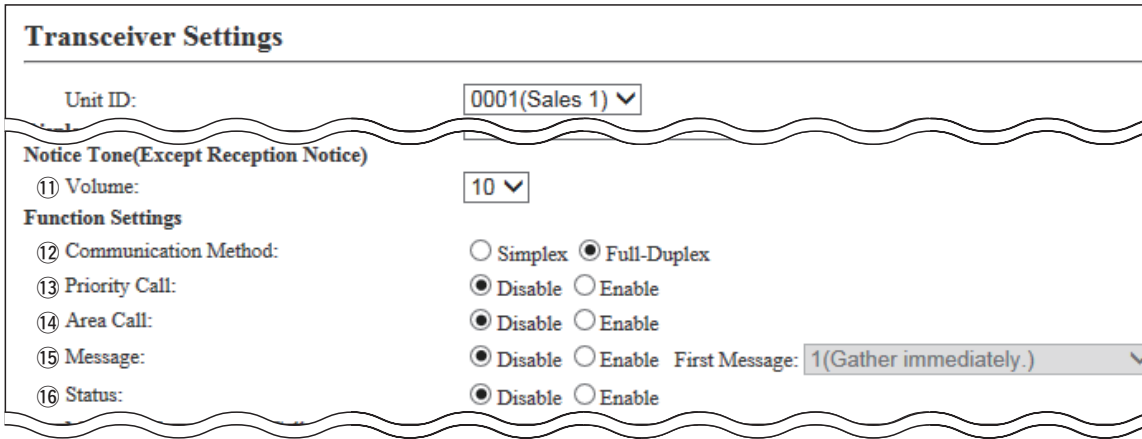


4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]—[Transceiver Settings]

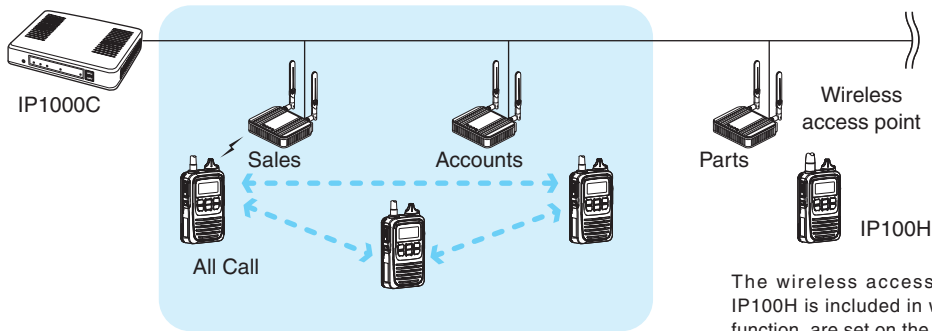
■ Transceiver Settings (continued)



(This is only an example.)

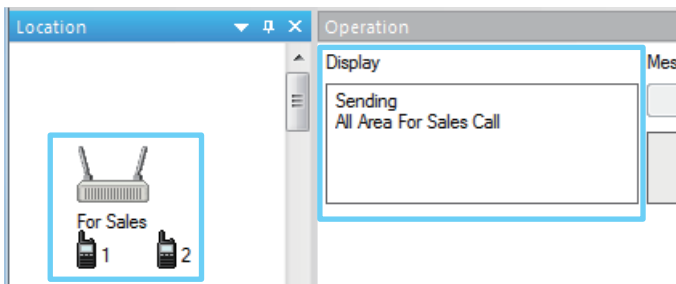
- ⑭ **Area Call** Select whether the IP100H uses the Area Call or not. (Default: Disable)
 When the IP100H calls All Call or Group Call using the Area Call function, it calls only other IP100Hs or IP100FSs in the same area that it connects to the wireless access point.

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



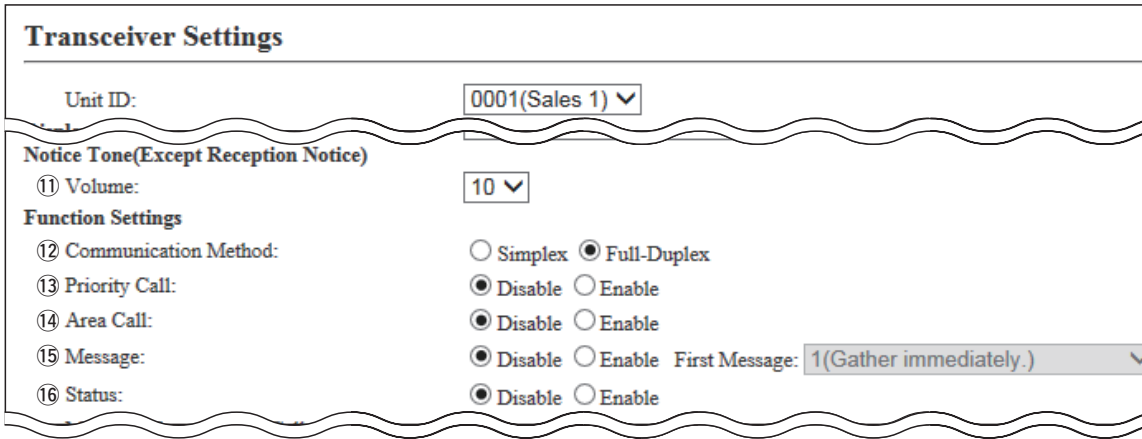
When the IP100FS uses the Area Call function, the IP100FS can call IP100Hs that are in the communication range of the access points assigned to the Area Call. Select the access point in the [Location], the Call type (Individual, Group, All, Area or Telephone) and names are displayed.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

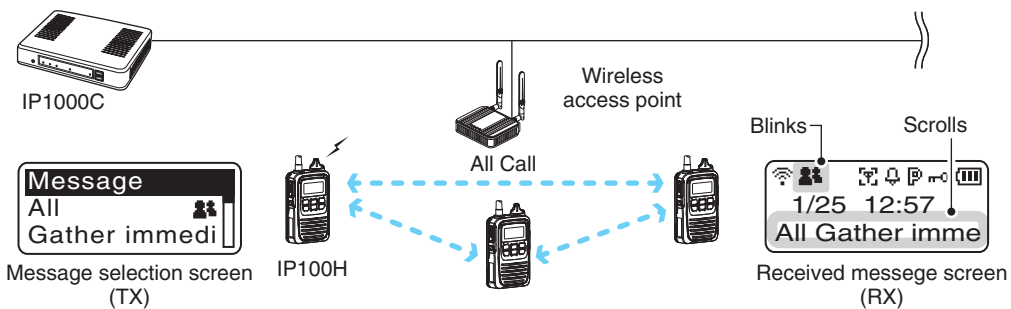
⑮ Message

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.

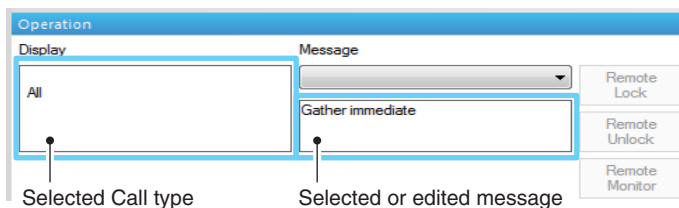
- Up to 10 messages of 32 characters or less can be programmed on the [Messages] screen in the [Common Settings] menu.
- Select the message number 1 to 10 in the “First Message” item that is registered on the [Message] screen.



IP100H transmits a message



IP100FS transmits a message



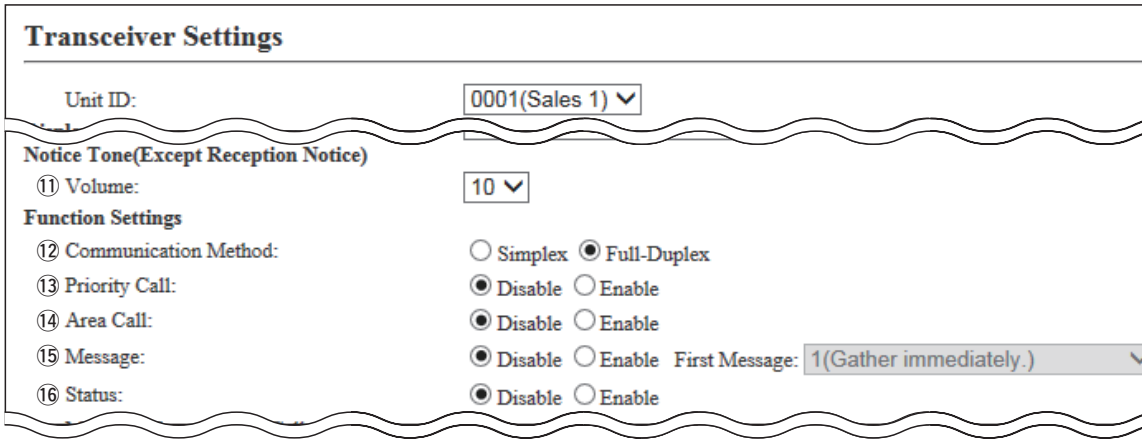
The IP100FS can store up to 100 messages in each Site.
You can edit the stored messages.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

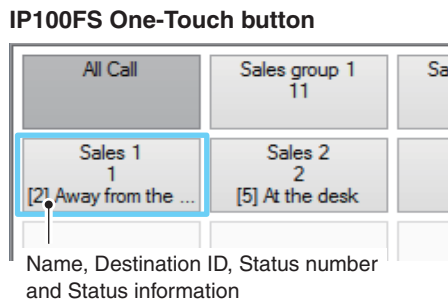
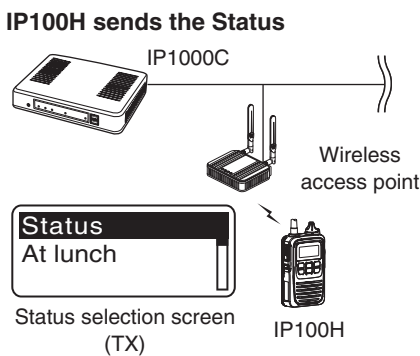
[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

- ⑩⑪ **Status** 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 Management] screen in the [Transceiver Settings] menu or the one-Touch button of the IP100FS.



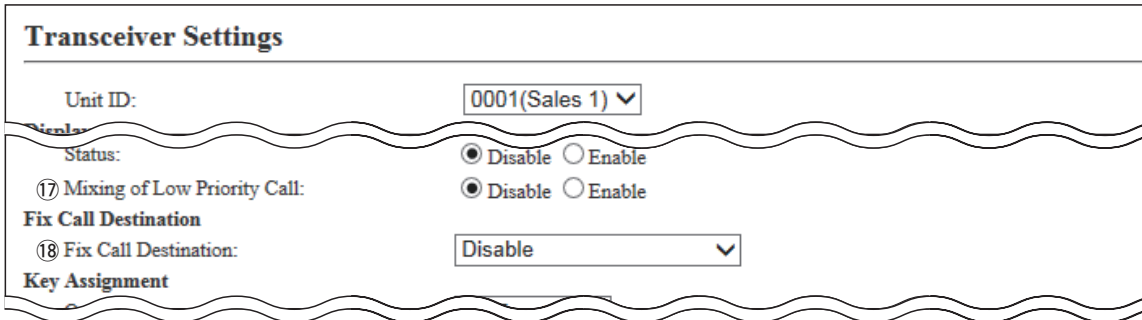
IP1000C Transceiver Management screen

Transceiver Management

<input type="checkbox"/> All	TRX No.	Transceiver Model	Name	Unit ID	Registration Status	IP Address	Current Status	Talkgroup
<input type="checkbox"/>	1	IP100H	Sales 1	0001	Connected	192.168.0.11	Meeting	202 (Talkgroup 2)
<input type="checkbox"/>	2	IP100H	Sales 2	0002	Connected	192.168.0.12	Meeting	202 (Talkgroup 2)
<input type="checkbox"/>	3	IP100H	Sales 3	0003	Connected	192.168.0.10	Under a break	-
<input type="checkbox"/>	4	IP100FS	Sales 4	0004	Disconnected	-	-	-

Status

■ Transceiver Settings (continued)



(This is only an example.)

⑰ **Mixing of Low Priority Call**

Select whether the IP100H receives the mixing audio or not.

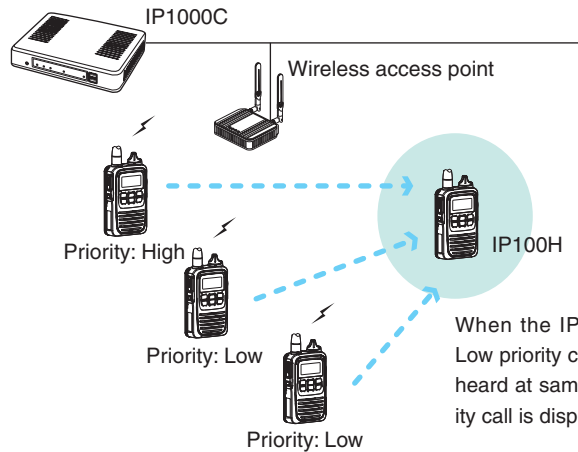
(Default: Disable)

When this setting is set to “Enable,” the IP1000C sends the mixing audio of all calls that call to the IP100H.

- The IP100H displays the called station that has the highest priority in the mixing audio.

See page 4-43 for details of the Priority level.

• **Mixing of Low priority call**



■ Transceiver Settings (continued)

Transceiver Settings

Unit ID: 0001(Sales 1) ▼

Status: Disable Enable

⑰ Mixing of Low Priority Call: Disable Enable

Fix Call Destination

⑱ Fix Call Destination: Disable ▼

Key Assignment

(This is only an example.)

⑱ Fix Call Destination

Select whether the IP100H uses the Fix Call Destination function or not.

(Default: Disable)

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

• Disable

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

• PTT

The Fix Call Destination is specified as the PTT transmission.

When [PTT] is held down, the IP100H calls the preset destination.

Call type is set to All

(Example: All call is specified to the PTT)

• Earphone Mic or Headset

The Fix Call Destination is specified as the external Mic transmission.

When the external microphone’s PTT switch is held down, or its VOX function is active, the IP100H calls the preset destination.

Call type is set to Group

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

- Specify the Call type from “Individual,” “Group” or “All.”
- When the “Call Type” item is set to “Individual” or “Group,” enter a 4 digits number of the Individual ID or Group ID in the “Destination ID” item.
- The destination ID or Call type of the Fix Call Destination is displayed on the 2nd line. (Usually Date and Time or Own Name is displayed on the 2nd line.)
- When the IP100H is set to this setting, and receives a call, it does not display the Caller’s ID or Call type on the 3rd line.
- When both of the IP100H’s [PTT] and external microphone’s PTT switch are held down, the external PTT has priority and the internal microphone will be muted.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

Transceiver Settings	
Unit ID:	0001(Sales 1) ▾
Key Assignment	
⑱ Option Key:	No Function ▾
⑳ Clear Down during Telephone Call:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Target Availability Check	
Target Availability Check:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable

(This is only an example.)

⑱ Option Key

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

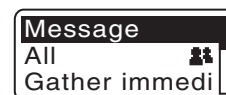
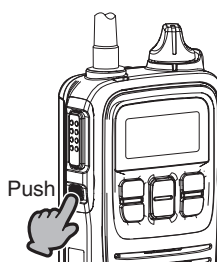
- When this setting is set to “No function,” nothing changes by pushing [Option] on the IP100H in the standby mode.

• 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.

Key Assignment	
Option Key:	Message ▾
Message No.:	1(Gather immediately) ▾
Clear Down during Telephone Call:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable

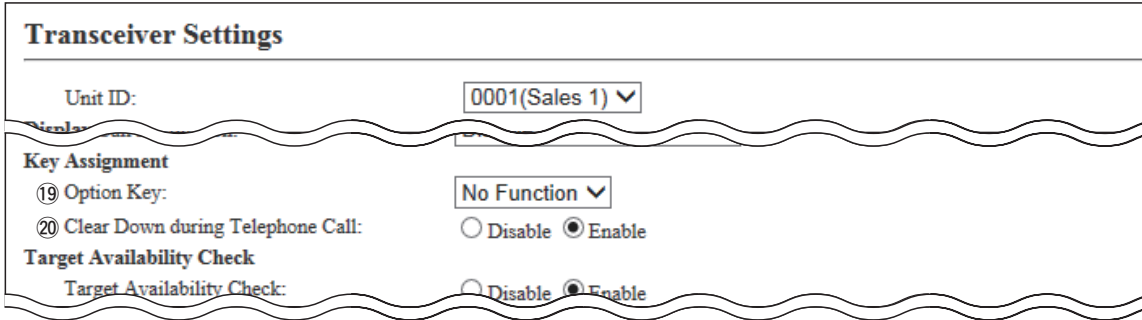


4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

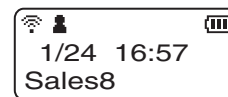
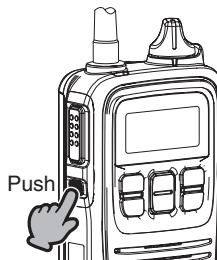
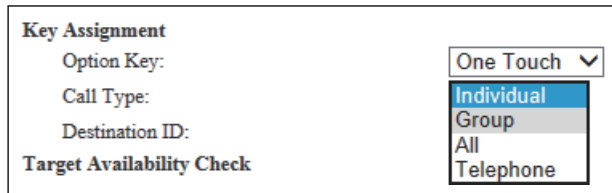
⑱ Option Key
(continued)

• 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.

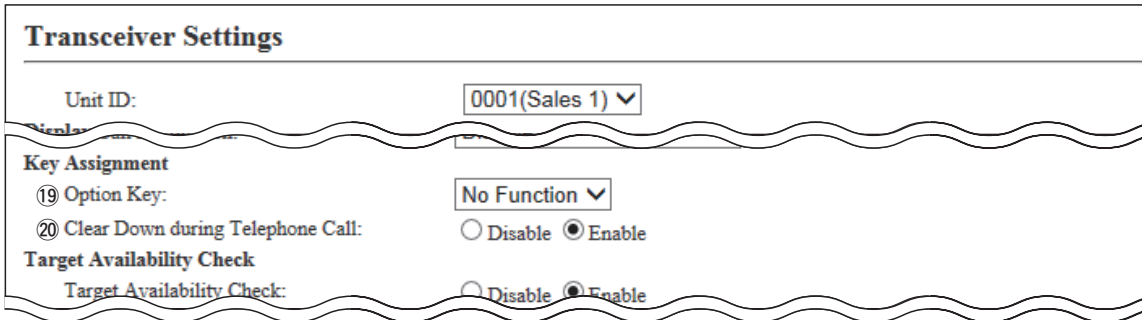


4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

⑱ Option Key
(continued)

• Clear Down

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

*You can assign another function, if you select "Enable" on the [Clear Down during Telephone Call] (⑱) item.



• MUTE

Hold down [Option] for 1 second on the IP100H when you want to mute the received audio. (The Notification beep cannot be muted.)

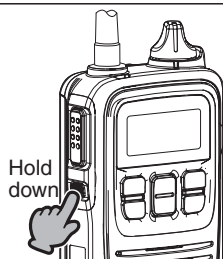
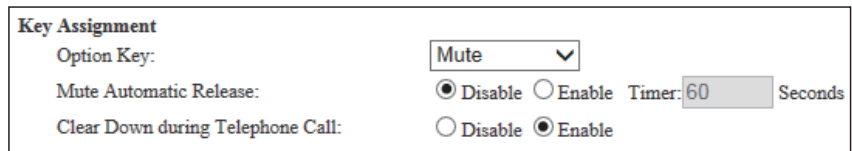
Hold down [Option] for 1 second to turn the mute function ON or OFF.

- You can turn OFF the mute function by pushing [PTT]. However, if you select "Enable" in the [Clear Down during Telephone Call] (⑱) item, terminates the phone call in the phone call.

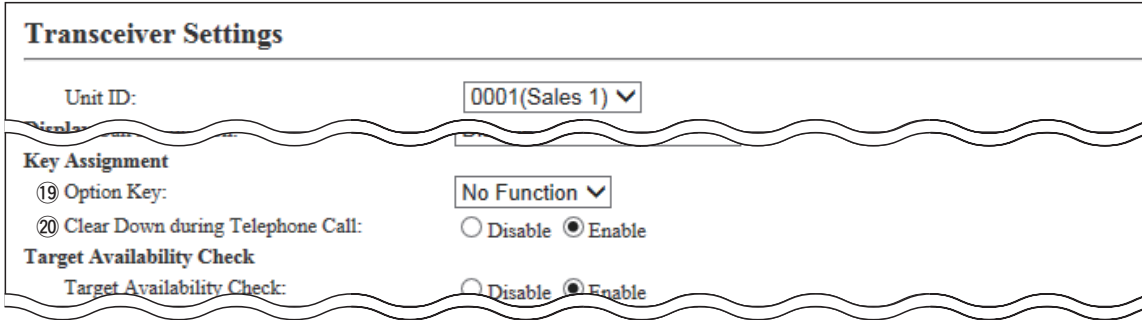
- If you select "Enable" in the [Mute Automatic Release] (⑳) item, turn OFF the mute function after specified time period has passed.

(Default: Disable)

If you select "Enable," set the time period to release the mute function to between 10 to 600 (seconds). (Default: 60 (seconds))



■ Transceiver Settings (continued)



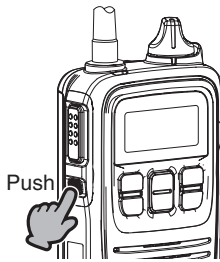
(This is only an example.)

⑳ Clear Down during Telephone Call

.....

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

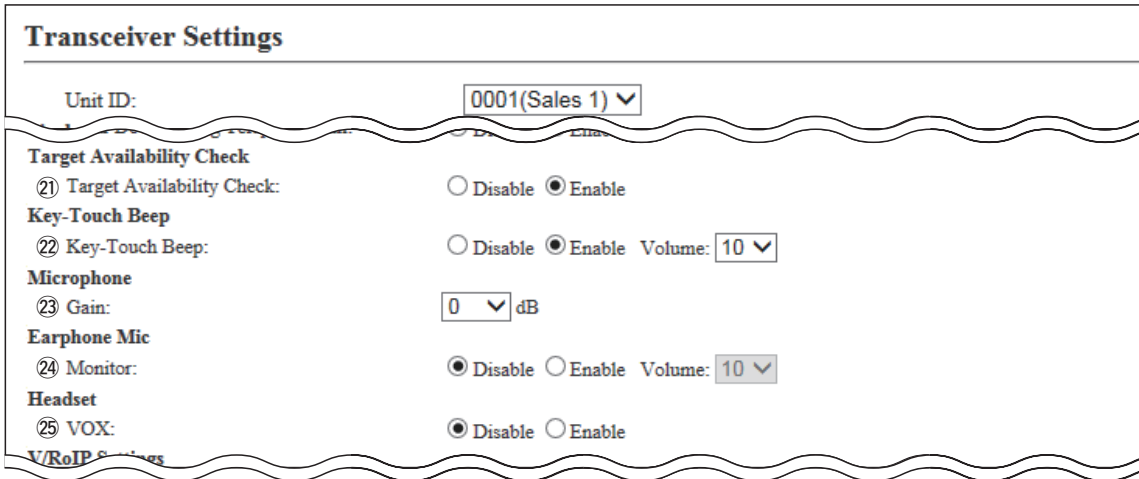
* When “Clear Down” is selected on the [Option Key] item (⑱), this item is not displayed.



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.

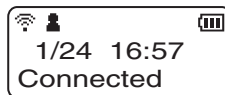
■ Transceiver Settings (continued)



(This is only an example.)

②1 Target 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

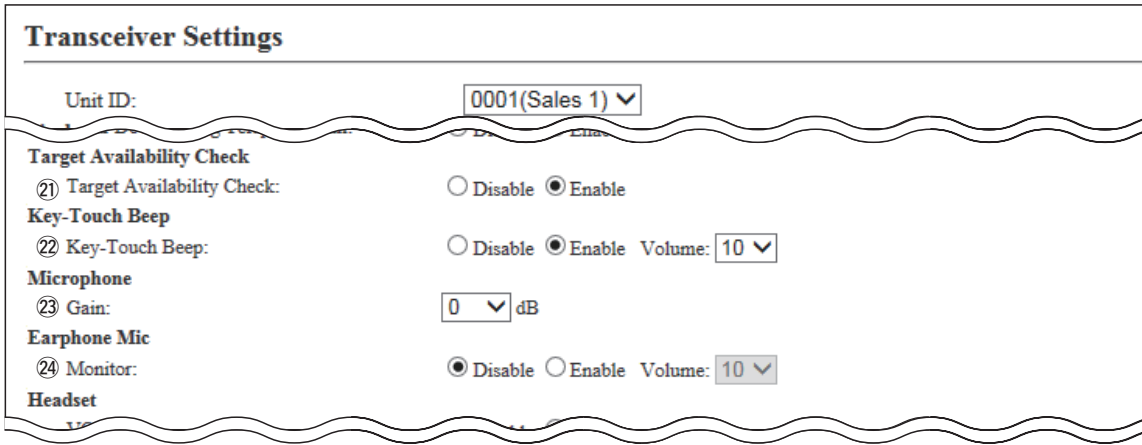
②2 Key-Touch Beep.....

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.

• Volume

Set the volume level of the notification beeps when the IP100H’s key is pushed. (Default: 10)
 Selectable range are between 0 and 10.
 * When “0” is selected on this setting, IP100H does not sound any beep even if the volume level is set.
 * When selecting “Disable,” this setting is greyed out and the volume level cannot be changed.

■ Transceiver Settings (continued)

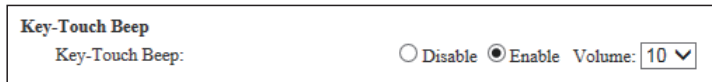


(This is only an example.)

③ **Gain** 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.

④ **Monitor** Select whether the IP100H with an earphone microphone uses the monitor function or not. (Default: Disable)
 When this setting is set to “Enable,” you can hear your transmit audio from earphone.
 * To prevent howling, set this setting to “Disable” when using with a speaker microphone such as the HM-186LS.

• **Volume:**
 Set the monitor level to between 0 and 32. (Default: 10)
 * When selecting “Disable,” this setting is greyed out and the monitor level cannot be changed.

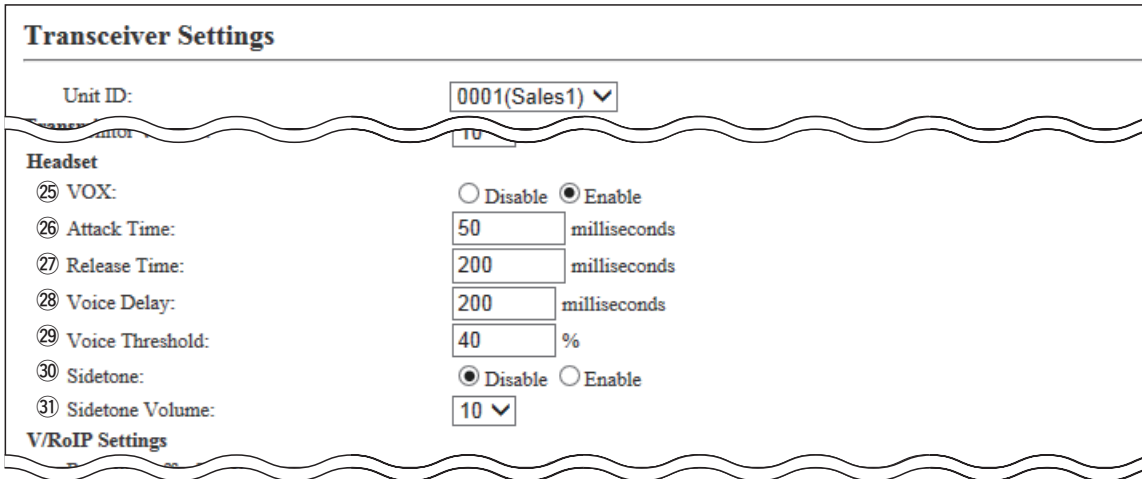


4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)



(This is only an example.)

25 VOX

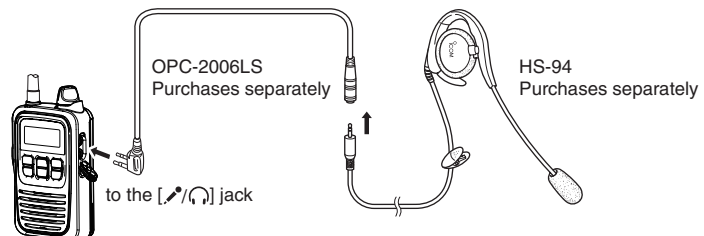
Select whether the IP100H can use the VOX (voice operated transmission) function or not. (Default: Disable)

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

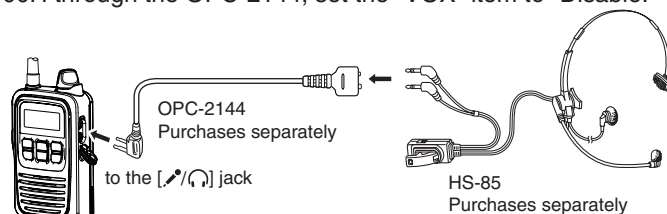
* The VOX function requires to connect an optional headset and connection cable.

Headset HS-94, HS-95, or HS-97 and Connection cable OPC-2006LS.
Or Headset HS-102 and Connection cable OPC-2359.

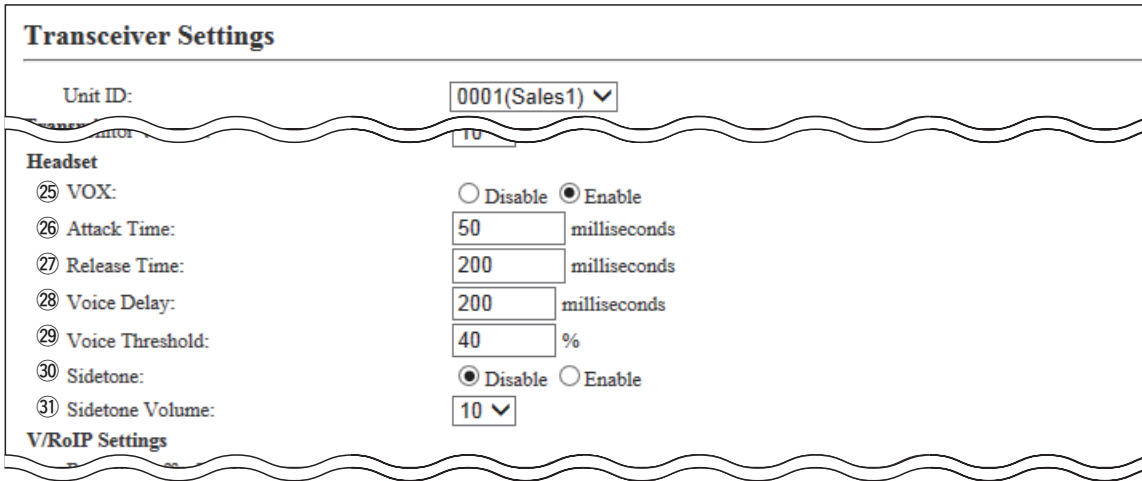
- The VOX function starts transmission when you speak into the microphone, without needing to push [PTT]; then, automatically returns to reception when you stop speaking.
- Be sure to turn OFF the IP100H's power, before connecting or disconnecting optional equipment to or from the [] jack.
- When "Enable" is selected, the "Attack Time" through "Sidetone Volume" items are displayed.



- The HS-85 has the VOX function, so if you connect the HS-85 to the IP100H through the OPC-2144, set the "VOX" item to "Disable."



■ Transceiver Settings (continued)



(This is only an example.)

- ②⑥ **Attack Time** Adjust the Attack time to between 5 and 2000 milliseconds in 5 milliseconds steps. (Default: 50 (milliseconds))

When audio from a headset microphone is input for this specified time, the IP100H starts transmitting.

VOX: Enable
- ②⑦ **Release Time** 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.

VOX: Enable
- ②⑧ **Voice Delay** 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))

VOX: Enable
- ②⑨ **Voice Threshold** Adjust the VOX Threshold level to between 0% and 100%. (Default: 40%)

Higher values make the VOX function more sensitive to your voice.

VOX: Enable
- ③⑩ **Sidetone** Select whether to use the Sidetone function or not. (Default: Disable)

When “Enable” is selected, you can hear your voice from the headset.

VOX: Enable
- ③① **Sidetone Volume** Adjust the Sidetone level to between 0 (minimum) and 32 (maximum). (Default: 10)

VOX: Enable

■ Transceiver Settings (continued)

(This is only an example.)

32 Receiver Buffer Type ... Select a type of buffers to reduce the received audio break-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.

33 TOS 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.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

Transceiver Settings

Unit ID: ▼

V/RoIP Settings

③② Receive Buffer Type: Static Dynamic

③③ TOS Type: ▼

③④ Media (RTP): Priority Level Service Type (HEX):E0

Antenna

③⑤ Selected Antenna: ▼

IP Address

③⑥ Setting Type: ▼

Maintenance

(This is only an example.)

③④ **Media (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 (③③) is set to "Diffserv."

V/RoIP Settings

Receive Buffer Type: Static Dynamic

TOS Type: ▼

Media (RTP): DSCP (HEX):E0

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

Transceiver Settings

Unit ID: 0001(Sales1) ▼

V/RoIP Settings

③② Receive Buffer Type: Static Dynamic

③③ TOS Type: TOS ▼

③④ Media (RTP): Priority Level 7 Service Type 0 (HEX):E0

Antenna

③⑤ Selected Antenna: Transceiver's Setting ▼

IP Address

③⑥ Setting Type: Transceiver's Setting ▼

Maintenance

(This is only an example.)

③⑤ **Selected 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

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

(This is only an example.)

③⑥ **Setting 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.

4 ABOUT THE SETTING SCREEN

8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

■ Transceiver Settings (continued)

(This is only an example.)

- 37 Provisioning 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.

- 38 Accept reboot command from other than the master controller** ... Select whether the IP100Hs can be rebooted by the other than the specified Provisioning server nor not. (Default: Disable)

* Only the IP1000C is compatible with this function. (As of January 2016)

- 39 SNTP 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.

- 40 Automatic Firmware Updating at Power ON** Select whether the IP100H will use the Automatic Update function or not. (Default: Enable (with Automatic Reboot))

 - **Disable**
Disables the automatic firmware updating at the IP100H turns ON.
 - **Enable (without Automatic Reboot)**
When this setting is set to “Enable (without Automatic Reboot),” the IP100H works as follows.
 1. The IP100H confirms the latest firmware in the IP1000C when turning ON.
 2. The IP100H automatically downloads the firmware if it needs to update.
 3. The IP100H will be updated when it is turned ON again.
 - **Enable (with Automatic Reboot)**
When this setting is set to “Enable (with Automatic Reboot),” the IP100H works as follows.
 1. The IP100H confirms the latest firmware in the IP1000C when turning ON.
 2. The IP100H automatically downloads the firmware if it needs to update.
 3. The IP100H is updated automatically, and then it is rebooted.

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

■ Transceiver Settings (continued)

(This is only an example.)

- ④① **Firmware 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.

- ④② **SYSLOG Host IP Address** Enter the SYSLOG host's address.
 - The host device must have the SYSLOG server function.

- ④③ **SYSLOG Severity** Select the log information to send to the SYSLOG host.
 - Enter a check mark to send the log entries.

(Default: DEBUG INFO NOTICE)

- ④④ **<Apply>** Click to apply the entries.

- ④⑤ **<Reset>** Click to restore the settings.
 - You cannot restore after clicking <Apply>.

■ 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.)

■ 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 IP100Hs.

Wireless LAN

① No.:

② Name:

③ SSID:

④ Authentication:

⑤ Encryption:

PSK (Pre-Shared Key):
8-63 alphanumeric characters or 64 hexadecimal digits

⑥ Scan Mode: 11g
 11a

⑦ Power Level:

⑧ Roaming Threshold: dBm

⑨ ⑩

(This is only an example.)

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

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

- ③ **SSID** 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.

■ Wireless LAN (continued)

Wireless LAN

① No.: 1

② Name: Sales

③ SSID: WAVEMASTER-1

④ Authentication: WPA-PSK/WPA2-PSK

⑤ Encryption: TKIP/AES

PSK (Pre-Shared Key): 00000000
8-63 alphanumeric characters or 64 hexadecimal digits

⑥ Scan Mode: 11g 11a

⑦ Power Level: High

⑧ Roaming Threshold: -75 dBm

⑨ Apply ⑩ Reset

(This is only an example.)

- ④ **Authentication** 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 the terminals and access points cannot communicate using different authentication methods.

About authentication methods

• **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” authentications are automatically recognized.

The combination of the Authentication and Encryption

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

■ Wireless LAN (continued)

(This is only an example.)

- ⑤ **Encryption** Select the encryption type that is the same as the wireless access point. (Default: None)
 - Be sure to verify the access point setting, because the terminals and access points cannot communicate using different encryption.

About the encryption types

- **None**

No data is encrypted.

 - This option can be selected when 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 connecting to a wireless access point.

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

■ Wireless LAN (continued)

Wireless LAN

① No.:

② Name:

③ SSID:

④ Authentication:

⑤ Encryption:

PSK (Pre-Shared Key):
8-63 alphanumeric characters or 64 hexadecimal digits

⑥ Scan Mode: 11g
 11a

⑦ Power Level:

⑧ Roaming Threshold: dBm

(This is only an example.)

⑤ Encryption
 (continued)

• WEP Encryption Key

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

Authentication:

Encryption:

WEP Encryption Key:

- This option can be selected when the “Authentication” item (④) is set to “Open System” or “Open System/Shared Key.”
- Enter hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key length is same as the displayed digits, 10 or 26 using hexadecimal numbers, or half of the displayed digits, 5 or 13 characters using ASCII characters.

• PSK (Pre-Shared Key)

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

Authentication:

Encryption:

PSK (Pre-Shared Key):
8-63 alphanumeric characters or 64 hexadecimal digits

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

■ Wireless LAN (continued)

(This is only an example.)

- ⑥ **Scan Mode** Select the frequency band that the IP100H uses. (Default: 11g, 11a)
 Selecting “11g” includes “11b” and “11n.”
 • Access points that comply with the wireless LAN standards, can be used with the IP100H.

- ⑦ **Power 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.

- ⑧ **Roaming 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 becomes difficult to start roaming.

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

- ⑩ **<Reset>**..... Click to restore the settings.
 • You cannot restore after clicking <Apply>.

■ List of Wireless LAN Entries

The list of the wireless LAN settings.

List of Wireless LAN Entries				
No.	Name	SSID	①	②
1	Sales	WAVEMASTER-1	Edit	Delete
2	Administrative	WAVEMASTER-2	Edit	Delete
				③ Delete All

(This is only an example.)

- ① <Edit> Click to edit the entries in the [Wireless LAN] field.
- ② <Delete> Click to delete the selected entry.
 - 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.

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 “Profile” field on the [Common Settings] screen.
- If any entries on this screen have been changed, you must reboot the IP100H.

ID List Common Settings

ID List Common Setting Number: * If you change this item, the screen automatically updates to the selected list.

(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.

- When the group name or IDs are registered in the group, displayed as below.

ID List Common Setting Number:

ID List Detail Settings

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

ID List Detail Settings

① Name:

② ③

- ① **Name** Enter a group name of up to 31 characters. The group is selected in the [ID List Common Setting] item in the [ID List] screen.
 - When the group is selected in the [ID List] and [Profile] screens, the group name is displayed.

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

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

Save or Write the ID List Setting

You can save an ID list file on your PC or load an ID list file to the IP1000C.

*If any IP100H settings have been changed, you must reboot it.



*This is an example when group 1 is selected in the [ID List Common Setting] field.
If the name is not edited, displays only the item name.

① **Load Settings from File**

Load an ID list file, which is saved on the [Save to File] item, to the IP1000C.
 Click <Browse...> to select the file to load.
 Select the target file on screen, and click <Open>. The selected file appears in the [Load Settings from File] item. Click <Write> after selecting the target file. Then, the selected file is loaded to the [ID List Entries] item.
 *When the file is loaded, the previous data in [ID List Entries] is deleted.
 *If you select the file that is saved on the [Settings Restore] screen in the [Management] menu, the setting is overwritten.

② **Save to File**

Save an ID list file, which is listed in the [ID List Entries] item, to your PC.
 Click <Save>, and then <Save> on the box to save an ID list file (a CSV file) to your PC.
 *A file name varies depending on the group number in the [ID List Common Settings] item. For example, the file name becomes “tn01_id_list001.csv” when group 1 of tenant 1 is selected.

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 an example when group 1 is selected in the [ID List Common Setting] field.

If the name is not edited, displays only the item name.

- ① **Add Type** Select the “Enter Individually” or “Select From List” Add Type. When the “Select From List” is selected, the Destination IDs that are registered in the [Transceiver Registration] screen or [Destination Settings] screen, are displayed.
*By clicking the [All] box, you can select or cancel all entries in the list.

Add Type: <input type="radio"/> Enter Individually <input checked="" type="radio"/> Select From List			
<input type="checkbox"/> All	Name	Call Type	Destination ID/Phone Number
<input type="checkbox"/>	Sales 1	individual	0001
<input type="checkbox"/>	Sales 2	individual	0002
<input type="checkbox"/>	Sales 3	individual	0003
<input type="checkbox"/>	Sales 4	individual	0004
<input type="checkbox"/>	Sales group1	Group	0101
<input type="checkbox"/>	Talkgroup 2	Talkgroup	0202
<input type="checkbox"/>	500 (IP Phone)	Telephone	500

- ② **No.** Select a number to register the destination.
Up to 50 destinations can be registered to a group.
- ③ **Name** Enter a destination name of up to 32 characters.
- ④ **Call Type** Select the “Individual,” “Group,” “Talkgroup” or “Telephone” Call type.
- ⑤ **Destination ID** Enter a 4 digit target individual ID, group ID or talkgroup ID.
When “Telephone” is selected as the “Call Type,” enter a target phone number of up to 31 digits using numbers and symbols (#, *).
- ⑥ **<Apply>** Click to apply the entries.
- ⑦ **<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

ID List Entries

The list of entered Group Calls.

No.	Name	Call Type	Destination ID/Phone Number	①	②
1	Sales 1	Individual	0001	Edit	Delete
2	Sales 2	Individual	0002	Edit	Delete
7	500 (IP Phone)	Telephone	500	Edit	Delete

Delete All ③

*This is an example when group 1 is selected in the [ID List Common Setting] field.
If the name is not edited, displays only the item name.

- ① <Edit> Click to edit the entries in the [ID List] field.
- ② <Delete> Click to delete the selected entry.
 - 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.

[When entering the Destination ID that is not registered in this IP1000C]

When applying the Destination ID to the ID list that is not registered in the [Transceiver Settings] screen or the [Destination Settings] screen, the ID is displayed in red as an error ID in the ID List Entries (Sales 1).

No.	Name	Call Type	Destination ID/Phone Number	Edit	Delete
1	Talkgroup 2	Talkgroup	0021		

Delete All

**No valid Transceiver Setting and Destination Setting.*

The error information is displayed in the [Top] screen, [Destination Settings] screen or Setting menu.

The screenshot shows a multi-panel interface. On the left is a navigation menu with 'Common Settings' and 'Destination Settings' highlighted. The central panel shows a 'Setting Error Status' message and system/network status information. The right panel shows the 'Destination Settings (Tenant1)' screen with a red error message: 'ID Lists without an ID registration are found. ID List Group 1(0021(Talkgroup))'. Below this are fields for 'No.', 'Name', 'Call Type', and 'Destination ID', along with a 'Destination Group' section containing checkboxes for 'All', '0001(Sales 1)', and '0002(Sales 2)'. At the bottom, a section for 'List of Destination Setting Entries (All Call)' is partially visible.

■ 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.

Message Group

Message Group Number: * If you change this item, the screen automatically updates to the selected list.

(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.

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

Message Group Number:

■ Message Group Detail

Enters the group name that is selected in the “Message Group” field.

Message Group Detail

① Name: ② ③

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

■ Save or Write the Message Setting

You can save a message file on your PC or load a message file to the IP1000C.

*If any IP100H settings have been changed, you must reboot it.

*This is an example when group 1 is selected in the [Message Group] field.
If the name is not edited, displays only the item name.

① Load Settings from File

Load a message file, which is saved on the [Save to File] item, to the IP1000C.

Click <Browse...> to select the file to load.

Select the target file on screen, and click <Open>. The selected file appears in the [Load Settings from File] item. Click <Write> after selecting the target file. Then, the selected file is loaded to the [Messages] item.

*When the file is loaded, the previous data in [Message] is deleted.

*If you select the file that is saved on the [Settings Restore] screen in the [Management] menu, the setting is overwritten.

② Save to File

Save an message file, which is listed in the [Message] item, to your PC.

Click <Save>, and then <Save> on the box to save a message file (a CSV file) to your PC.

*A file name varies depending on the group number in the [Message Group] item. For example, the file name becomes "tn01_msg_list001.csv" when group 1 of tenant 1 is selected.

■ 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.

Messages(Sales 1)

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

①
②

(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>.

■ 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.

Status Settings

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

①
②

(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>.

Profile List

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

Profile List

No.	Name	Wireless LAN	ID List Number	Common Message Group		
1	①	Transceiver's Setting	1 (Sales 1)	1 (Sales 1)	② Edit	③ Delete
2	▼	Add				④ Delete All

(This is only an example.)

- ① <Add> Click to add a new profile.
- ② <Edit> Click to edit the entries in the “Profile” items.
- ③ <Delete> Click to delete the selected entry.
 - After clicking <Delete>, the content cannot be recalled.
- ④ <Delete All> Click to delete all the entries.
 - After clicking <Delete All>, the contents cannot be recalled.

Profile

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.

Profile

① No.: 1 ▾ * If you change this item, the screen automatically updates to the selected profile.

② Name:

Wireless LAN

③ Wireless LAN: Transceiver's Setting ▾

Common Settings

④ ID List: 1 (Sales 1) ▾

⑤ Message List: 1 (Sales 1) ▾

Registration

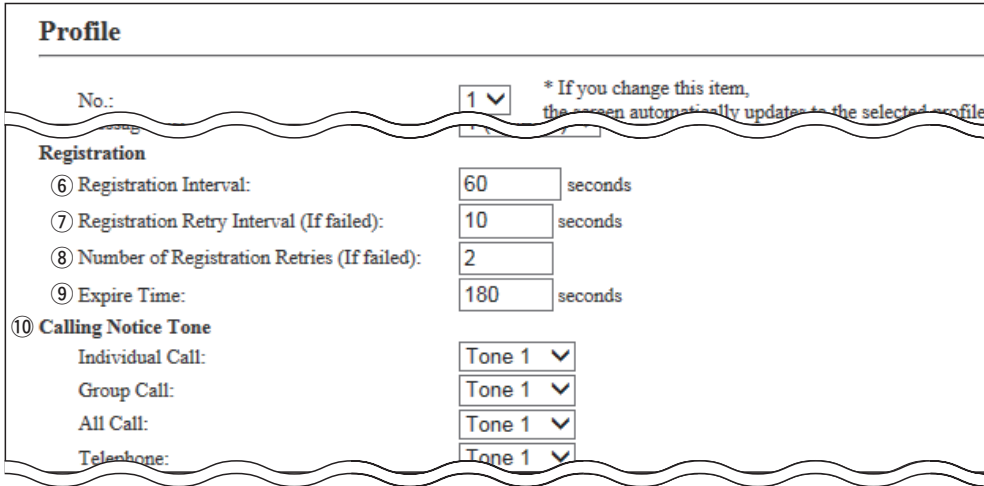
Registration Interval: 60 seconds

Registration Retry Interval (If failed): 10 seconds

(This is only an example.)

- ① **No.** Select a profile between 1 and 100, to assign to the IP100H belongs to.
- ② **Name** Enter a profile name of up to 31 characters.
The profile name is displayed in the [Profile List] item in the [Profile] screen.
- ③ **Wireless LAN** Select the wireless LAN setting that is 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.
- ④ **ID 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.
- ⑤ **Message 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.

■ Profile (continued)



(This is only an example.)

- ⑥ **Registration 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.

- ⑦ **Registration 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))

- ⑧ **Number 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)

- ⑨ **Expire Time** The IP1000C check the IP100Hs connection status in this interval. (Default: 180)
 - Setable range is Registration Interval (⑥)+ 1 to 900 (seconds).
 - Generally use the default setting.
 - You cannot set this setting to shorter than Registration Interval (⑥).

- ⑩ **Calling 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.”

4 ABOUT THE SETTING SCREEN

■ Profile (continued)

(This is only an example.)

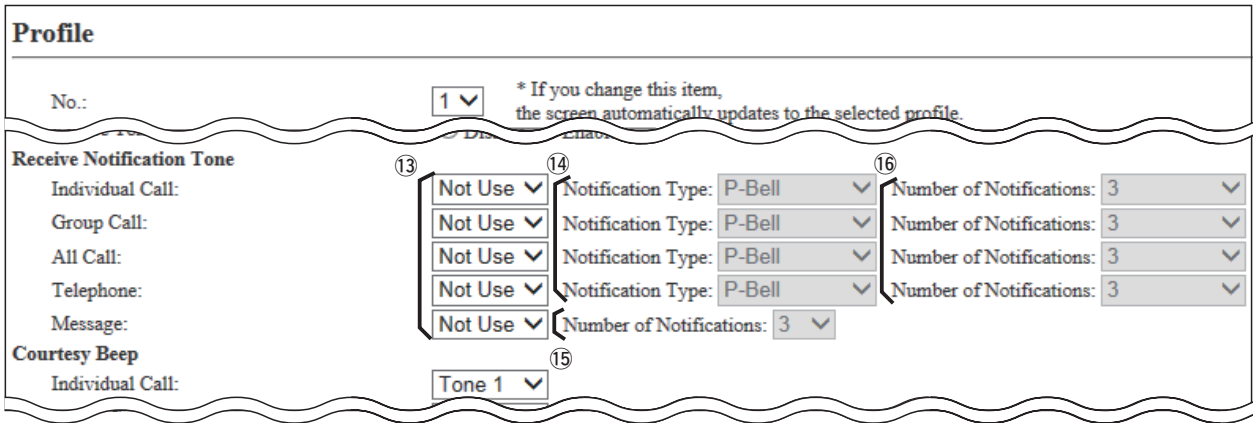
- ① **Success Tone** Select a notice tone for a successful connection. (Default: Enable)

 - 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.

- ⑫ **Failure 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.

Profile (continued)



(This is only an example.)

- 13 Receive 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.”

- 14 Notification 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 (13) is set to “Tone 1” to “Tone 8.”
 - You cannot select this item for a Message call.

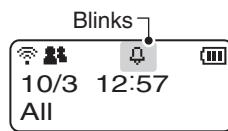
- Pocket Beep**

When a specified call is received, the IP100H sounds the notification beep and the notification icon blinks.

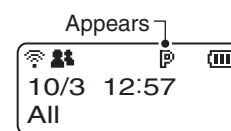
- P-Bell**

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.



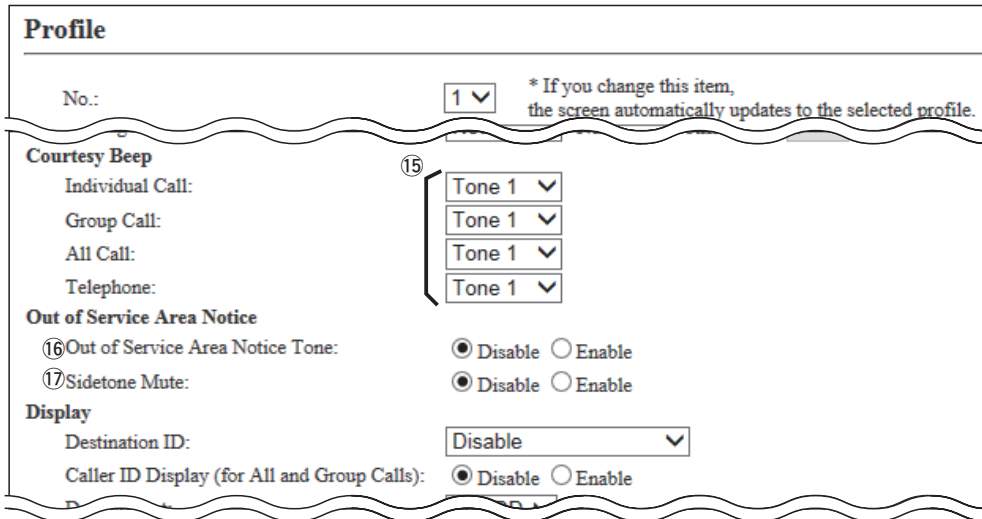
When the Pocket beep is active



When the P-bell is ON

- 15 Number 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 (13) is set to “Tone 1” to “Tone 8.”
 - You cannot select this item for a Message call.

■ Profile (continued)



(This is only an example.)

15 Courtesy 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.

16 Out of Service Area Notice Tone Select whether the IP100H sounds the Out of service area notice tone or not. (Default: Disable)

When “Enable” is selected, the IP100H sounds the notice tone when it goes out the service area or returns to the service area.

17 Sidetone mute..... Select whether the IP100H uses the Side tone mute function or not. (Default: Disable)

When “Enable” is selected, the IP100H mutes the sidetone or monitor audio when it goes out the service area. At that time, you cannot hear your voice from a head set or earphone microphone.

- When the [Monitor] item or [Sidetone] item is set to “Disable” in the [Transceiver Settings] menu, this function is not activated.

4 ABOUT THE SETTING SCREEN

9. [Common Settings] Menu

[Common Settings]–[Profile]

Profile (continued)

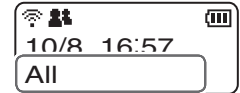
(This is only an example.)

⑱ Destination 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.

⑲ Caller ID Display (for All and Group Calls)

.....

Select whether the IP100H displays the Caller ID in the All call or Group call. (Default: Disable)

- **Disable**

When the IP100H or IP100FS receives an All call or Group call, only the Call type is displayed.

- **Enable**

When the IP100H or IP100FS are received the All call or Group call alternately displays the Call type and Caller ID.

4 ABOUT THE SETTING SCREEN

9. [Common Settings] Menu

[Common Settings]–[Profile]

Profile (continued)

(This is only an example.)

⑳ Date 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)

㉑ TalkBack 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))

㉒ TalkBack Timer (Telephone) Enter a time between 0 and 600 seconds that the IP100H will return to the standby mode after a received signal from a telephone disappears. (Default: 15 (seconds))

- When "0" is selected, the TalkBack timer (Telephone) is disabled. In that case, the connection does not terminate until the telephone hangs up or the IP100H terminates the call by pushing the [Option] key.

4 ABOUT THE SETTING SCREEN

9. [Common Settings] Menu

[Common Settings]–[Profile]

Profile (continued)

(This is only an example.)

- ②① **TalkBack 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.

- ②② **TOT** 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.

- ②③ **TOT Timer** Set the Time-out timer to between 11 and 600 seconds.
The this timer limits the IP100H’s continuous transmission.
(Default: 180 (seconds))

- ②④ **Penalty Timer** Set the TOT Penalty timer to between 1 and 600 seconds.
After the TOT timer period ends, the TOT Penalty timer starts and inhibits the user from transmitting during the penalty period. (Default: 30 (seconds))

4 ABOUT THE SETTING SCREEN

9. [Common Settings] Menu

[Common Settings]–[Profile]

Profile (continued)

(This is only an example.)

②④ **TOT Beep** Select whether the IP100H uses the TOT beep function or not.
(Default: Enable)

②⑤ **Default Telephone Gateway Interconnection**
..... When the IP100H make a Telephone call and the callee phone number is not registered its Telephone Gateway Interconnection in the [Destination Settings] screen on the [Destination Settings] menu, the IP1000C uses this default Telephone Gateway Interconnection. (See pp. 4-95 and 4-99)
(Default: NONE)
Selectable number or group number are only registered in the [Destination Settings] screen on the [Destination Settings] menu. (See pp. 4-22 and 4-24)

②⑥ **<Apply>** Click to apply the entries.

②⑦ **<Reset>**..... Click to restore the settings.
• You cannot restore after clicking <Apply>.

Destination Setting

Call Type: All

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

- This screen is displayed when clicking <Edit> on the [List of Destination Setting Entries (All Call)] field.

Destination Setting

Call Type: All

Destination Group

① Communication Type: Simplex Full-Duplex

② All Call for Talkgroup: Disabled Enable

③ Additional Controller:

All 1(Office2 (sub)) 2(Office3 (sub))

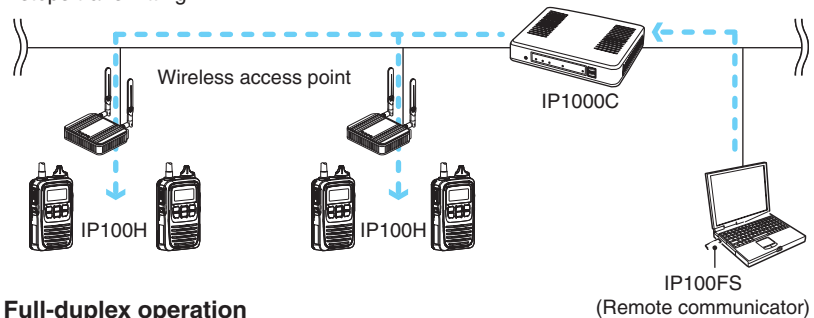
④ Apply ⑤ Reset

① Communication Type ...

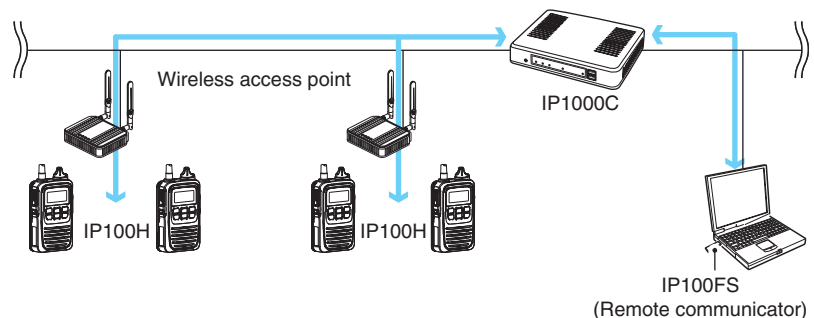
Select "Simplex" or "Full-Duplex" to use the All call.

Simplex operation

- When the Simplex is selected, the called station cannot reply until the caller station stops transmitting.



Full-duplex operation



② All call for the Talkgroup

Select whether the All call includes the IP100Hs or IP100FS which belong to the talkgroup or not. (Default: Enable)

4 ABOUT THE SETTING SCREEN

Destination Setting (continued)

Call Type: All

(These are examples when clicking <Edit> on the [List of Destination Setting Entries (All Call)] field.)

3 Additional Controller ...

Select Additional Controller when configuring several controllers, and the All call calls between the different controllers.

*By clicking the [All] box, you can select or cancel all entries in the list.

*If [Sub] is selected on the [Controller Mode] item in the [RoIP Settings] screen, select the Additional controller on this setting as shown below.

4 <Apply>

Click to apply the entries.

5 <Reset>.....

Click to restore the settings.

- You cannot restore after clicking <Apply>.

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.

Destination Setting

① No.:

② Name:

③ Call Type:

④ Destination ID:

Destination Group

⑤ Communication Type: Simplex Full-Duplex

⑥ Transceiver Selection

<input type="checkbox"/> All	<input checked="" type="checkbox"/> 0001(Sales 1)	<input checked="" type="checkbox"/> 0002(Sales 2)	<input checked="" type="checkbox"/> 0003(Sales 3)	<input type="checkbox"/> 0004(Sales 4)
------------------------------	---	---	---	--

⑦ Additional Controller:

<input type="checkbox"/> All	<input type="checkbox"/> 1(Office2 (sub))	<input type="checkbox"/> 2(Office3 (sub))
------------------------------	---	---

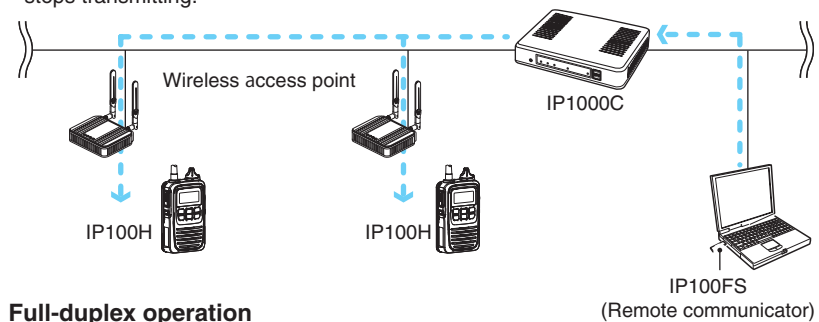
⑧ ⑨

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

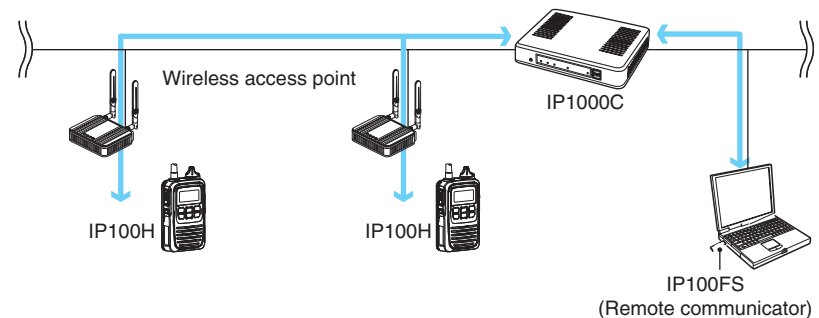
- ① **No.** Select the number to register the destination groups. Up to 1000 destinations can be registered.
- ② **Name** Enter the destination name. (Up to 31 characters)
- ③ **Call Type** Select “Group” to use the Group call.
- ④ **Destination ID** Enter the 4 digit destination number.
- ⑤ **Communication Type** ... Select “Simplex” or “Full-Duplex” to select the operation type.

Simplex operation

- When the Simplex is selected, the called station cannot reply until the caller station stops transmitting.



Full-duplex operation



Destination Setting (continued)

Call Type: Group

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

- ⑥ **Transceiver 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.
 - *By clicking the [All] box, you can select or cancel all entries in the list.
- ⑦ **Additional Controller**..... Select the additional controller when configuring several controllers, and the Group call calls between the different controllers.
 - *By clicking the [All] box, you can select or cancel all entries in the list.
 - *If [Sub] is selected on the [Controller Mode] item in the [RoIP Settings] screen, select the Additional controller on this setting as shown below.

- ⑧ **<Apply>**..... Click to apply the entries.
- ⑨ **<Reset>**..... Click to restore the settings.
 - You cannot restore after clicking <Apply>.

NOTE:

When configuring several controllers, set the same group setting between the controllers in the [Destination setting] screen (p. 4-87).
 For example, in the Controller 1 setting, the “Additional Controller” of the Group 1 is set to the Controller 2, you must set the “Additional Controller” of the Group 1 is set to the Controller 1 in the Controller 2 setting.

- Even if you configure three or more controllers using one Master and two or more Subs, follow above manner.

Destination Setting (continued)

Call Type: Talkgroup

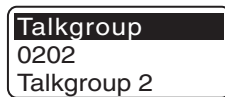
Set the destinations to call a Talkgroup through the Internet.

- 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 “Talkgroup.”)

- ① **No.** Select the number to register the destination Talkgroups.
Up to 1000 destinations can be registered.
- ② **Name** Enter the destination name. (Up to 31 characters)
- ③ **Call Type** Select “Talkgroup” to use the Talkgroup call.
- ④ **Destination ID** Enter the 4 digit destination number.
 - This number must be registered to the [ID List] field on the [ID List] screen.
 - Push [FUNC] on the IP100H, and then select the Talkgroup number to call the same Talkgroup members.

When OFF is selected in the IP100H, the standby screen returns to the usual screen.

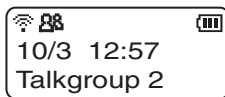


Talkgroup is selected

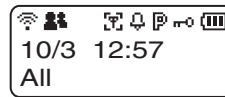


Talkgroup is OFF

- Standby screen



Talkgroup is selected



Talkgroup is OFF

Destination Setting (continued)

Call Type: Talkgroup

Destination Setting

① No.:

② Name:

③ Call Type:

④ Destination ID:

Destination Group

⑤ Communication Type: Simplex Full-Duplex

⑥ Talkgroup Call for IP100FS: Disabled Enable

⑦ Callee ID for IP100FS: All Appointment Destination ID:

⑧ Additional Controller:

All 1(Office1 (Master)) 2(Office1 (Sub))

⑨ ⑩

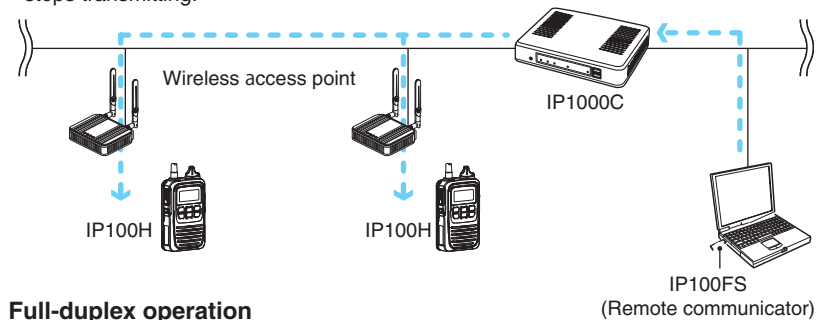
(These are examples when the “Call Type” item is set to “Talkgroup.”)

⑤ Communication Type ...

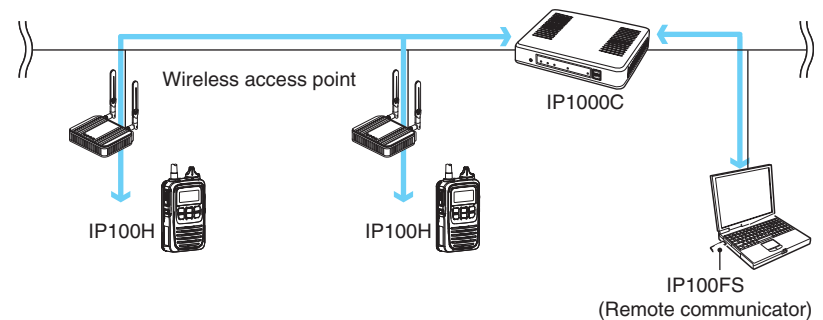
Select “Simplex” or “Full-Duplex” to select the operation type.

Simplex operation

- When the Simplex is selected, the called station cannot reply until the caller station stops transmitting.



Full-duplex operation



Destination Setting (continued)

Call Type: Talkgroup

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

⑥ Talkgroup Call for IP100FS Select whether the Talkgroup Call includes the IP100FSs or not.
(Default: Enable)

⑦ Callee ID for IP100FS ... When the “Talkgroup Call for IP100FS” item is set to “Enable,” set the destination IP100FSs. (Default: All)
 When “Appointment” is selected, you can register up to 5 IP100FS’s Destination IDs (4 digits).

⑧ Additional Controller..... Select an Additional Controller when configuring several controllers, and the Talkgroup call calls between the different controllers.
 *By clicking the [All] box, you can select or cancel all entries in the list.
 *If [Sub] is selected on the [Controller Mode] item in the [RoIP Settings] screen, select an Additional Controller on this setting as shown below.

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

⑩ <Reset>..... Click to restore the settings.
 • You cannot restore after clicking <Apply>.

Destination Setting (continued)

Call Type: Individual

Set the destinations to call the group through the Internet.

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

Destination Setting

① No.:

② Name:

③ Call Type:

④ Destination ID:

Destination Group

⑤ Additional Controller:

⑥ ⑦

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

- ① **No.** Select the number to register the destination groups.
Up to 1000 destinations can be registered.
- ② **Name** Enter the destination name. (Up to 31 characters)
- ③ **Call Type** Select “Individual” to use the Group call.
- ④ **Destination ID** Enter the 4 digit destination number.
- ⑤ **Additional Controller** ... Select the additional controller when configuring several controllers, and the Individual call calls between the different controllers.
- ⑥ **<Apply>** Click to apply the entries.
- ⑦ **<Reset>**..... Click to restore the settings.
 - You cannot restore after clicking <Apply>.

4 ABOUT THE SETTING SCREEN

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.

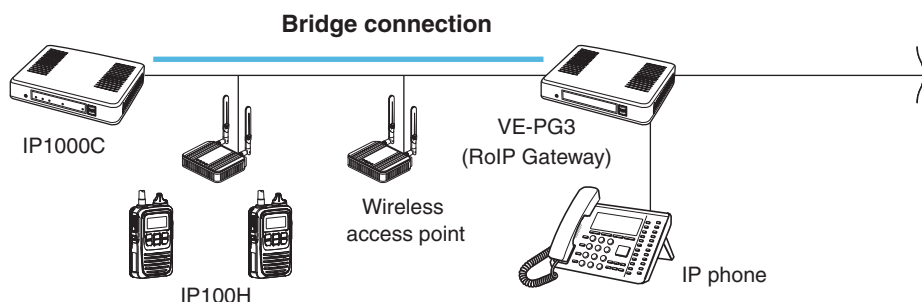
Destination Setting

① No.:	2 ▾
② Name:	500 (IP Phone)
③ Call Type:	Telephone ▾
④ Destination Phone Number:	500
⑤ Telephone Gateway Interconnection Number:	1 ▾

⑥ Apply ⑦ Reset

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

- ① **No.** Select the number to register the destination IP phone.
Up to 1000 destinations can be registered.
- ② **Name** Enter the destination name. (Up to 31 characters)
- ③ **Call Type** Select “Telephone” to call the IP phone.
 - The “Telephone” option includes the transceivers in the VE-PG3’s network.
- ④ **Destination Phone Number** Enter the phone number.
Up to 31 digits numbers and symbols (#, *).
- ⑤ **Telephone Gateway Interconnection 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 [Telephone Gateway Interconnect] screen on the [RoIP Server Setting] menu.
- ⑥ **<Apply>** Click to apply the entries.
- ⑦ **<Reset>** Click to restore the settings.
 - You cannot restore after clicking <Apply>.



4 ABOUT THE SETTING SCREEN

10. [Destination Settings] Menu (continued)

[Destination Settings]–[Destination Setting]

■ List of Destination Setting Entries (All Call)

Click to edit the setting on the [Destination Setting] field.

List of Destination Setting Entries (All Call)			
Communication Type	All Call for Talkgroup	Additional Controller	
Full-Duplex	Enable	Not Set	<input type="button" value="Edit"/>

(This is only an example.)

■ List of Destination Setting Entries (Group Call)

The list of the registered Group Calls.

List of Destination Setting Entries (Group Call)							
<input type="checkbox"/> All	No.	Name	Destination ID	Number of Transceivers	Additional Controller	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="checkbox"/>	1	Sales group1	0101	3	Not Set	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="checkbox"/>	5	Sales group2 (Additional)	0201	-	Set	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="checkbox"/>	6	Sales group3 (Additional)	0301	-	Set	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
						<input type="button" value="Delete"/>	<input type="button" value="Delete All"/>

(This is only an example.)

- ① **Selection Box** Click a selection box to add a check mark to delete an entry.
*By clicking the [All] box, you can select or cancel all entries in the list.
- ② **<Edit>** Click to edit the entries in the [Destination Setting] field.
- ③ **<Delete>** Click to delete the selected entry.
• After clicking <Delete>, the content cannot be recalled.
- ④ **<Delete>** Click to delete an entry, which you select in the selection box.
*After an entry is deleted, the entry cannot be recalled.
- ⑤ **<Delete All>** Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

■ List of Destination Setting Entries (Talkgroup Call)

The list of the registered Talkgroup Calls.

<input type="checkbox"/> All	No.	Name	Destination ID	Additional Controller	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/>	3	Talkgroup 2	0202	Not Set	<input type="button" value="Delete"/> <input type="button" value="Delete All"/>

(This is only an example.)

- ① **Selection Box** Click a selection box to add a check mark to delete an entry.
*By clicking the [All] box, you can select or cancel all entries in the list.

- ② **<Edit>** Click to edit the entries in the [Destination Setting] field.

- ③ **<Delete>** Click to delete the selected entry.
• After clicking <Delete>, the content cannot be recalled.

- ④ **<Delete>** Click to delete an entry, which you select in the selection box.
*After an entry is deleted, the entry cannot be recalled.

- ⑤ **<Delete All>** Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

■ List of Destination Setting Entries (Individual Call)

The list of the registered Individual Calls.

①					
<input type="checkbox"/> All	No.	Name	Destination ID	Additional Controller	
<input type="checkbox"/>	4	Sales1	0001	-	② Edit ③ Delete
<input type="checkbox"/>	7	Sales2	0002	-	② Edit ③ Delete
					④ Delete ⑤ Delete All

(This is only an example.)

- ① **Selection Box** Click a selection box to add a check mark to delete an entry.
*By clicking the [All] box, you can select or cancel all entries in the list.

- ② **<Edit>** Click to edit the entries in the [Destination Setting] field.

- ③ **<Delete>** Click to delete the selected entry.
• After clicking <Delete>, the content cannot be recalled.

- ④ **<Delete>** Click to delete an entry, which you select in the selection box.
*After an entry is deleted, the entry cannot be recalled.

- ⑤ **<Delete All>** Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

List of Destination Setting Entries (Telephone)

The list of the registered Phone Calls.

<input type="checkbox"/> All	No.	Name	Destination Phone Number	Telephone Gateway Interconnection Number		
<input type="checkbox"/>	2	500 (IP Phone)	500	1	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
					<input type="button" value="Delete"/>	<input type="button" value="Delete All"/>

(This is only an example.)

- ① **Selection Box** Click a selection box to add a check mark to delete an entry.
*By clicking the [All] box, you can select or cancel all entries in the list.

- ② **<Edit>** Click to edit the entries in the [Destination Setting] field.

- ③ **<Delete>** Click to delete the selected entry.
• After clicking <Delete>, the content cannot be recalled.

- ④ **<Delete>** Click to delete an entry, which you select in the selection box.
*After an entry is deleted, the entry cannot be recalled.

- ⑤ **<Delete All>** Click to delete all the entries.
• After clicking <Delete All>, the contents cannot be recalled.

Administrator Password

Set the administrator password.

- ① **Username**..... Displays the administrator login ID (“admin”).
- ② **Current Password** Enter the current password, when you change it. (Default: admin)
 - The entered characters are displayed as an * (asterisk) or a • (dot).
- ③ **New Password** Enter a new password up to 31 characters.
 - The entered characters are displayed as an * (asterisk) or a • (dot).
- ④ **New 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).

■ Date and Time

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

Date and Time	
① Current Time:	2015/04/10 15:24 (Etc/UTC) ③
② Manually Set Time:	<input type="text" value="2015"/> <input type="text" value="04"/> <input type="text" value="10"/> <input type="text" value="15"/> <input type="text" value="24"/> (Year/Month/Day Hour:Minute) <input type="button" value="Set"/>

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

- ② **Manually 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.

■ Time Zone

Select the appropriate Time Zone.

Time Zone

① Time Zone: ▼

② Use Daylight Savings Time: Disable Enable

- ① **Time Zone** Select the appropriate Time Zone. (Default: Etc/UTC)
- ② **Use 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.

■ 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.

NTP	
① NTP Client:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
② NTP Server 1:	<input type="text" value="210.173.160.27"/>
③ NTP Server 2:	<input type="text" value="210.173.160.57"/>
④ Polling Interval:	<input type="text" value="1"/> days
⑤ Last Update:	2014/01/17 10:28
⑥ Next Update:	2014/01/18 10:28

- ① **NTP Client** Select “Enable” to use the Automatic Clock Synchronize function.
(Default: Enable)
- ② **NTP 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.
- ③ **NTP Server 2** Enter the second time management server’s IP address.
(Default: 210.173.160.57)
- ④ **Polling Interval** Enter the time synchronization interval. (Default: 1)
Range: 1 to 99 (day)
- ⑤ **Last Update** Displays the date and time when the IP1000C has last accessed the time management server.
- ⑥ **Next Update** Displays the scheduled date and time when the IP1000C accesses the time management server next.

■ 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.

SNTP Server

① SNTP Server: Disable Enable

The SNTP server is for our RoIP devices which have no route to an external NTP server. ②

③

Apply Reset

- 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>.

■ SYSLOG

Select the information to be saved to the SYSLOG host.

SYSLOG

① **DEBUG:** Disable Enable

② **INFO:** Disable Enable

③ **NOTICE:** Disable Enable

④ **Host IP Address:**

⑤
⑥

- | | | |
|--------------------------------|--|--------------------|
| 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>. | |

■ SNMP

Configure the SNMP function.

SNMP

① **SNMP:** Disable Enable

② **Community Name (GET):**

③ **System Location:**

④ **System Contact:**

- 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>.

■ USB

Select the USB flash drive option.

USB

① USB Flash Drive: Disable Enable

② USB Access Permission: Firmware Update

Backup/Restore

③
④

- 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>.

■ Ping Test

Run the Ping test.

- ① **Host** Enter the IP address or host name 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.

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.

■ Reboot

Click <Reboot> to reboot the IP1000C.

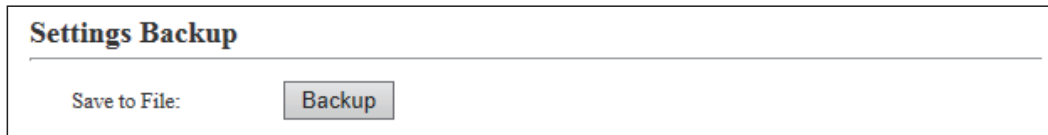
- When clicking <Reboot>, the "Do you want to reboot the system?" message appears. Click <OK> to continue.

Reboot

Reboot Now:

■ Settings Backup

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



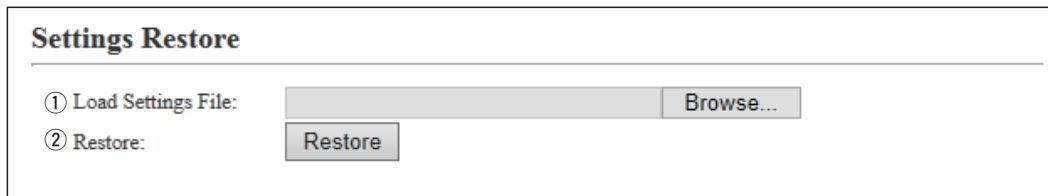
Save to File Click <Backup> to save the settings to a PC as a backup file (Extension: sav).
See the topic below to load the saved file into the IP1000C.

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.

■ Online Settings

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

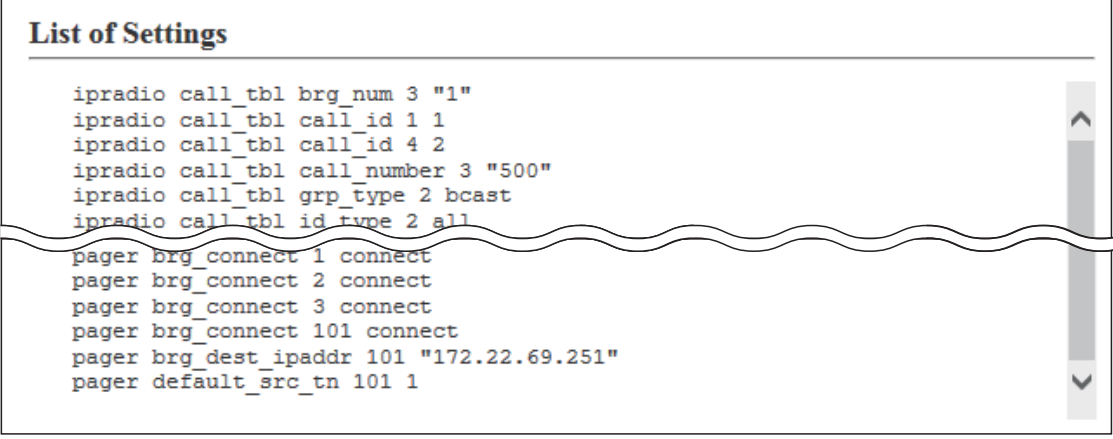
- An SFTP server is required for this function.

- | | | |
|--------------------------------|--|--------------------|
| 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 from 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>. | |

■ List of Settings

Displays the changed settings.

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

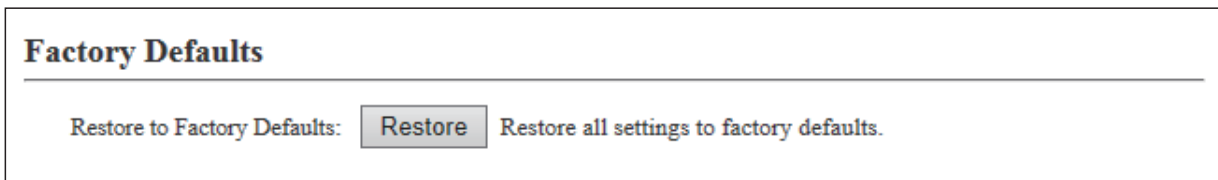


```
List of Settings  
-----  
ipradio call_tbl brg_num 3 "1"  
ipradio call_tbl call_id 1 1  
ipradio call_tbl call_id 4 2  
ipradio call_tbl call_number 3 "500"  
ipradio call_tbl grp_type 2 bcast  
ipradio call_tbl id_type 2 all  
-----  
pager brg_connect 1 connect  
pager brg_connect 2 connect  
pager brg_connect 3 connect  
pager brg_connect 101 connect  
pager brg_dest_ipaddr 101 "172.22.69.251"  
pager default_src_tn 101 1
```

(This is only an example.)

■ 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,

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.

Firmware Status

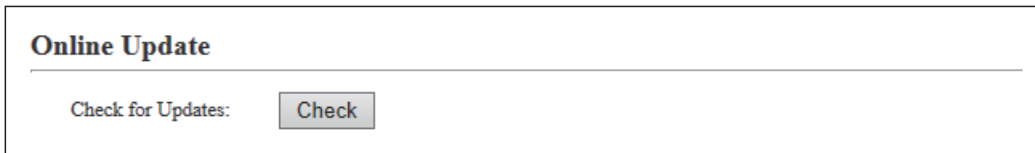
IPL:	Rev. 1
Version:	IP1000C Ver. 1.02 Copyright 2007-2011 Icom Inc.

(This is only an example.)

■ Online Update

Downloads the firmware through the internet, and automatically updates it.

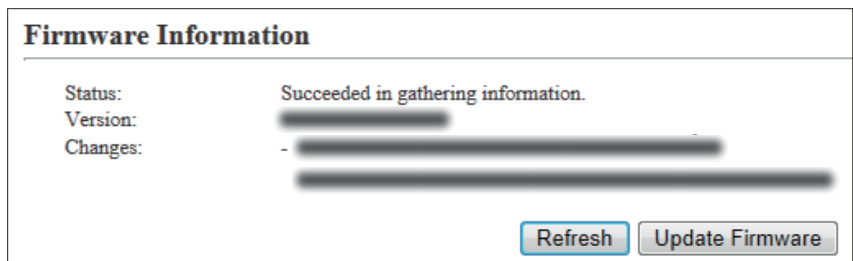
Note: To use this function, an internet connection, DNS and default gateway settings are necessary.



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.

■ 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 **Select the update 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.

1. How to save the IP1000C's setting to a PC	5-2
■ Saving the setting	5-2
2. How to load the saved file to an IP1000C	5-3
■ Reloading the settings file into the IP1000C	5-3
3. How to initialize the settings to the factory default	5-4
4. How to update the firmware	5-6
■ About the Firmware	5-6
5. About the Automatic Restore using a USB flash drive	5-9
6. How to restore the configuration using a USB flash drive	5-12
■ Saving the settings file to a USB flash drive	5-12
7. How to update the firmware using a USB flash drive	5-15
■ Updating the firmware	5-15

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.

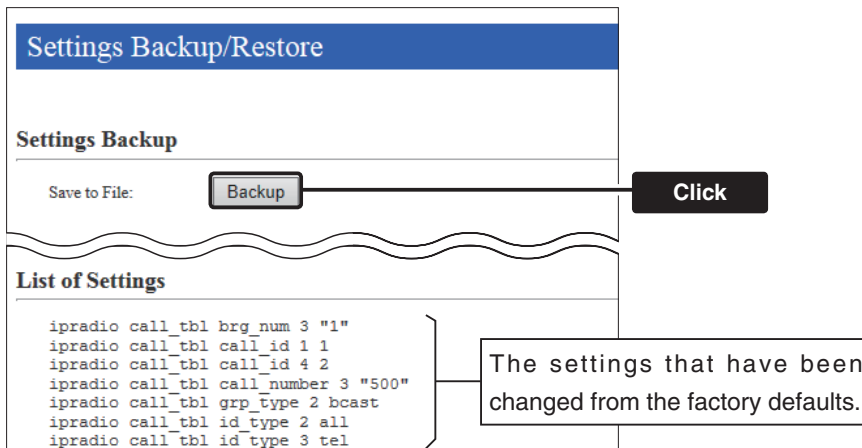
■ Saving the setting

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)

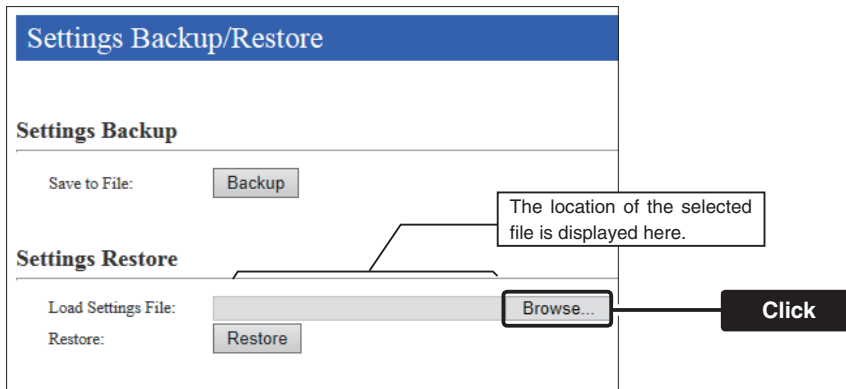
■ Reloading the settings file into the IP1000C

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

- The [Settings Backup/Restore] screen appears.

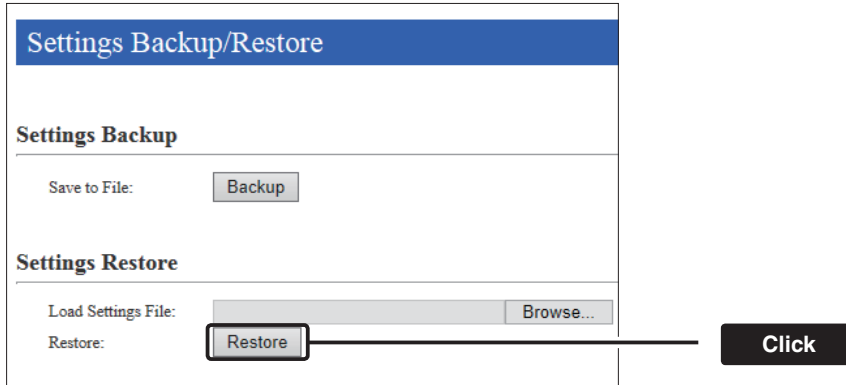
2 Click <Browse...>.

- 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 are 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

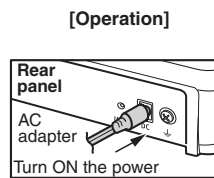
Initializing clears all the settings.

- 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.

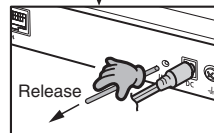
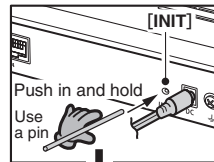
See the supplied "Precautions" leaflet for details.

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

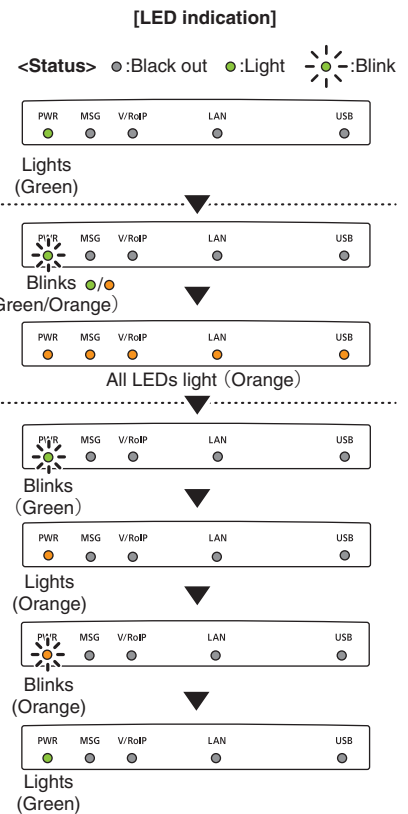
- Verify that the [PWR] indicator lights green.



- 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

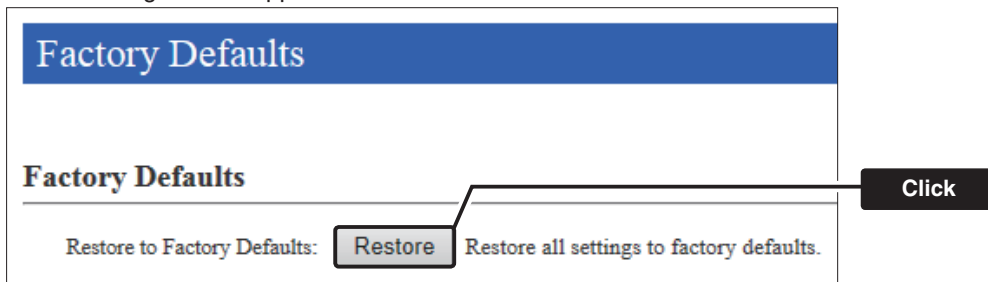
You can restore all the IP1000C's settings. The IP1000C's IP address is set to "192.168.0.1," when initialized. Set the PC's IP address to "192.168.0.xxx." (You can set xxx to any number from 2 to 254.)

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

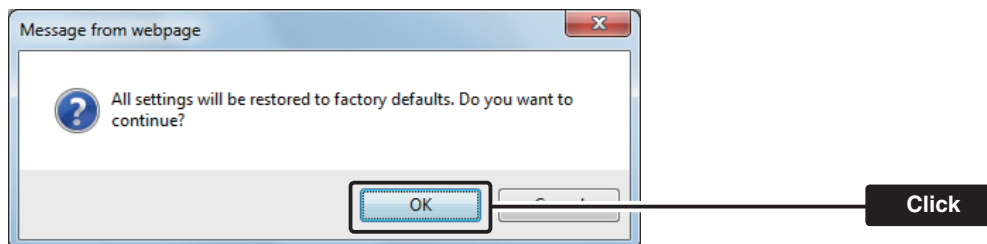
B: Using the IP1000C's setting screen

- 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.

TOP	
System Status	
Host Name	IP1000C
IPL	Rev. 1.00
Version	Ver. 1.00 Copyright 2007-2013 Icom Inc.
LAN MAC Address	00-90-C7-00-00-00
IP100H Firmware Version	Ver. 1.00

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.

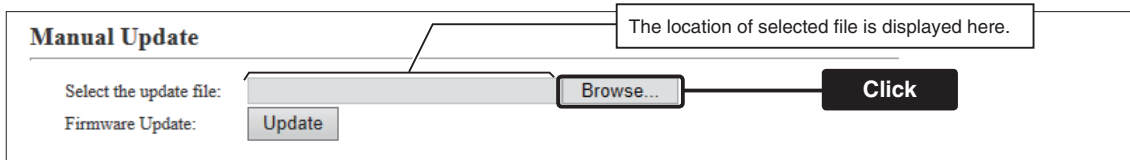
- Restricting access to the setting screen is recommended. (p. 3-2)

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

2 Click the [Management] menu, then [Firmware Update].

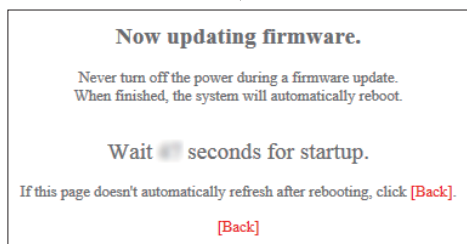
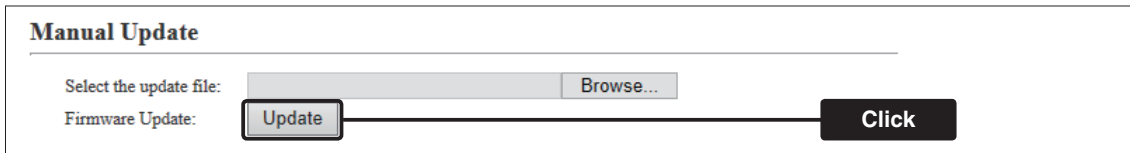
- The [Firmware Update] screen appears.

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.

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

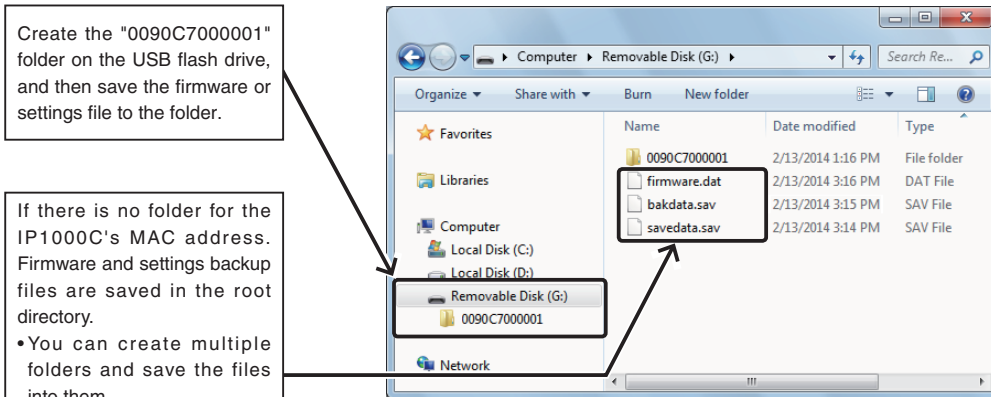
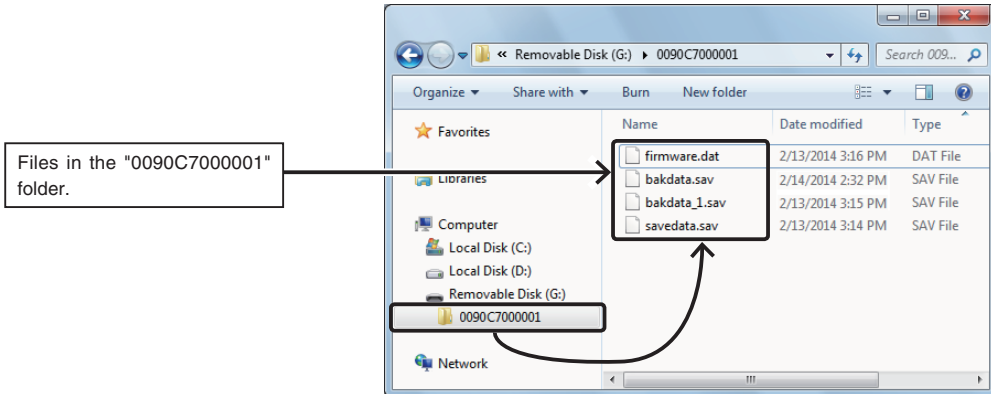


Figure 2



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

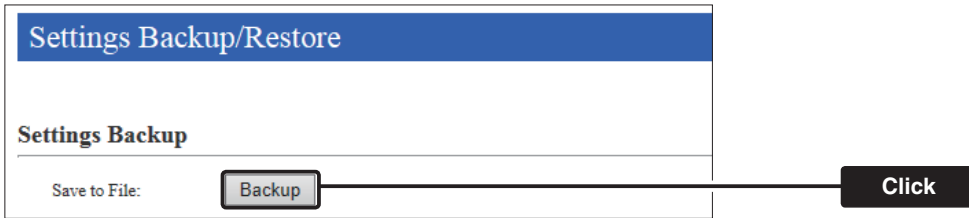
You can clone the settings to the other IP1000Cs.

It is convenient when you sequentially configure multiple IP1000Cs.

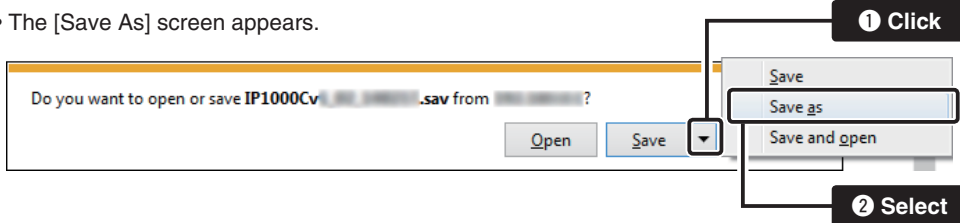
Note: Before using a USB flash drive, see page 5-9.

■ Saving the settings file to a USB flash drive

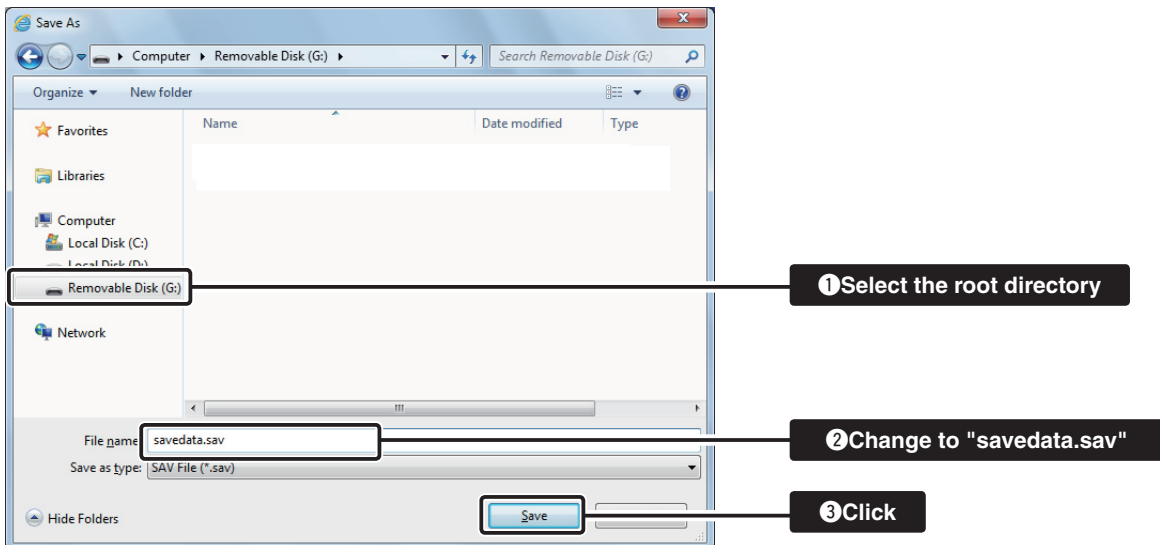
- 1 Insert the flash drive securely into one of the PC's USB ports.
- 2 Open the IP1000C's setting screen.
- 3 Click [Management], then [Settings Backup/Restore].
 - The [Settings Backup/Restore] screen appears.
- 4 Click <Backup>.



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



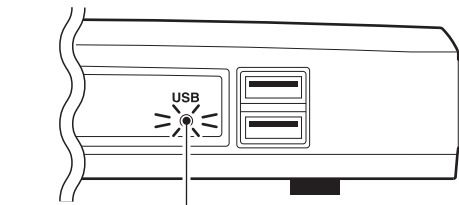
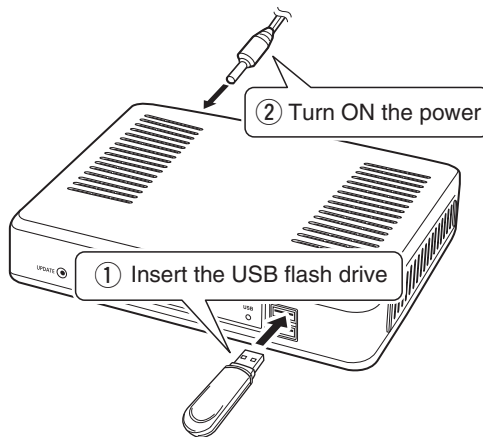
- 6 Select the root directory of the USB flash drive, and save the settings file as "savedata.sav."
 - Any other file name is not acceptable.



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.



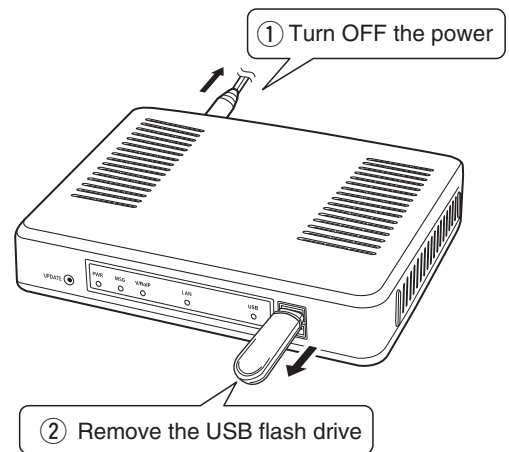
Note: NEVER remove the USB flash drive or turn OFF the IP1000C's power, while setting data. It will cause data corruption, or damage the USB flash drive.

(Continued on the next page.)

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

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 reboots. 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. 4-107)

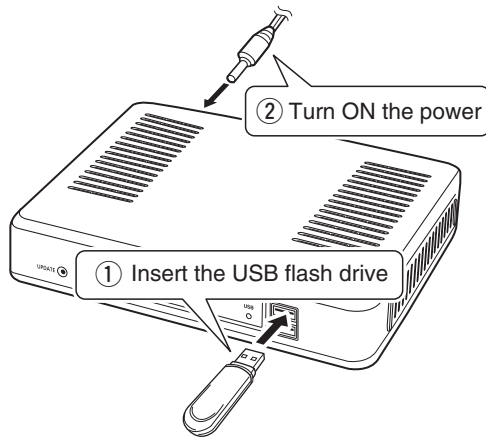
7. How to update the firmware using a USB flash drive

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.

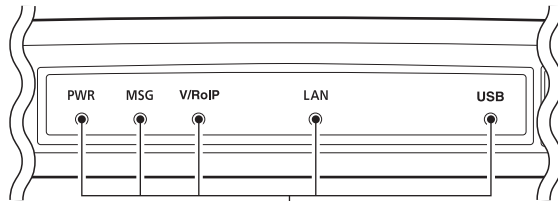
(Continued on the next page.)

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

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.

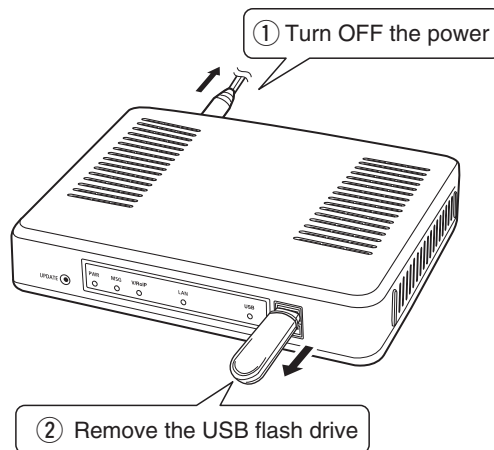


Lights orange while updating the firmware.

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.

1. Trouble shooting	6-2
2. How to connect to the IP1000C using Telnet	6-4
■ How to connect	6-4
■ How to use the [CONSOLE] port	6-4
■ About Telnet commands	6-4
3. Specifications	6-5
■ General	6-5
■ Communication Interfaces	6-5

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.**
 - Turn 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 stealth SSID is set to ON, or the SSID Broadcast is set to OFF in the access point.**
 - Set the stealth SSID to OFF, or set the SSID Broadcast to ON.

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. 4-43)
 - 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. 4-28)

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

- ① Start up Windows.
- ② Click the Start button (Logo button), and then click [Search program and files].
Input "telnet.exe" in the text box, and then push [Enter].
- ③ The 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)
- ④ Input login ID and password, then push [Enter].
login: admin
password: admin (The IP1000C's default password)
- ⑤ When 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] -> reset, restart |

3. Specifications

Note: All specifications are subject to change without notice.

■ General

Power supply:	12 V DC $\pm 10\%$ [Plug polarity: \ominus — \bullet — \oplus] 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) \times 38 (H) \times 168 (D) mm; 9.1 (W) \times 1.5 (H) \times 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) $\times 2$

■ Communication Interfaces

Interface:	[LAN] port (RJ-45 type) $\times 4$ (Auto MDI/MDI-X) <ul style="list-style-type: none">• IEEE802.3/10BASE-T• IEEE802.3u/100BASE-TX• IEEE802.3ab/1000BASE-T [CONSOLE] port (RJ-11 type) $\times 1$ <ul style="list-style-type: none">• 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!

