



## INSTRUCTION MANUAL

IP ADVANCED RADIO SYSTEM  
CONTROLLER

# IP1000C

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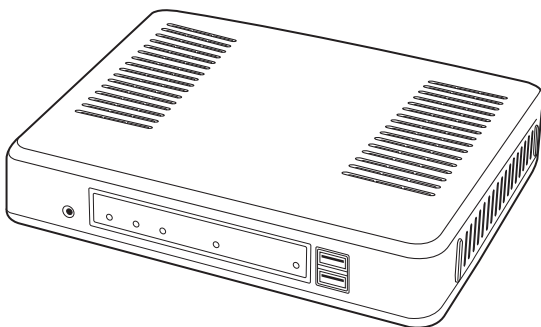
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3 OTHER BASIC FUNCTIONS

4 ABOUT THE SETTING SCREEN

5 MAINTENANCE

6 FOR YOUR INFORMATION



Icom Inc.

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# INTRODUCTION

Thank you for purchasing this Icom product. The IP1000C IP ADVANCED RADIO SYSTEM CONTROLLER is designed and built with Icom's IP network technology.

We hope you agree with Icom's philosophy of "technology first." Many hours of research and development went into the design of your IP1000C.

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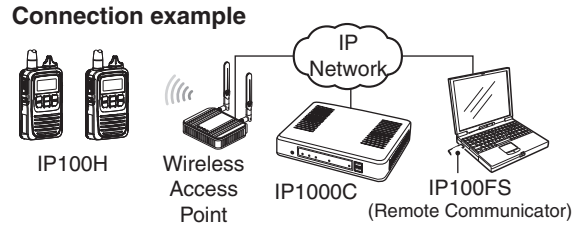
# INTRODUCTION

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## FEATURES

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- 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.

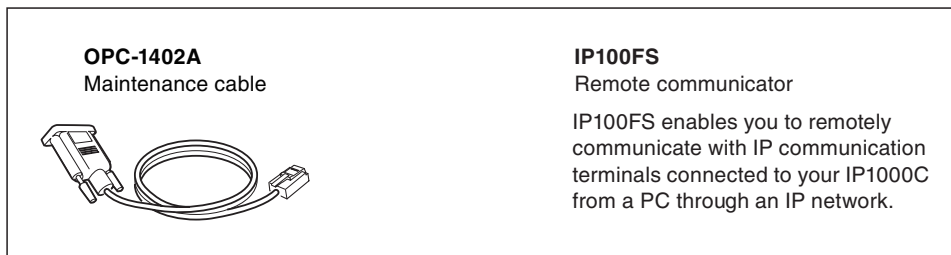


- A total of up to 100 IP100Hs IP COMMUNICATION TERMINAL and IP100FSs REMOTE COMMUNICATOR can be registered and used in the IP1000C system. (Depending on the IP1000C versions, only the 20 terminals can be registered.)
  - IP100FS enables you to remotely communicate with IP communication terminals connected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

# INTRODUCTION

## OPTIONS

As of February 2014



**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 Permission | ✓ Firmware Update<br>✓ Backup/Restore |
| Firmware Update  | Automatic Update | Automatic Update | Enable                |                                       |

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

**To prevent unauthorized access**

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

- Choose one that is not easy to guess.
- Use numbers, characters and letters (both lower and upper case).

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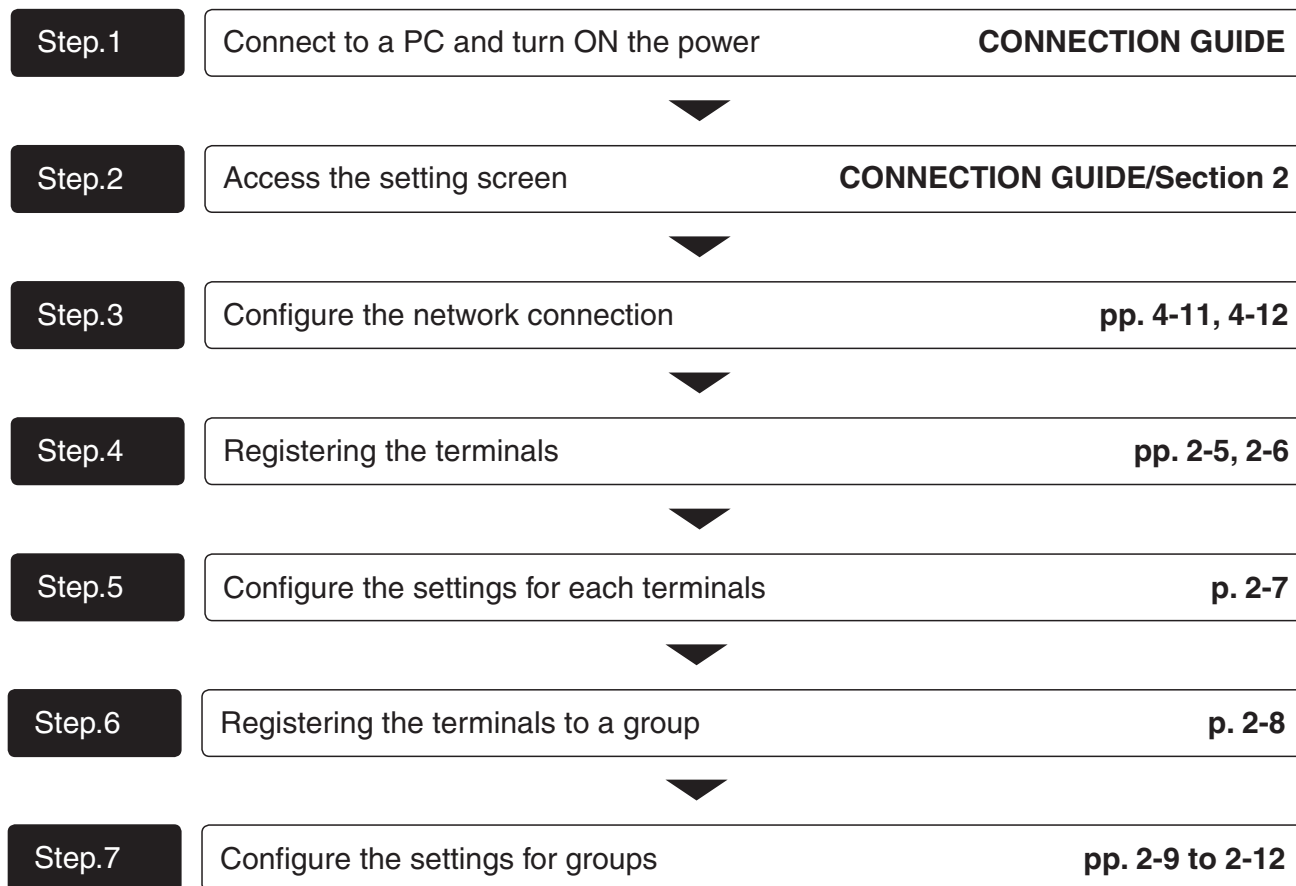
# INTRODUCTION

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## SETTING PROCEDURE

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Set up the IP1000C, following the procedure below.



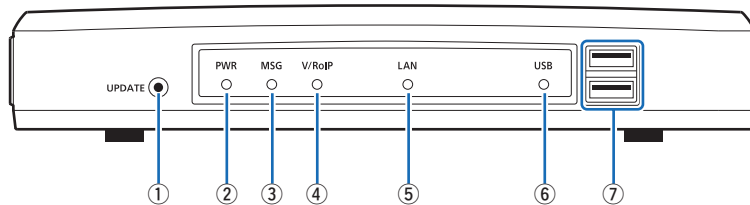
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# 1 BEFORE USING THE IP1000C

## 1. Panel description

### ■ Front panel

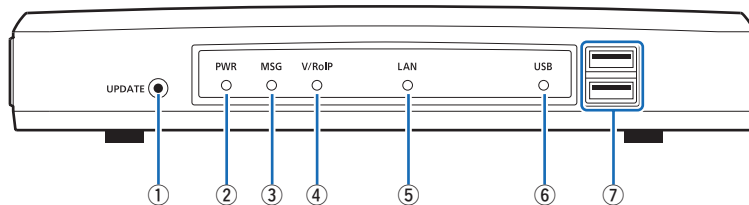


- ① [UPDATE] button ..... When [MSG] lights green, a firmware update is ready.  
To download and install the new firmware, hold down this button until [MSG] blinks.
- To use the Firmware Update function, an internet connection, DNS and default gateway settings are necessary.
- ② [PWR].....
- No light: Power is OFF
  - Lights green: Power is ON\*<sup>1</sup>
  - ☀ Blinks green: Booting\*<sup>1</sup>\*<sup>2</sup>
  - Lights orange: Booting\*<sup>1</sup>
  - ☀ Blinks orange: Booting\*<sup>1</sup>\*<sup>2</sup>
- \*<sup>1</sup> After the power is ON:  
Blinks green > lights orange > blinks orange > lights green
- \*<sup>2</sup> After [INIT] is pushed until the default resets are completed:  
Blinks orange and green alternately.
- ③ [MSG].....
- Lights green: A firmware update is ready (Online update)
  - ☀ Blinks green: Downloading new firmware (Online update)
- ④ [V/RoIP].....
- No light: No registration
  - Lights green: IP communication terminal registered (More than 1 registration)
- ⑤ [LAN]\*<sup>3</sup>\*<sup>4</sup>.....
- No light: Not connected
  - Lights green: LAN connected: All connections (1000BASE-T)
  - Lights orange: LAN connected: More than 1 connection (10BASE-T/100BASE-TX)
- \*<sup>3</sup> When 1000BASE-T/10BASE-T/100BASE-TX are mixed, the [LAN] LED lights orange.
- \*<sup>4</sup> 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] .....

- Lights green: Inserting a USB flash drive.
- ⚡ Blinks green: Accessing the USB flash drive\*<sup>5</sup>
- ⚡ Blinks orange: Accessing the USB flash drive\*<sup>5</sup>

\*<sup>5</sup> 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)

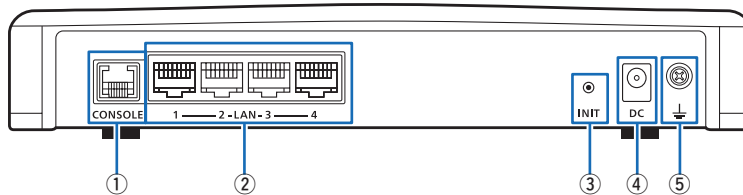
- Turn OFF the IP1000C's power before inserting or removing the USB flash drive, to prevent data corruption.
- Either one of the USB slots accepts a USB flash drive, but insert only one drive at a time.
- Securely insert the USB flash drive.
- NEVER remove the USB flash drive or turn OFF the IP1000C's 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.



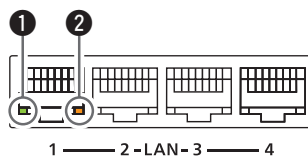
# 1 BEFORE USING THE IP1000C

## 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.

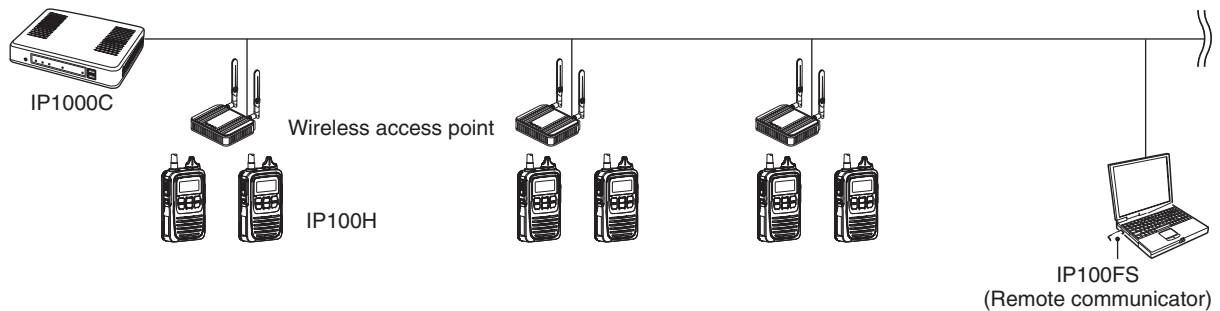
# 1 BEFORE USING THE IP1000C

## 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.

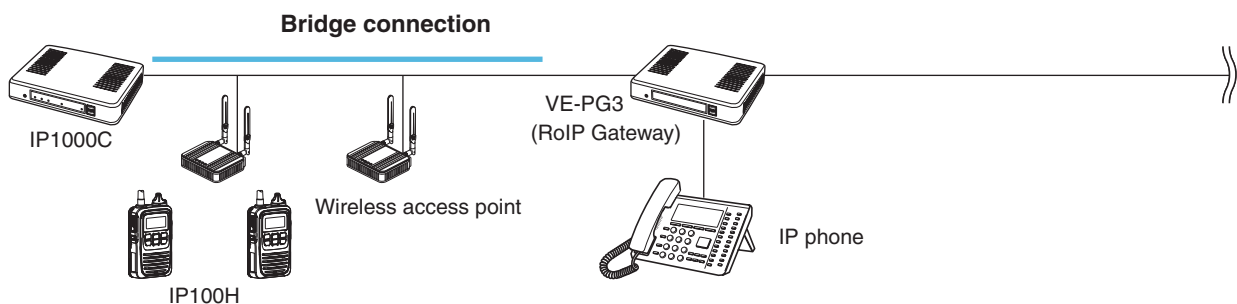
### CS-IP100H (Cloning software)

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 web site)

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

### ■ Connecting a telephone

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

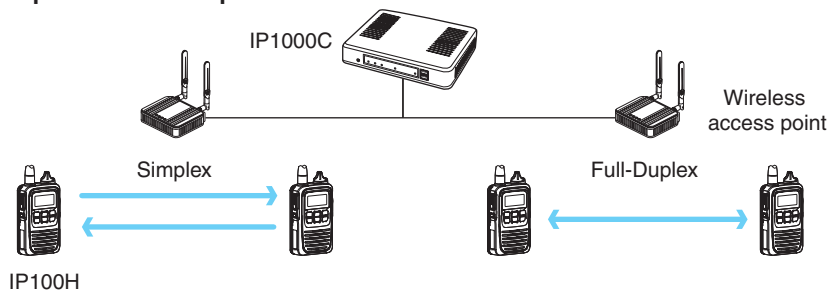
The IP1000C has two methods of communications (Simplex and Full-Duplex.)

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 <sup>*1</sup><br>(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 <sup>*2</sup>                                     |
| HS-94    | HEADSET             | OPC-2006LS             | ✓           |               | ✓       | Enable  |
|          |                     | OPC-2328 <sup>*3</sup> |             | ✓             | ✓       | —   |
| HS-95    | HEADSET             | OPC-2006LS             | ✓           |               | ✓       | Enable  |
|          |                     | OPC-2328 <sup>*3</sup> |             | ✓             | ✓       | —   |
| HS-97    | THROAT MICROPHONE   | OPC-2006LS             | ✓           |               | ✓       | Enable  |
|          |                     | OPC-2328 <sup>*3</sup> |             | ✓             | ✓       | —   |

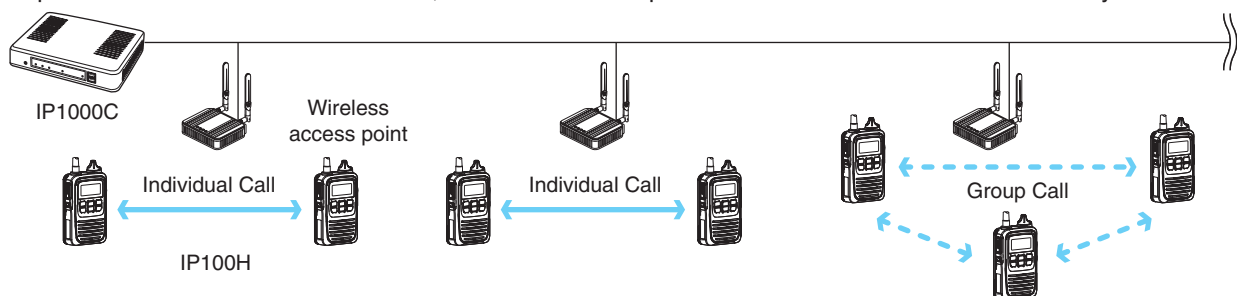
\*1 When a headset that supports the VOX function is connected, the communication mode automatically changes between reception and transmission by verifying the communication voice.

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

\*3 Receive by using the OPC-2328.

### Multi communication

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

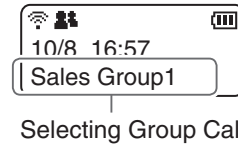
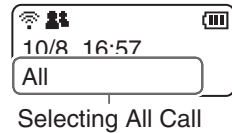


# 1 BEFORE USING THE IP1000C

## 2. Feature description (continued)

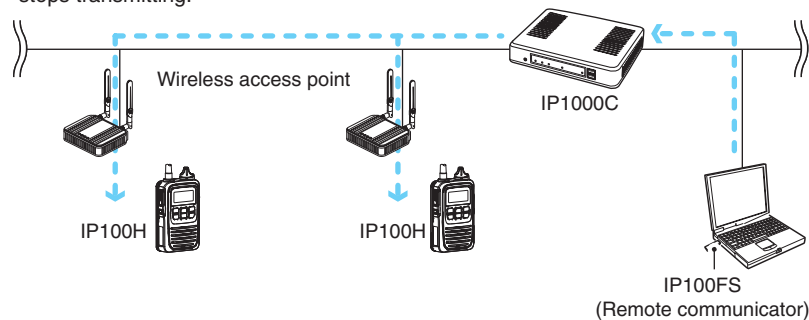
### ■ All Call and Group Call

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

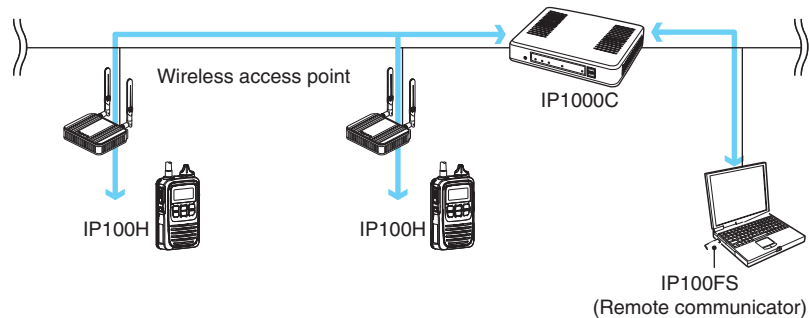


#### Simplex operation

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



#### Full-duplex operation



#### About All Calls

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

#### About Group Calls

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

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

# 1 BEFORE USING THE IP1000C

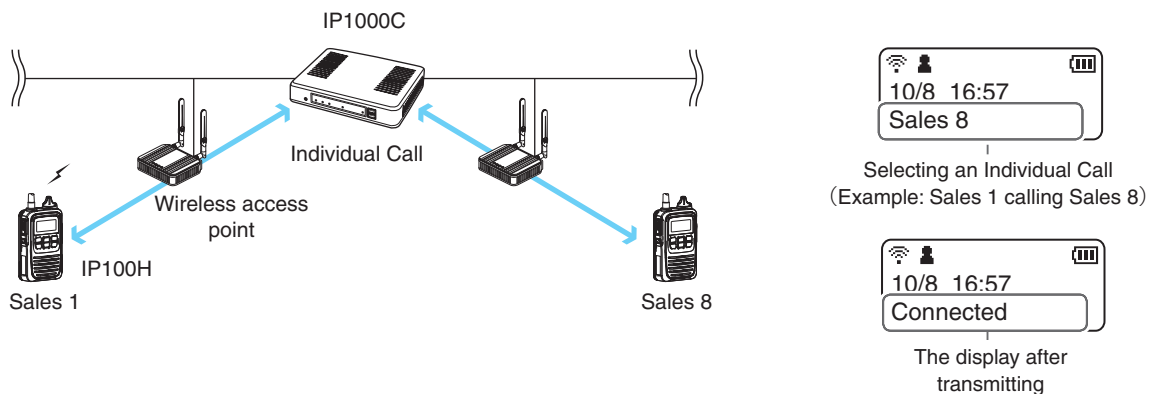
## 2. Feature description (continued)

### 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)

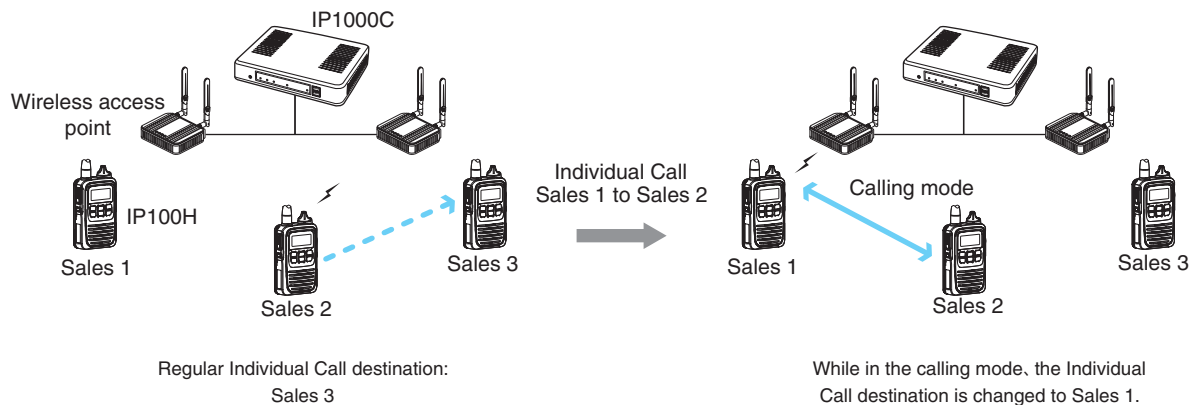
- If the IP100H that you are calling is out of range, “No response” is displayed.
- If desired, set the Receive Notification Tone in the [Common Settings] Screen in the [Common Settings] menu to notify a Call is received.



### 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. 4-66)

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

# 1 BEFORE USING THE IP1000C

## 2. Feature description (continued)

### ■ Priority Call and its priority

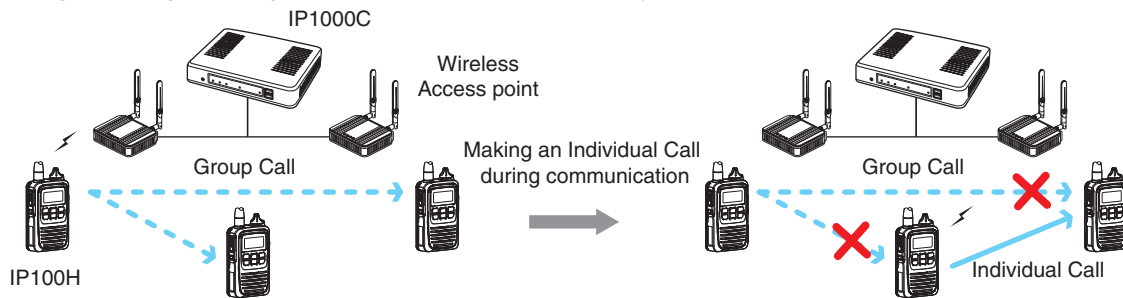
The Priority Call function is set to “Disable” in the default setting.

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

| Priority level        | Call type       | Priority Call | Remarks   |
|-----------------------|-----------------|---------------|---|
| High<br>↑<br>↓<br>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 | —             |   |
|                       | 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)

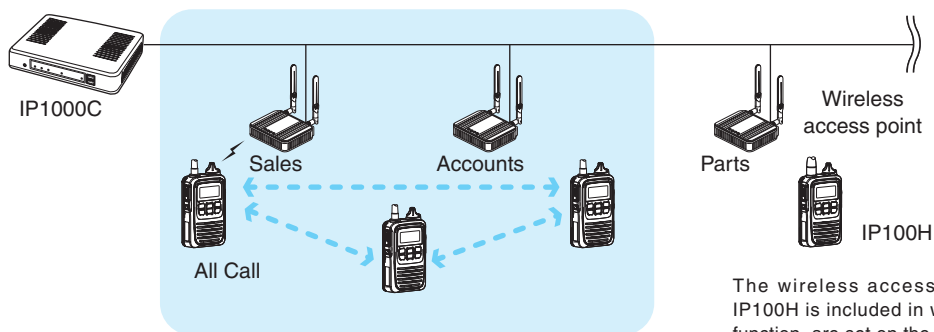
### ■ Area Call

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

(Default: Disable)

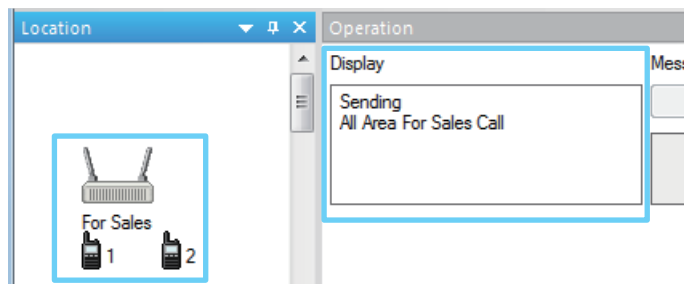
If you make an All Call or Group Call when Area Call in the IP100H is set to ON, the IP100H and IP100FS that are in the same area with the IP100H connected to the wireless access point are called.

#### 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

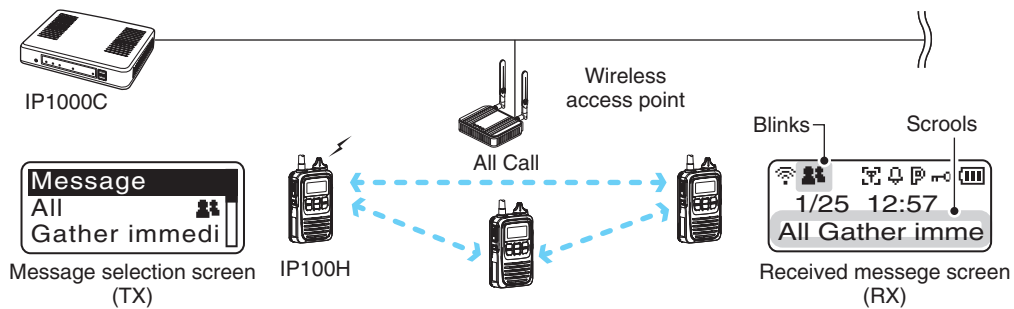
## 2. Feature description (continued)

### ■ Messages

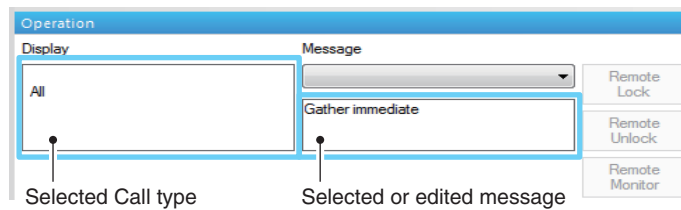
Set this function to send a message with the IP100H and IP100FS. (Default: Disable)

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 calls transmits a message



#### IP100FS trasmits 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

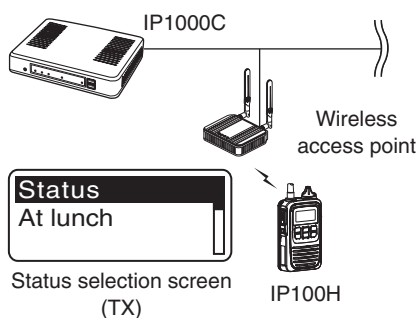
## 2. Feature description (continued)

### ■ About Status Settings

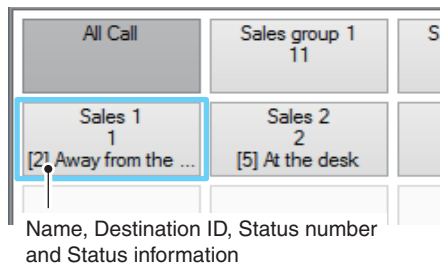
Set the Status to send the status information (Example: Away from the desk) from the IP100H. (Default: Disable)

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

#### IP100H sends the Status



#### IP100FS One-Touch button



#### IP1000C Transceiver Status screen

##### Transceiver Status

| TRX No. | Name     | Unit ID | Registration Status | IP Address   | Current Status     | Location  | Version    |
|---------|----------|---------|---------------------|--------------|--------------------|-----------|------------|
| 1       | Sales1   | 0001    | Connected           | 192.168.0.38 | Away from the desk | 00-90-C7- | Ver. 1.000 |
| 2       | Sales2   | 0002    | Connected           | 192.168.0.13 | At the desk        | 00-90-C7- | Ver. 1.000 |
| 3       | Account1 | 0003    | Connected           | 192.168.0.39 | Meeting            | 00-90-C7- | Ver. 1.000 |
| 4       | Account2 | 0004    | Connected           | 192.168.0.34 | Meeting            | 00-90-C7- | Ver. 1.000 |

Status

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

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|  |      |
|--|------|
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| 3. Bridge connection and Caller settings .....                     | 2-13 |

## 2 SETTING UP THE IP1000C SYSTEM

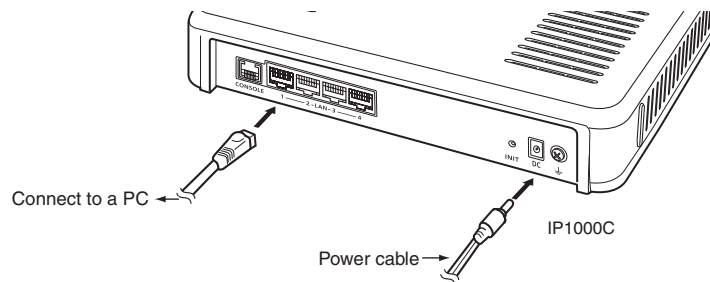
### 1. Flow using IP100H

#### ■ 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].

### 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, 4-28)

Enter the Transceiver model, Name and Unit ID, Password and Setting group.

- The default password is "iptrx," and you can change it for security.

This password is also used when setting up the IP100H by using CS-IP100H cloning software.

- The common settings that are used by the group, are set in the [Common Settings] menu.

##### Setting by the CS-IP100H cloning software (p. 2-6)

After IP100Hs are registered to the IP1000C, set the wireless LAN setting, antenna setting (internal or external), provisioning server setting (IP1000C) to all the IP100Hs.

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

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

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

##### [ID List] screen

Register the unit IDs that are registered on the [Transceiver Registration] screen or the group IDs that are registered on the [Destination Settings] screen.

- When an IP1000C's bridge connection is made with a VE-PG3, you can register the telephone number of the IP phone.

##### [Message] screen

Enter messages that the IP100H will send.

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

##### [Status] screen

Enter Statuses that the IP100H will send.

Up to 10 messages, each with up to 32 characters, can be entered.

##### [Common Settings] screen

Specify the ID list and message list of the group that the IP100H belongs.

#### About updating setup

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

## 2 SETTING UP THE IP1000C 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. 4-41 to 4-43, 4-62 to 4-67)

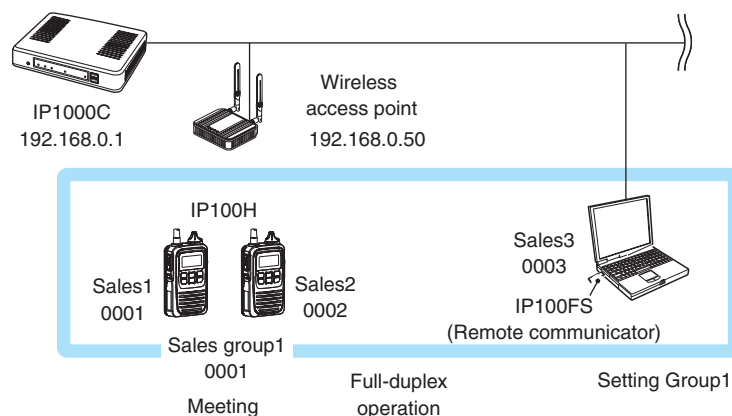
Depending on your system requirement, set the mic gain or assign the VOX function\* on the [Transceiver Settings] screen, set common settings, such as the various notice tones, talkback settings on the [Common Settings] screen.

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

### 2. Transceiver settings

Each terminal requires that you set the unit ID and so on.

The following illustration is an example of setting requirements to register an IP100H to an IP1000C.



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

## 2 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 <Apply>.

The screenshot shows the 'Transceiver Settings' form with the following fields and values:

- TRX No.: 1
- Transceiver Model: IP100H
- Name: Sales1
- Unit ID: 0001
- Security Password: iptrx
- Connection Port Transceiver Port Number: 30000
- Server Port Number: 30000
- Common Settings Group: 1

Annotations include:

- A box around the Name, Unit ID, and Transceiver Model fields with an arrow pointing to a '1 Enter' button.
- A callout box pointing to the Group dropdown with the text: 'This number is specified in the Common Settings field on the [Common Settings] screen.' and an arrow pointing to a '2 Click' button.
- An 'Apply' button at the bottom right.

- 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.)

The screenshot shows the 'Transceiver Setting Entry List' table with the following data:

| TRX No. | Transceiver Model | Name   | Unit ID | Connection Port |        | Group |      |        |
|---------|-------------------|--------|---------|-----------------|--------|-------|------|--------|
|         |                   |        |         | Transceiver     | Server |       | Edit | Delete |
| 1       | IP100H            | Sales1 | 0001    | 30000           | 30000  | 1     | Edit | Delete |
| 2       | IP100H            | Sales2 | 0002    | 30002           | 30002  | 1     | Edit | Delete |
| 3       | IP100FS           | 100fs  | 0003    | -               | 30004  | 1     | Edit | Delete |

Annotations include:

- A box around the first three rows of the table with an arrow pointing to a 'Confirm' button.
- A 'Delete All' button at the bottom right.

## 2 SETTING UP THE IP100C SYSTEM

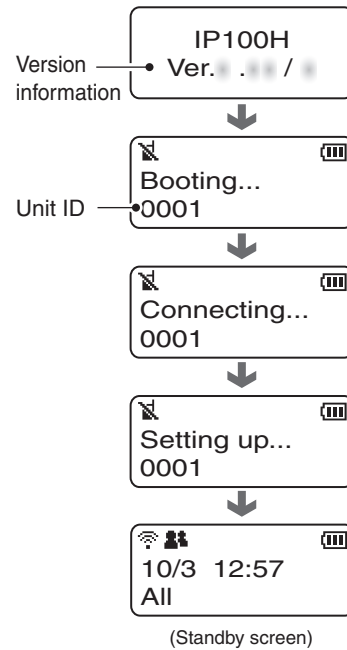
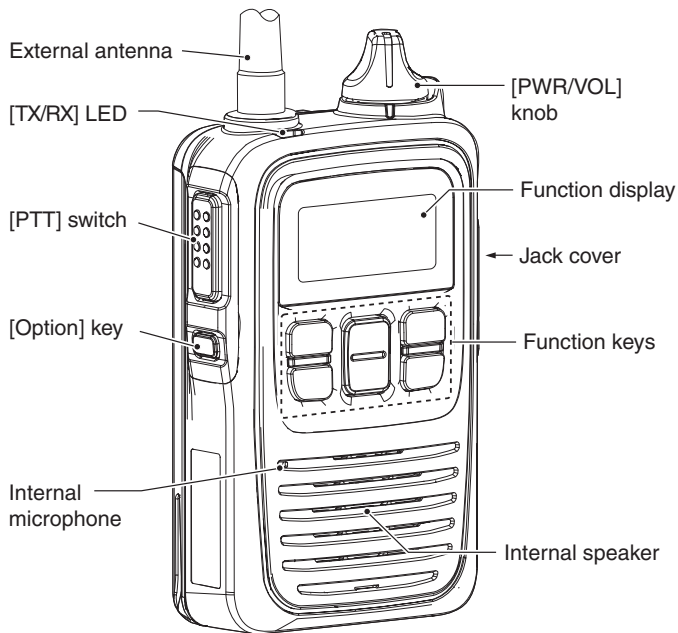
### 2. Transceiver settings (continued)

#### ■ About confirming the registration and rebooting the IP100H

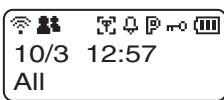
After the registration of the IP100H to the IP1000C is completed, program the IP100H using the CS-IP100H cloning software and a PC.

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

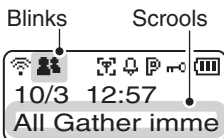
- The CS-IP100H is a freeware that can be downloaded from the Icom website.
- If the IP100H will not display the standby screen, check the settings of the IP1000C and the wireless access point.



#### About the display icons



Standby screen



When a message is received

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

#### About updating setup

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

## 2 SETTING UP THE IP1000C 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.

**Transceiver Settings**

Unit ID: 0001(Sales1) 1 Select

**Destination ID**

Use ID List:  Disable  Enable 2 Enter

Call Type: All

**Received Call Notification**

Volume: 10

Action: Notification Beep

**Function Settings**

Communication Method:  Simplex  Full-Duplex

Priority Call:  Disable  Enable

Area Call:  Disable  Enable

Message:  Disable  Enable First Message: 1

Status:  Disable  Enable

**Key Assignment**

Option Key: No Function

- 3 Click <Apply>.

SYSLOG Severity:  DEBUG  INFO  NOTICE

Apply Click

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

**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    |

Verify



## 2 SETTING UP THE IP100C SYSTEM

### 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>.

The screenshot shows the 'Destination Setting' form. It includes fields for 'No.' (set to 1), 'Name' (Sales group1), 'Call Type' (Group), and 'Destination ID' (0001). Below these is the 'Destination Group' section with 'Communication Type' set to 'Full-Dupl...' and a 'Transceiver Selection' list containing three checked items: '0001(Sales1)', '0002(Sales2)', and '0003(100fs)'. An 'Apply' button is at the bottom right. Three callout boxes with arrows point to the 'Name' field (labeled '1 Enter'), the 'Transceiver Selection' list (labeled '2 Select'), and the 'Apply' button (labeled '3 Click').

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

The screenshot shows a table titled 'List of Destination Setting Entries (Group Call)'. The table has four columns: 'No.', 'Name', 'Destination ID', and 'Number of Transceivers'. It contains two rows of data. To the right of the table are 'Edit' and 'Delete' buttons for each row, and a 'Delete All' button at the bottom. A callout box labeled 'Confirm' points to the table.

| No. | Name         | Destination ID | Number of Transceivers |
|-----|--------------|----------------|------------------------|
| 1   | Sales group1 | 0001           | 3                      |
| 4   | Sales group2 | 0002           | 2                      |

## 2 SETTING UP THE IP1000C 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 ▼ \* If you change this item, the screen automatically updates to the selected list.

**ID List**

No.: 1 ▼  
Name: Sales1  
Call Type: Individual ▼  
Destination ID: 0001

Apply

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   | Sales1      | Individual | 0001                        |
| 2   | Sales2      | Individual | 0002                        |
| 3   | Sales group | Group      | 0001                        |

Edit Delete  
Edit Delete  
Edit Delete  
Delete All

Verify

## 2 SETTING UP THE IP1000C 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**

| 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

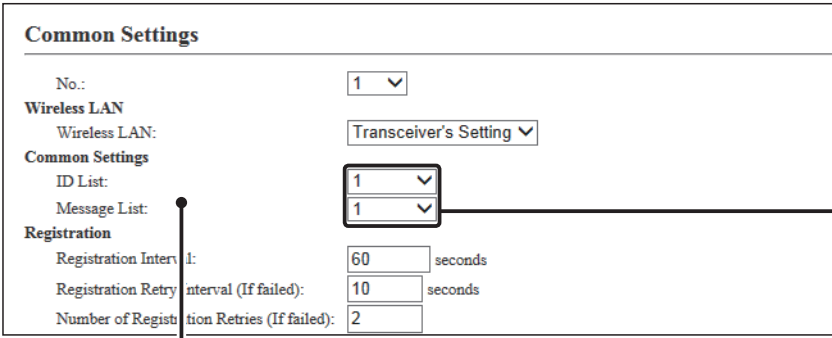
## 2 SETTING UP THE IP100C SYSTEM

### 2. Transceiver settings (continued)

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

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

- 1 Click [Common Settings], then [Common Settings].
  - The [Common Settings] screen is displayed.
- 2 Select the group number in the “Common Settings” field.
  - The group number setting (example: 1) is specified in the “Group” item on the [Transceiver Registration] screen in each IP100H.
- 3 Select the “ID List” and “Message List” in the “Common Settings” field.



**Common Settings**

No.: 1

Wireless LAN  
Wireless LAN: Transceiver's Setting

Common Settings  
ID List: 1  
Message List: 1

Registration  
Registration Interval: 60 seconds  
Registration Retry interval (If failed): 10 seconds  
Number of Registration Retries (If failed): 2

Enter

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>.

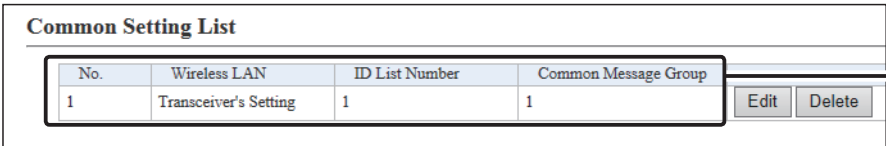


Disable  Enable

Apply

Click

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



**Common Setting List**

| No. | Wireless LAN          | ID List Number | Common Message Group |
|-----|-----------------------|----------------|----------------------|
| 1   | Transceiver's Setting | 1              | 1                    |

Edit Delete

Confirm

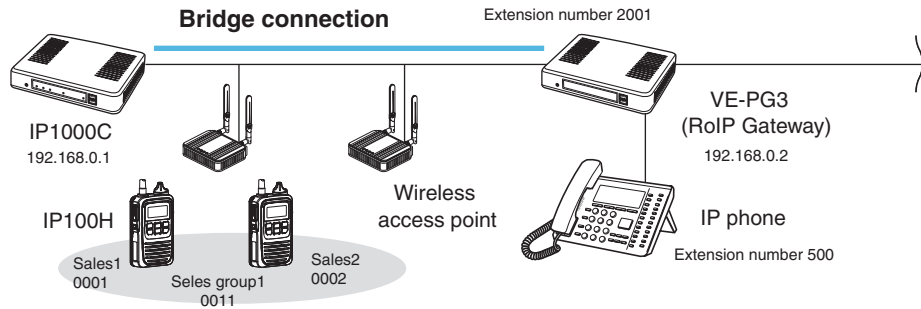
## 2 SETTING UP THE IP1000C SYSTEM

### 3. Bridge connection and Caller settings

When making a bridge connection with a VE-PG3\*, the IP1000C system can communicate with the transceivers.

\* A VE-PG3 with a firmware version that is earlier than 1.13, cannot communicate with the IP1000C system.

Before connecting the VE-PG3, check the firmware version on the VE-PG3's setting screen.



#### About the IP1000C settings

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

| Bridge Connection        |             |
|--------------------------|-------------|
| No.:                     | 1           |
| Destination Address:     | 192.168.0.2 |
| Destination Port Number: | 21530       |
| Service Port Number:     | 21530       |

This number is the same as the "Bridge Number" item in the [Destination Settings] field.

2. After setting the "Call Type" item to "Telephone," select the "Bridge Number" item and then enter a telephone number in the "Destination Phone Number" item.

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

- Select the bridge number as same as the number that is selected the [Bridge Connection] field. (Example: 1)
- Enter the VE-PG3's extension number. (Example: 500)

| Destination Setting       |                |
|---------------------------|----------------|
| No.:                      | 2              |
| Name:                     | 500 (IP Phone) |
| Call Type:                | Telephone      |
| Bridge Number:            | 1              |
| Destination Phone Number: | 500            |

This number is the same as the "No." item in the [Bridge Connection] 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 |

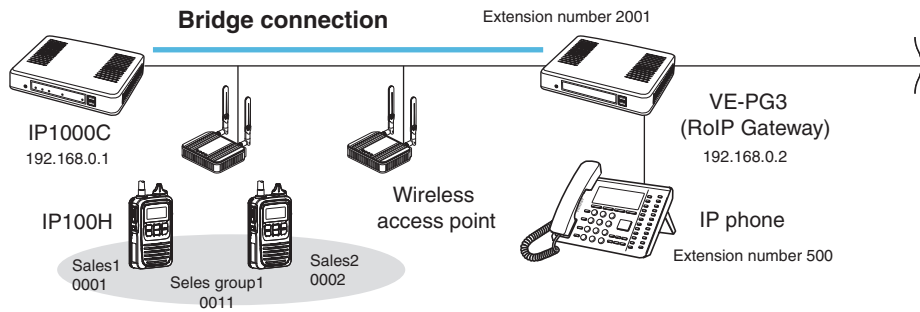
If you change this item, the screen automatically updates to the selected list.

| ID List                   |                |
|---------------------------|----------------|
| No.:                      | 2              |
| Name:                     | 500 (IP Phone) |
| Call Type:                | Telephone      |
| Destination Phone Number: | 500            |

(Continued to next page)

## 2 SETTING UP THE IP1000C SYSTEM

### 3. Bridge connection and Caller settings (continued)



#### About the VE-PG3 settings (Converter mode)

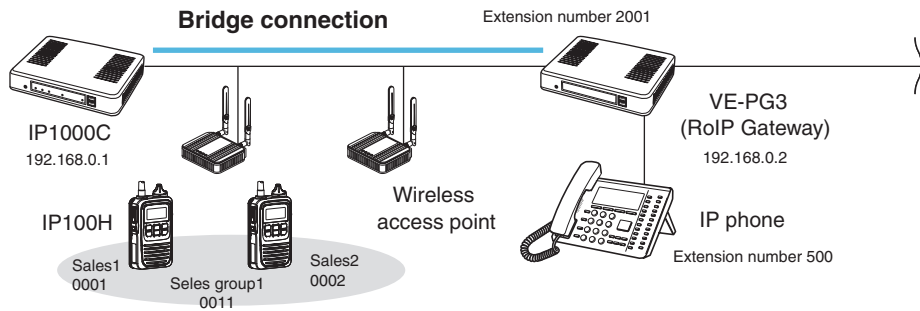
- Enter the IP address of the IP1000C in the [Bridge Connection] field. (Example: 192.168.0.1)  
Select the Voice Coding. (Example: G.711u Signaling)  
[Port Settings] (menu) > [Bridge] (screen) (Example: Bridge1) > [Bridge Connection] (field)
  - Make sure the using port number for connection don't duplicate with another connection.
- Select the call type and enter the destination ID in the [Bridge Communication] field.  
Call type (Example: Group), Destination ID (Example: 11)
- For full-duplex telephone operation, set the "Priority Receive" item in the [Bridge Control] field to "Disable."
- 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  |
| <div style="border: 1px solid black; padding: 5px; width: fit-content;">After settings in this screen are completed, click &lt;Apply&gt;. Then click &lt;Connect&gt;.</div> |  |
| 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 |
| <b>Default Callee ID</b>  |  |
| 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  |
| <div style="border: 1px solid black; padding: 5px; width: fit-content;">"Default Callee ID" item is set to "Enable," set the Destination settings below.</div>              |  |
| Bridge Control  |  |
| Priority Receive:   | <input checked="" type="radio"/> Disable <input type="radio"/> Enable                      |
| PTT Cancel:   | <input checked="" type="radio"/> Disable <input type="radio"/> Enable                      |
| <b>Notice Tone to the Transceiver</b>   |  |
| 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   |
| <b>PTT Control Type from the Telephone</b>  |  |
| PTT Control Type:   | VOX  |
| <b>Call Control Type to the Telephone</b>   |  |
| Call Control Type:  | RTP  |
| <div style="border: 1px solid black; padding: 5px; width: fit-content;">Set the PTT control or Call Control types according to your requirements.</div>                     |  |

(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

4. 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.

5. 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.



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|   |     |
|---|-----|
| 1. How to restrict access .....                       | 3-2 |
| Setting password.....                                 | 3-2 |
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## 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: 2014/02/08 09:17 (Asia/Tokyo)

Manually Set Time: 2014 / 02 / 08 | 09 : 17 (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 **1 Select**

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 **2 Click**

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 interface. The title bar is blue and says "DHCP Server". Below it, the "DHCP Server" section has a radio button for "Disable" and a selected radio button for "Enable". To the right of the "Enable" radio button is a callout box with "1 Click". Below this, the "IP Pool Start Address" field contains "192.168.0.10" and is highlighted with a callout box "2 Enter". The "Pool Size" field contains "128". The "Subnet Mask" field contains "255.255.255.0". The "Lease Time" field contains "72" and "hours". Below these are fields for "Domain Name", "Default Gateway", "Primary DNS Server", "Secondary DNS Server", "Primary WINS Server", and "Secondary WINS Server". At the bottom right, there are "Apply" and "Reset" buttons. A callout box "3 Click" points to the "Apply" button.

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

The screenshot shows a dialog box with a "Reboot" button and a message: "A reboot is required to apply all the new settings." A callout box "Click" points to the "Reboot" button.

##### 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.

---

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## 4 ABOUT THE SETTING SCREEN

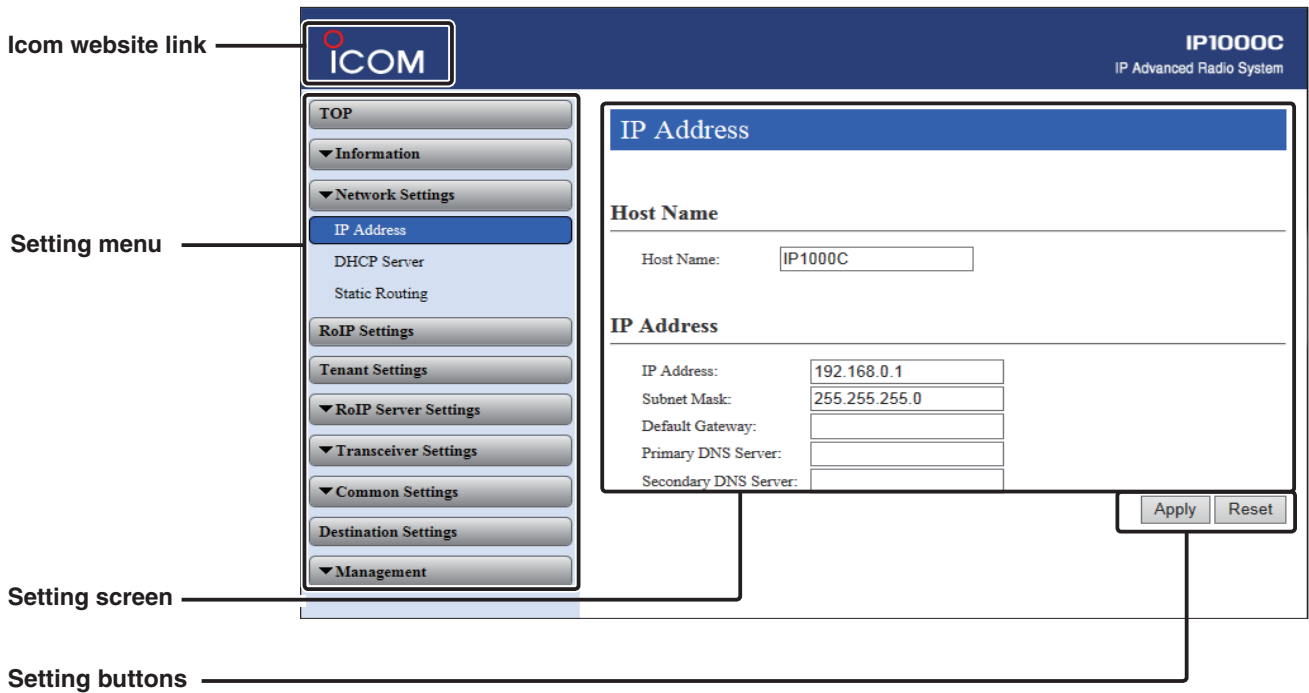
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# 4 ABOUT THE SETTING SCREEN

## 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.

**Now rebooting.**

Wait XX seconds for startup.

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

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



### ■ 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 [Transceiver Status] screen of the [Transceiver Settings] menu (p. 4-27).

### ■ Network Status

Displays the network information such as IP address.

| Network Status |            |
|----------------|------------|
| LAN IP Address | [REDACTED] |
| DHCP Server    | Disabled   |

(This is only an example.)

### ■ 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.

### ■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]

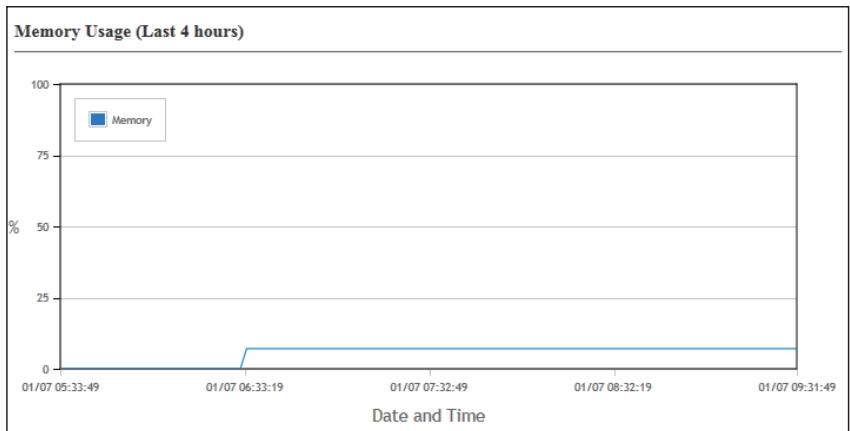
### ■ Memory Usage

Displays a statistical graph of the memory usage.

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



- 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:  ▾

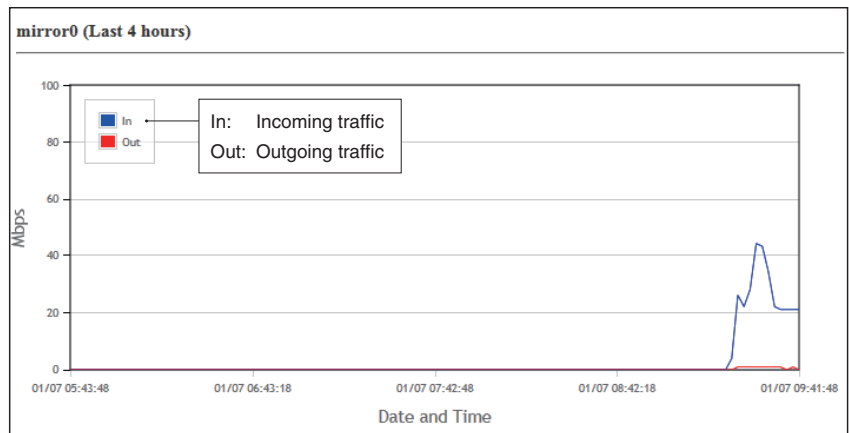
② Automatic Refresh:  Disable  Enable

③

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.

|                  |                                      |
|------------------|--------------------------------------|
| <b>Host Name</b> |                                      |
| 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: 192.168.0.10

③ Pool Size: 128

④ Subnet Mask: 255.255.255.0

⑤ Lease Time: 72 hours

⑥ Domain Name:

⑦ Default Gateway:

⑧ Primary DNS Server:

⑨ Secondary DNS Server:

⑩ Primary WINS Server:

⑪ Secondary WINS Server:

⑫ Apply    ⑬ Reset

- 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-C7-12-34-56 | 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 |
|---------------|-----------------|--------------|-------------|---------|
| 0.0.0.0       | 0.0.0.0         | 172.22.0.1   | mirror0     | static  |
| 127.0.0.1     | 255.255.255.255 | 127.0.0.1    | lo0         | host    |
| 172.22.0.0    | 255.255.0.0     | 172.22.72.61 | mirror0     | misc    |
| 172.22.72.61  | 255.255.255.255 | 172.22.72.61 | lo0         | host    |

- ① **Destination** ..... The network address of the route's destination network.
- ② **Subnet Mask** ..... The subnet mask of the route's destination network.
- ③ **Gateway** ..... The route's gateway address.
- ④ **Interface** ..... The routing interface.
  - **lo0:** Loop back interface
  - **mirror0:** LAN
- ⑤ **Owner** ..... The type of routing path.
  - **static:** Static route
  - **misc:** Broadcast frame
  - **host:** Host route

## 4 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.

### 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><b>VoIP Extension</b></p> <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><b>VoIP Extension</b></p> <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><b>VoIP Extension</b></p> <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 (continued)

[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 (continued)

[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

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

- The terminals cannot communicate among different tenants.

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

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

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

(This is only an example.)

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

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

- You cannot restore after clicking <Apply>.



**Bridge Connection**

Set the Bridge connection with a VE-PG3.

(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>.

## ■ Bridge Connection Entry List

The list of the registered device for the bridge connection.

| 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 [Bridge Connection] field.
- ② <Delete> ..... Click to delete the selected entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

## ■ Bridge Group

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

**Bridge Group**

---

① No.:  ▾

② Name:

③ Bridge 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 **Bridge Number** ..... Select the bridge to register to the group.
  
- ④ **<Add>** ..... Click to add the entries.
  
- ⑤ **<Reset>**..... Click to restore the settings.  
• You cannot restore after clicking <Add>.

## ■ Bridge Group Entry List

The list of the registered bridge group.

| Bridge Group Entry List |                    |               |                 |
|-------------------------|--------------------|---------------|-----------------|
| No.                     | Name               | Bridge Number | ① ②             |
| 1                       | PG3 Bridge numbers | 1 2 3 4       | ① Edit ② Delete |
|                         |                    |               | ③ Delete All    |

(This is only an example.)

- ① <Edit> ..... Click to edit the setting on the [Bridge Group] field.
- ② <Delete> ..... Click to delete the selected entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

## 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- <span style="background-color: #cccccc;">          </span> | 00-90-C7- <span style="background-color: #cccccc;">          </span> |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

④     ⑤

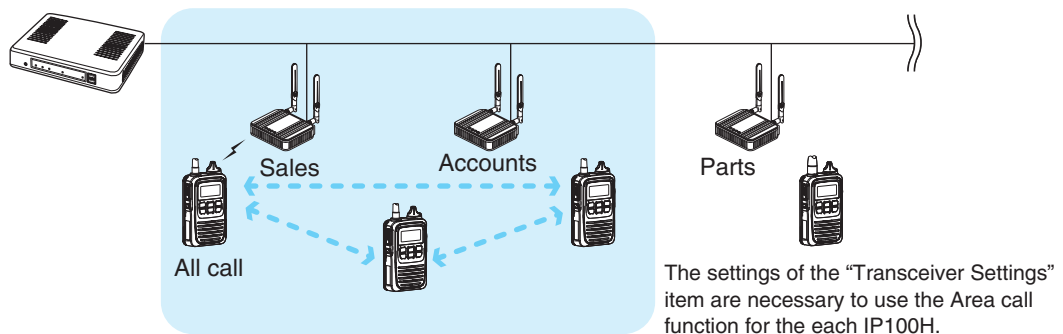
(This is only an example.)

- 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.



## ■ 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<br>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 entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

### ■ Transceiver Status

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

| ① TRX No. | ② Name   | ③ Unit ID | ④ Registration Status | ⑤ IP Address | ⑥ Current Status   | ⑦ Location             | ⑧ Version  |
|-----------|----------|-----------|-----------------------|--------------|--------------------|------------------------|------------|
| 1         | Sales1   | 0001      | Connected             | 192.168.0.38 | Away from the desk | 00-90-C7-<br>- - - - - | Ver. 1.002 |
| 2         | Sales2   | 0002      | Connected             | 192.168.0.13 | At the desk        | 00-90-C7-<br>- - - - - | Ver. 1.002 |
| 3         | Account1 | 0003      | Connected             | 192.168.0.39 | Meeting            | 00-90-C7-<br>- - - - - | Ver. 1.002 |
| 4         | Account2 | 0004      | Connected             | 192.168.0.34 | Meeting            | 00-90-C7-<br>- - - - - | Ver. 1.002 |
| 5         | Sales3   | 0005      | Connected             | 192.168.0.15 | Working            | 00-90-C7-<br>- - - - - | Ver. 1.002 |
| 6         | Sales4   | 0006      | Connected             | 192.168.0.22 | Meeting            | 00-90-C7-<br>- - - - - | Ver. 1.002 |
| 7         | 100fs    | 0007      | Disconnected          | -            | -                  | -                      | -          |

(This is only an example.)

- ① **TRX No.**..... Displays the TRX numbers that are registered the “TRX No” item on the [Transceiver Registration] screen.
  
- ② **Name** ..... Displays the Names that are registered the “Name” item on the [Transceiver Registration] screen.
  
- ③ **Unit ID** ..... Displays the Unit IDs that are registered the “Unit ID” item on the [Transceiver Registration] screen.
  
- ④ **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.”
  
- ⑤ **IP Address** ..... Displays the IP Addresses of the IP100Hs or IP100FSs.
  - While the “Registration Status” displays “Disconnected,” “-” is displayed.
  
- ⑥ **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.
  
- ⑦ **Location** ..... Displays the BSSIDs of the wireless access point that the IP100Hs are connected to.
  - While the “Registration Status” displays “Disconnected” or the terminal is IP100FS, “-” is displayed.
  
- ⑧ **Version** ..... Displays the version of the IP100Hs or IP100FSs that are registered to the IP1000C.
  - While the “Registration Status” displays “Disconnected,” “-” is displayed.

## ■ Transceiver Settings

Registers or edits the IP100H or IP100FS settings.

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

(This is only an example.)

- 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.



■ Transceiver Settings (continued)

(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 **Group** ..... Select the group number that the IP100H or IP100FS belongs to. (Default: 1)
  - 1 to 100 are selectable.
  - Set the Group setting in the [Common Settings] menu, such as ID list, message or Receive notification tone settings.
  
- ⑨ **<Apply>** ..... Click to apply the entries.
  
- ⑩ **<Reset>**..... Click to restore the settings.
  - You cannot restore after clicking <Apply>.

## 4 ABOUT THE SETTING SCREEN

### 8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Registration]

#### ■ Transceiver Setting Entry List

The list of the registered IP100Hs or IP100FSs.

| TRX No. | Transceiver Model | Name   | Unit ID | Connection Port |        | Group | ①    | ②      |
|---------|-------------------|--------|---------|-----------------|--------|-------|------|--------|
|         |                   |        |         | Transceiver     | Server |       |      |        |
| 1       | IP100H            | Sales1 | 0001    | 30000           | 30000  | 1     | Edit | Delete |
| 2       | IP100H            | Sales2 | 0002    | 30002           | 30002  | 1     | Edit | Delete |
| 3       | IP100FS           | 100fs  | 0003    | -               | 30004  | 1     | Edit | Delete |

③  
Delete All

(This is only an example.)

- ① <Edit> ..... Click to edit the setting on the [Transceiver Setting] field.
- ② <Delete> ..... Click to delete the selected entries.  
• After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.  
• After clicking <Delete All>, the contents cannot be recalled.

## ■ 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 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.



- Select the All or ID number (1 to 50) that the IP100H displays after power ON.
- The ID list is select the Common Setting screen.

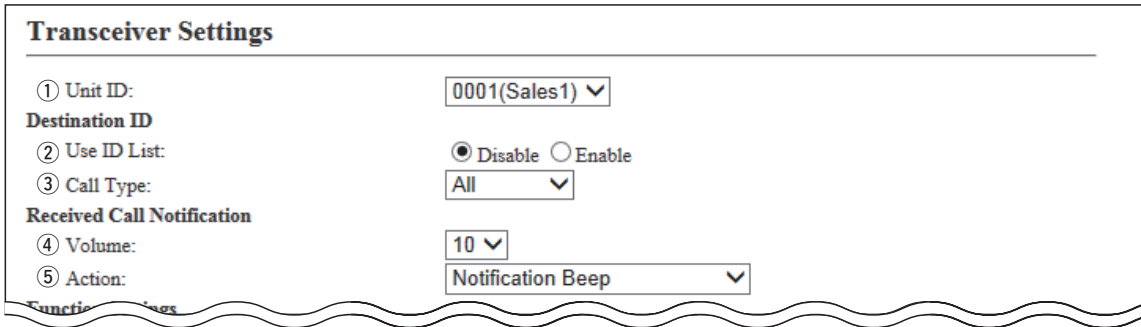
### ③ Call Type .....

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 (②) is selected “Enable,” this item is not displayed.

■ Transceiver Settings (continued)



(This is only an example.)

④ **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.

⑤ **Action** ..... 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.

## 4 ABOUT THE SETTING SCREEN

### 8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

#### ■ Transceiver Settings (continued)

### Transceiver Settings

Unit ID: 0001(Sales1) ▾

Destination ID: [ ]

Function Settings

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

⑩ Status:  Disable  Enable

Key Assignment

⑪ Option Key: No Function ▾

(This is only an example.)

#### ⑥ Communication Method

Select the communication method that the IP100H uses.

(Default: Full-Duplex)

##### • Simplex

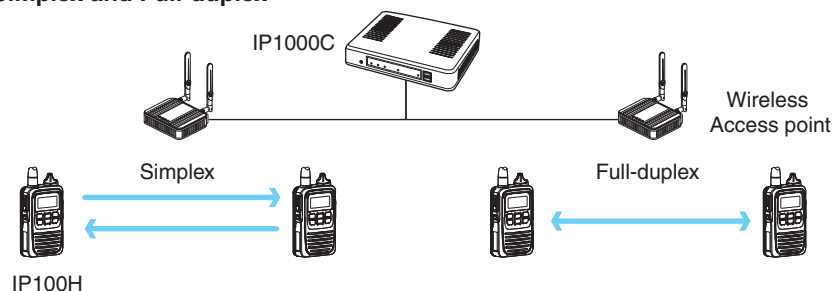
Toggles the transmission (Talker) and reception (Listener) by turns for communication.

##### • 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)

**Transceiver Settings**

---

Unit ID: 0001(Sales1) ▾

Destination ID: 0001(Sales1) ▾

---

**Function Settings**

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

⑩ Status:  Disable  Enable

**Key Assignment**

⑪ Option Key: No Function ▾

(This is only an example.)

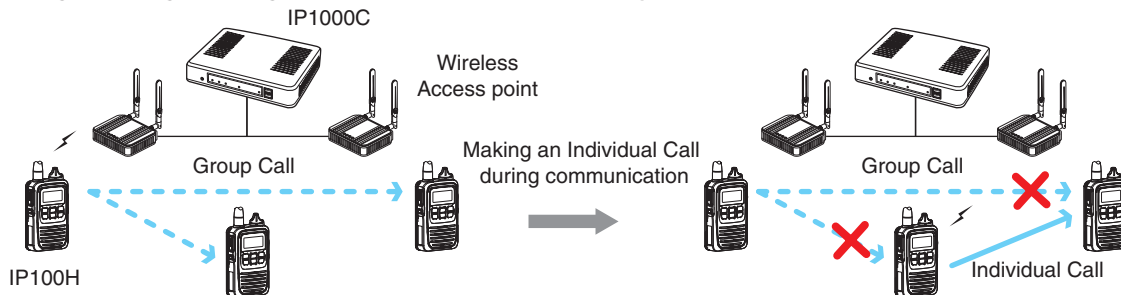
⑦ **Priority Call** ..... Select whether the IP100H uses the Priority Call or not. (Default: Disable)

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

| Priority level                        | Call type       | Priority Call | Remarks   |
|---------------------------------------|-----------------|---------------|---|
| ↑<br>High<br><br><br><br><br>↓<br>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 | —             |   |
|                                       | 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)

**Transceiver Settings**

---

Unit ID: 0001(Sales1) ▾

**Destination ID**

---

**Function Settings**

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

⑩ Status:  Disable  Enable

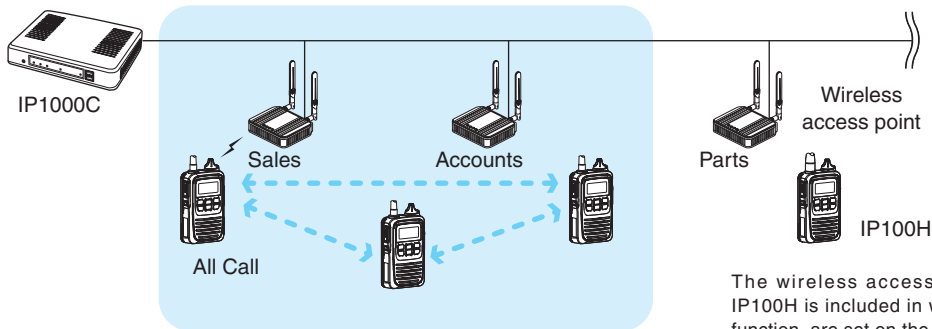
**Key Assignment**

⑪ Option Key: No Function ▾

(This is only an example.)

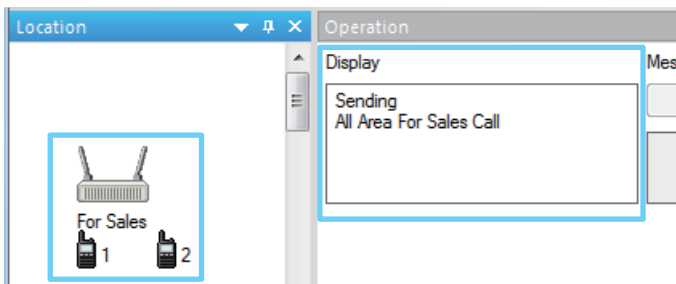
- ⑧ **Area Call** ..... Select whether the IP100H uses the Area Call or not. (Default: Disable)  
 When the IP100H calls All Call or Group Call using the Area Call function, it calls only other IP100Hs or IP100FSs in the same area that it connects to the wireless access point.

#### 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, 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)

**Transceiver Settings**

---

Unit ID: 0001(Sales1) ▾

**Destination ID**

---

**Function Settings**

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

⑩ Status:  Disable  Enable

**Key Assignment**

⑪ Option Key: No Function ▾

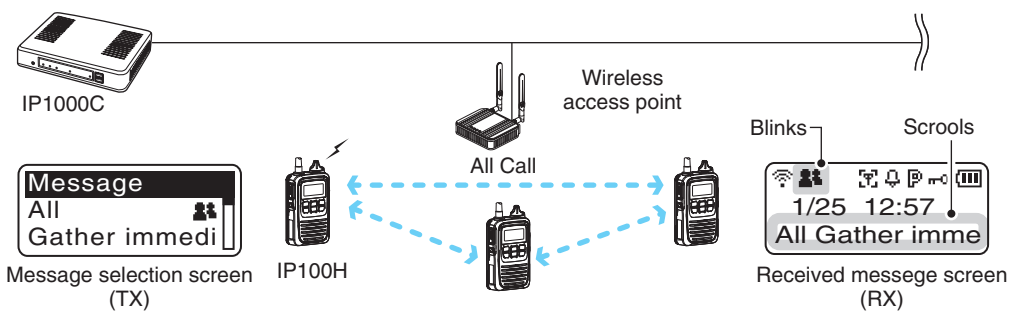
(This is only an example.)

### ⑨ Message .....

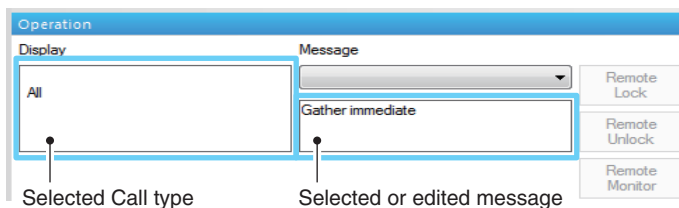
Select whether the IP100H can send the messages or not. (Default: Disable)  
 When “Enable” is selected, push [FUNC] on the IP100H once to enter the Message selection screen.

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

### IP100H calls transmits a message



### IP100FS trasmits a message



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



# 4 ABOUT THE SETTING SCREEN

## 8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

### ■ Transceiver Settings (continued)

**Transceiver Settings**

---

Unit ID: 0001(Sales1) ▾

**Destination ID**

---

**Function Settings**

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

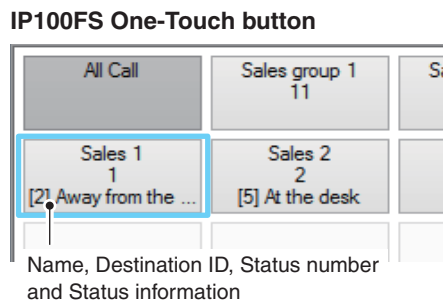
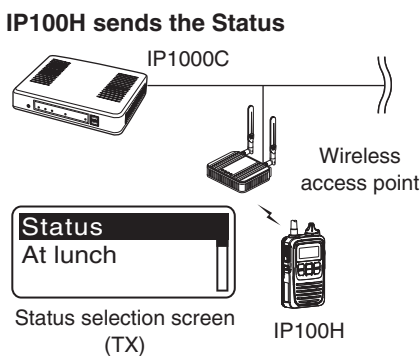
⑩ Status:  Disable  Enable

**Key Assignment**

⑪ Option Key: No Function ▾

(This is only an example.)

- ⑩ **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 Status] screen in the [Transceiver Settings] menu or the one-Touch button of the IP100FS.



### IP1000C Transceiver Status screen

#### Transceiver Status

| TRX No. | Name     | Unit ID | Registration Status | IP Address   | Current Status     | Location  | Version   |
|---------|----------|---------|---------------------|--------------|--------------------|-----------|-----------|
| 1       | Sales1   | 0001    | Connected           | 192.168.0.38 | Away from the desk | 00-90-C7- | Ver. 1.00 |
| 2       | Sales2   | 0002    | Connected           | 192.168.0.13 | At the desk        | 00-90-C7- | Ver. 1.00 |
| 3       | Account1 | 0003    | Connected           | 192.168.0.39 | Meeting            | 00-90-C7- | Ver. 1.00 |
| 4       | Account2 | 0004    | Connected           | 192.168.0.34 | Meeting            | 00-90-C7- | Ver. 1.00 |

Status

# 4 ABOUT THE SETTING SCREEN

## 8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

### ■ Transceiver Settings (continued)

**Transceiver Settings**

Unit ID: 0001(Sales1) ▾

Destination ID

**Function Settings**

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

⑩ Status:  Disable  Enable

**Key Assignment**

⑪ Option Key: No Function ▾

(This is only an example.)

#### ⑪ Option Key .....

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

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

#### • Message

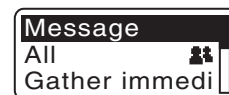
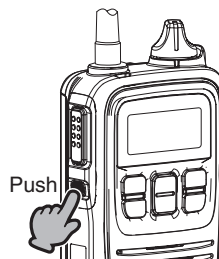
Pushing [Option] on the IP100H displays the Message selection screen.

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

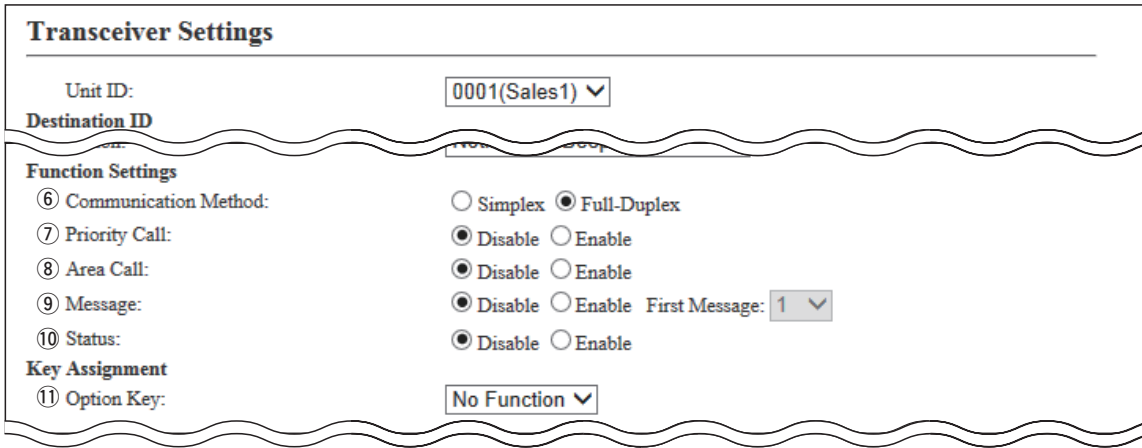
**Key Assignment**

Option Key: Message ▾

Message No.: 1 ▾



■ Transceiver Settings (continued)



(This is only an example.)

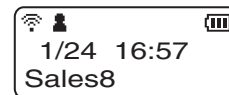
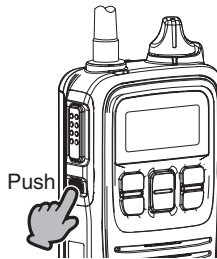
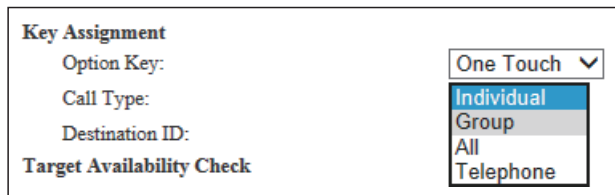
⑪ Option Key  
(continued) .....

• 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)

**Transceiver Settings**

---

Unit ID: 0001(Sales1) ▾

**Destination ID**

---

**Function Settings**

⑥ Communication Method:  Simplex  Full-Duplex

⑦ Priority Call:  Disable  Enable

⑧ Area Call:  Disable  Enable

⑨ Message:  Disable  Enable First Message: 1 ▾

⑩ Status:  Disable  Enable

**Key Assignment**

⑪ Option Key: No Function ▾

(This is only an example.)

#### ⑪ Option Key

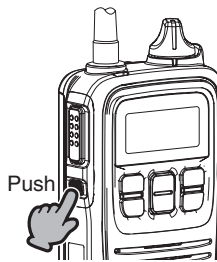
(continued) .....

#### • Clear Down

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

**Key Assignment**

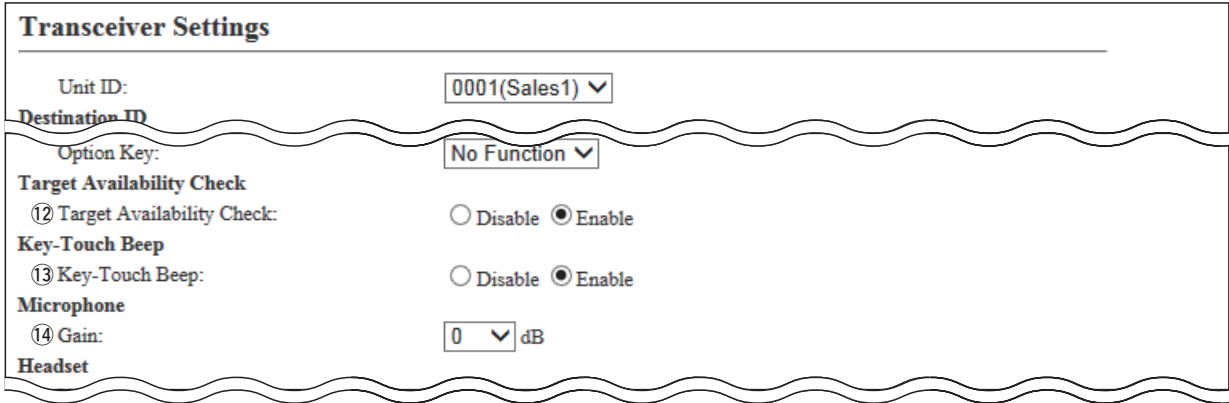
Option Key: Clear Down ▾



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)

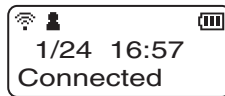


(This is only an example.)

⑫ **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

⑬ **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.

⑭ **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 ABOUT THE SETTING SCREEN

## 8. [Transceiver Settings] Menu

[Transceiver Settings]—[Transceiver Settings]

### ■ Transceiver Settings (continued)

**Transceiver Settings**

---

Unit ID: 0001(Sales1) ▾

Destination ID

---

Gain: 0 ▾ dB

**Headset**

⑮ VOX:  Disable  Enable

⑯ Attack Time: 50 milliseconds

⑰ Release Time: 200 milliseconds

⑱ Voice Delay: 200 milliseconds

⑲ Voice Threshold: 40 %

⑳ Sidetone:  Disable  Enable

㉑ Sidetone Volume: 10 ▾

**V/RoIP Settings**

---

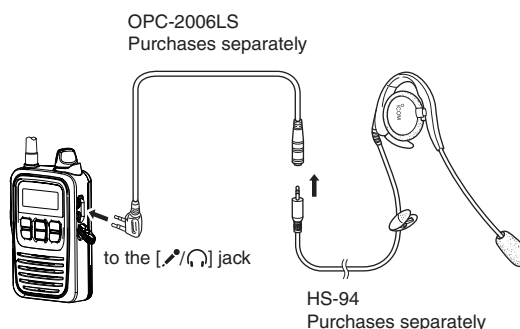
(This is only an example.)

### ⑮ 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. An optional HS-94, HS-95 or HS-97 headset and the OPC-2006LS plug adapter cable are required to use the VOX function.

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



- Be sure to turn OFF the IP100H's power, before connecting or disconnecting optional equipment to or from the [MIC] jack.
- When "Enable" is selected, the "Attack Time" through "Sidetone Volume" items are displayed.

# 4 ABOUT THE SETTING SCREEN

## 8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

### ■ Transceiver Settings (continued)

**Transceiver Settings**

Unit ID: 0001(Sales1) ▾

Destination ID

Gain: 0 ▾ dB

**Headset**

15 VOX:  Disable  Enable

16 Attack Time: 50 milliseconds

17 Release Time: 200 milliseconds

18 Voice Delay: 200 milliseconds

19 Voice Threshold: 40 %

20 Sidetone:  Disable  Enable

21 Sidetone Volume: 10 ▾

**V/RoIP Settings**

(This is only an example.)

- 16 **Attack Time** ..... Adjust the Attack time to between 5 and 500 milliseconds in 5 milliseconds steps. (Default: 50 (milliseconds))  
VOX: Enable  
When audio from a headset microphone is input for this specified time, the IP100H starts transmitting.
- 17 **Release Time** ..... Adjust the Release time to between 5 and 2000 milliseconds in 5 milliseconds steps. (Default: 200 (milliseconds))  
VOX: Enable  
The release time is amount of time the transmitter stays ON after you stop speaking.
- 18 **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
- 19 **Voice Threshold** ..... Adjust the VOX Threshold level to between 0% and 100%. (Default: 40%)  
VOX: Enable  
Higher values make the VOX function more sensitive to your voice.
- 20 **Sidetone** ..... Select whether to use the Sidetone function or not. (Default: Disable)  
VOX: Enable  
When “Enable” is selected, you can hear your voice from the headset.
- 21 **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.)

② **Receiver Buffer Type** ... Select a type of buffers to reduce the received audio breaks up. (Default: Dynamic)

• **Static**

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

• **Dynamic**

The buffer time changes according to the audio fluctuation.

③ **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:  ▼

Destination ID:

**V/RoIP Settings**

② Receive Buffer Type:  Static  Dynamic

③ TOS Type:  ▼

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

**Antenna**

⑤ Selected Antenna:  ▼

**IP Address**

⑥ Setting Type:  ▼

**Maintenance**

(This is only an example.)

④ **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 (③) is set to "Diffserv."

**V/RoIP Settings**

Receive Buffer Type:  Static  Dynamic

TOS Type:  ▼

Media (RTP): DSCP  (HEX):E0

### ■ Transceiver Settings (continued)

**Transceiver Settings**

---

Unit ID:  ▼

Destination ID:

**V/RoIP Settings**

② Receive Buffer Type:  Static  Dynamic

③ TOS Type:  ▼

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

**Antenna**

⑤ Selected Antenna:  ▼

**IP Address**

⑥ Setting Type:  ▼

**Maintenance**

(This is only an example.)

⑤ **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)

**Transceiver Settings**

Unit ID: 0001(Sales1) ▼

Destination ID: ▼

**V/RoIP Settings**

② Receive Buffer Type:  Static  Dynamic

③ TOS Type: TOS ▼

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

**Antenna**

⑤ Selected Antenna: Transceiver's Setting ▼

**IP Address**

⑥ Setting Type: Transceiver's Setting ▼

**Maintenance**

(This is only an example.)

⑥ **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.

**IP Address**

Setting Type: DHCP Client ▼

Primary DNS Server:

Secondary DNS 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.

**IP Address**

Setting Type: Static IP ▼

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS Server:

Secondary DNS Server:

• 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.

■ Transceiver Settings (continued)

(This is only an example.)

②⑦ **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.

②⑧ **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.

②⑨ **Automatic Firmware Updating at Power ON**  
 ..... Select whether the IP100H will use the Automatic Update function or not.  
 (Default: Enable (with Automatic Reboot))

• **Desable**

Disables the automatic firmware updating at the IP100H turns ON.

• **Enable (without Automatic Reboot)**

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

• **Enable (with Automatic Reboot)**

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

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

## 4 ABOUT THE SETTING SCREEN

### 8. [Transceiver Settings] Menu

[Transceiver Settings]–[Transceiver Settings]

#### ■ Transceiver Settings (continued)

**Transceiver Settings**

Unit ID: 0001(Sales1) ▾

Destination ID: ▾

**IP Address**

Setting Type: Transceiver's Setting ▾

**Maintenance**

②⑦ Provisioning Server:

②⑧ SNTP Server:

②⑨ Automatic Firmware Updating at Power ON: Enable (with Automatic Reboot) ▾

③⑩ Firmware Server:

③① SYSLOG Host IP Address:

③② SYSLOG Severity:  DEBUG  INFO  NOTICE

③③  ③④

(This is only an example.)

- ③⑩ **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.
- ③① **SYSLOG Host IP Address** ..... Enter the SYSLOG host's address.
- The host device must have the SYSLOG server function.
- ③② **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)
- ③③ **<Apply>** ..... Click to apply the entries.
- ③④ **<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 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 IP100H.

**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)

(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 a different authentic methods cannot access each other.

**About authentic method**

• **Open System/Shared Key**

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

• **Open System**

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

• **WPA-PSK/WPA2-PSK**

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

**The combination of the Authentication and Encryption**

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



■ Wireless LAN (continued)

(This is only an example.)

- ⑤ **Encryption** ..... Select the encryption that is the type same as the wireless access point. (Default: None)
  - Be sure to verify the Access point setting, because the different encryption types cannot be accessed with each other.

**About the encryption type**

- **None**

No data is encrypted.

  - This option can be selected when the “Authentication” item (④) is set to “Open System” or “Open System/Shared Key.”
- **WEP RC4**

This is a security type often used by wireless communications.

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

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

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

■ 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.)

⑤ Encryption  
 (continued) .....

• WEP Encryption Key

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

Authentication: Open System/Shared Key

Encryption: WEP RC4 128(104)

WEP Encryption Key: 00000000000000000000000000000000

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

• PSK (Pre-Shared Key)

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

Authentication: WPA-PSK/WPA2-PSK

Encryption: TKIP/AES

PSK (Pre-Shared Key): 00000000  
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 a hexadecimal numbers with numbers (0 to 9) and letters (A to F). Or enter ASCII characters. The key lengths are 64 digits using hexadecimal number, or 8 to 63 characters using ASCII characters.

■ Wireless LAN (continued)

(This is only an example.)

- ⑥ **Scan Mode** ..... Select the wireless LAN standard that the IP100H uses.  
(Default: 11g, 11a)
  - Access points that corresponds the wireless LAN standards, can be used with the IP100H.
  
- 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.

| 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 entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

**ID List Common Settings**

Selects an ID list that the IP100Hs will use.

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

**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.

**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.

**ID List**

---

① No.:

② Name:

③ Call Type:

④ Destination ID:

⑤     ⑥

(This is only an example.)

- ① **No.** .....      Select a number to register the destination.  
Up to 50 destinations can be registered to a group.
- ② **Name** .....      Enter a destination name of up to 32 characters.
- ③ **Call Type** .....      Select the “Individual,” “Group” or “Telephone” Call type.
- ④ **Destination ID** .....      Enter a 4 digit target individual ID or group ID.  
When “Telephone” is selected as the “Call Type,” enter a target phone number of up to 31 digits using numbers and symbols (#, \*).
- ⑤ **<Apply>** .....      Click to apply the entries.
- ⑥ **<Reset>**.....      Click to restore the settings.  
• You cannot restore after clicking <Apply>.

## ■ ID List Entries

The list of entered Group Calls.

| ID List Entries |             |            |                             |                 |        |
|-----------------|-------------|------------|-----------------------------|-----------------|--------|
| No.             | Name        | Call Type  | Destination ID/Phone Number | ①               | ②      |
| 1               | Sales1      | Individual | 0001                        | Edit            | Delete |
| 2               | Sales2      | Individual | 0002                        | Edit            | Delete |
| 3               | Sales group | Group      | 0001                        | Edit            | Delete |
|                 |             |            |                             | ③<br>Delete All |        |

(This is only an example.)

- ① <Edit> ..... Click to edit the entries in the [ID List] field.
- ② <Delete> ..... Click to delete the selected entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

## ■ 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.

## ■ 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**

| 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>.



## Common Setting List

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

| Common Setting List |                       |                |                      |      |            |
|---------------------|-----------------------|----------------|----------------------|------|------------|
| No.                 | Wireless LAN          | ID List Number | Common Message Group | ①    | ②          |
| 1                   | Transceiver's Setting | 1              | 1                    | Edit | Delete     |
|                     |                       |                |                      |      | ③          |
|                     |                       |                |                      |      | Delete All |

(This is only an example.)

- ① <Edit> ..... Click to edit the entries in the “Common Settings” items.
- ② <Delete> ..... Click to delete the selected entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

## Common Settings

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

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

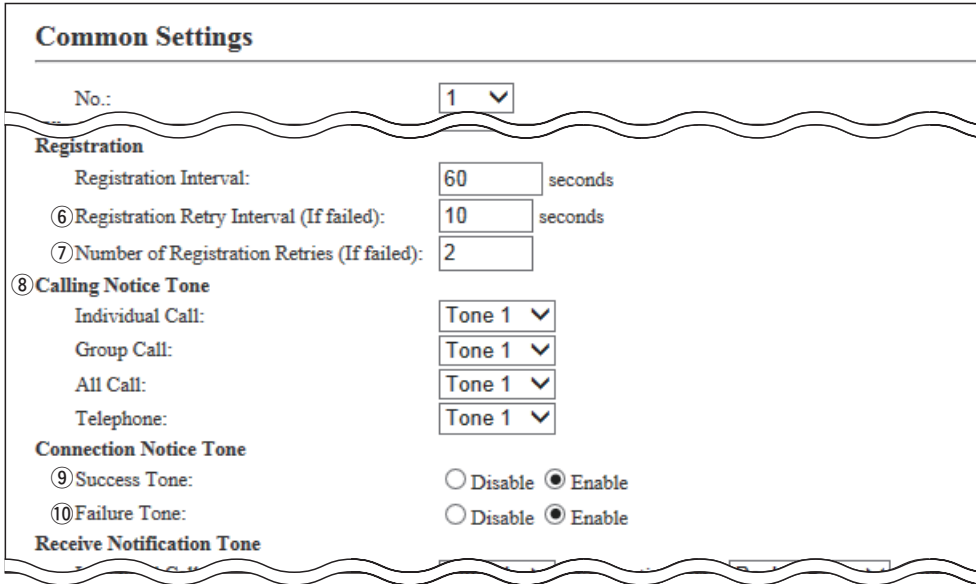
The screenshot shows the 'Common Settings' menu with the following items:

- ① No.: 1 (dropdown)
- Wireless LAN
  - ② Wireless LAN: Transceiver's Setting (dropdown)
- Common Settings
  - ③ ID List: 1 (dropdown)
  - ④ Message List: 1 (dropdown)
- Registration
  - ⑤ Registration Interval: 60 seconds (input field)
  - Registration Retry Interval (If failed): 10 seconds (input field)
  - Number of Registration Retries (If failed): 2 (input field)

(This is only an example.)

- ① **No.** ..... Select a group between 1 and 100, to assign to the IP100H belongs to.
- ② **Wireless LAN** ..... Select the wireless LAN setting that are commonly used by the IP100Hs in the group. (Default: Transceiver's Setting)
  - **Transceiver's Setting**  
Uses the last wireless LAN setting that was set by the CS-IP100H or IP1000C.
  - **1 (Name) to 20 (Name)**  
Select a number with wireless LAN name that was entered in the Wireless LAN screen.
- ③ **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.
- ④ **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.
- ⑤ **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.

■ Common Settings (continued)



(This is only an example.)

⑥ **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))

⑦ **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)

⑧ **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.”

⑨ **Success Tone** .....

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

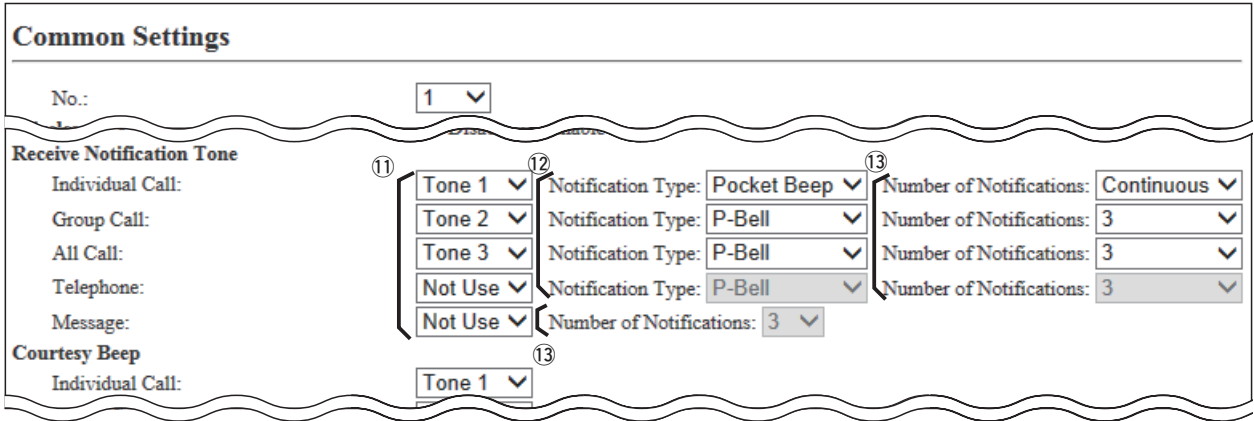
- When an individual call, Message call, Status call or telephone call connection is successful, the notice tone sounds.
- When the “Target Availability Check” item in the [Transceiver Settings] screen is set to “Disable,” the notice tone will not sound.

⑩ **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.

### Common Settings (continued)



(This is only an example.)

- ① 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.”

- ② 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 (①) is set to “Tone 1” to “Tone 8.”
  - You cannot select this item for a Message call.

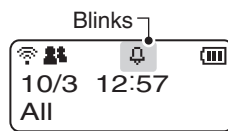
**• Pocket Beep**

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

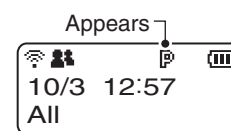
**• P-Bell**

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

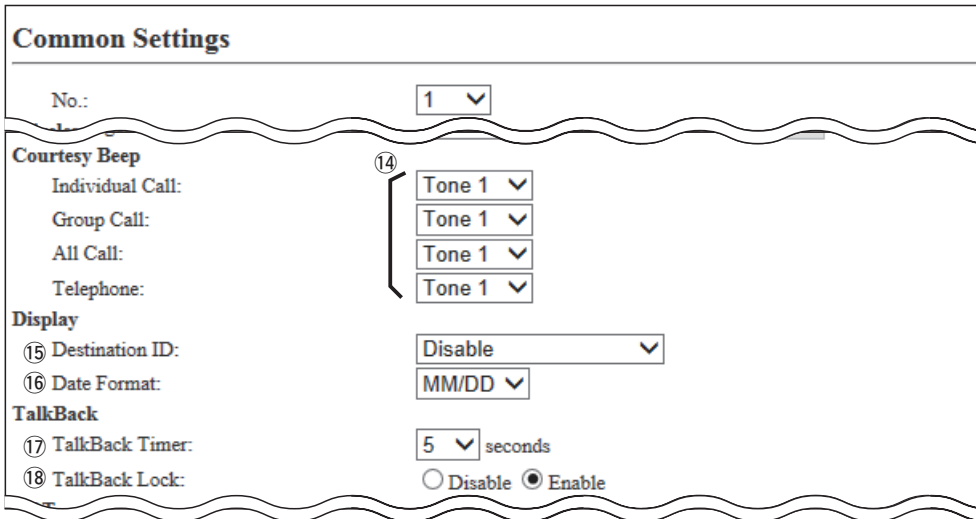
- ③ Number of Notification ...** Select a notification number of “Continuous,” “1,” “3,” “10” or “20.” (Default: 3)
- You can select this item when the “Received Notification Tone” item (①) is set to “Tone 1” to “Tone 8.”
  - You cannot select this item for a Message call.

# 4 ABOUT THE SETTING SCREEN

## 9. [Common Settings] Menu

[Common Settings]–[Common Settings]

### Common Settings (continued)



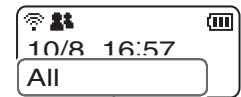
(This is only an example.)

- ⑭ **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.

- ⑮ **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**

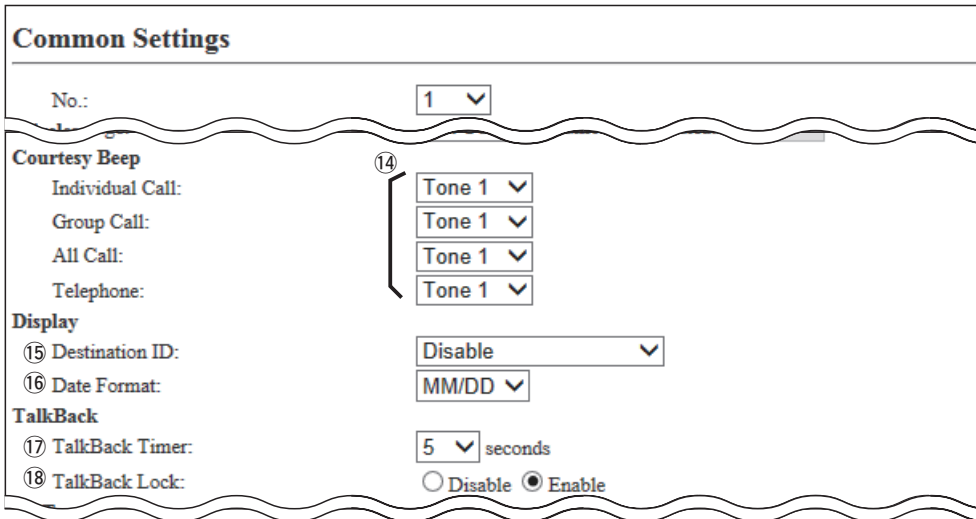
Displays either IDs that the IP100H recently called, was called by or displayed ID list/History.

# 4 ABOUT THE SETTING SCREEN

## 9. [Common Settings] Menu

[Common Settings]–[Common Settings]

### Common Settings (continued)



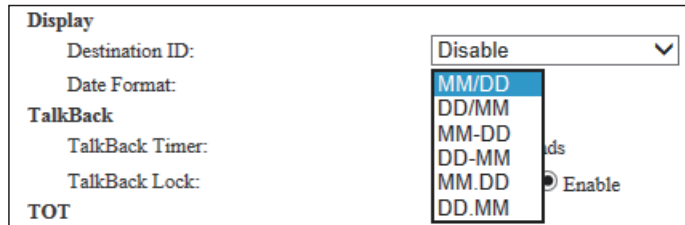
(This is only an example.)

#### 16 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)



#### 17 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))

#### 18 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.

# 4 ABOUT THE SETTING SCREEN

## 9. [Common Settings] Menu

[Common Settings]–[Common Settings]

### Common Settings (continued)

(This is only an example.)

- ①⑨ **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.
  
- ②⑩ **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))
  
- ②① **Penalty Timer** ..... Set the TOT Penalty timer to between 1 and 30 seconds.  
After the TOT timer period ends, the TOT Penalty timer starts and inhibits the user from transmitting during the penalty period.  
(Default: 30 (seconnds))
  
- ②② **TOT Beep** ..... Select whether the IP100H uses the TOT beep function or not.  
(Default: Enable)
  
- ②③ **<Apply>** ..... Click to apply the entries.
  
- ②④ **<Reset>** ..... Click to restore the settings.  
• You cannot restore after clicking <Apply>.

**Destination Setting**

Call Type: All

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

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

**Destination Setting**

---

① No.:

② Name:

③ Call Type:

④ Communication Type:  Simplex  Full-Duplex

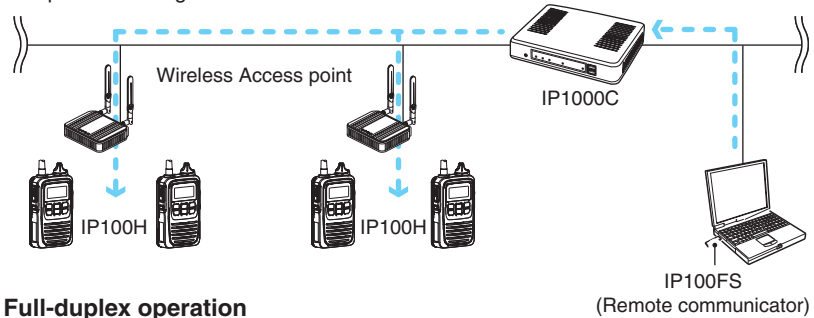
⑤

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

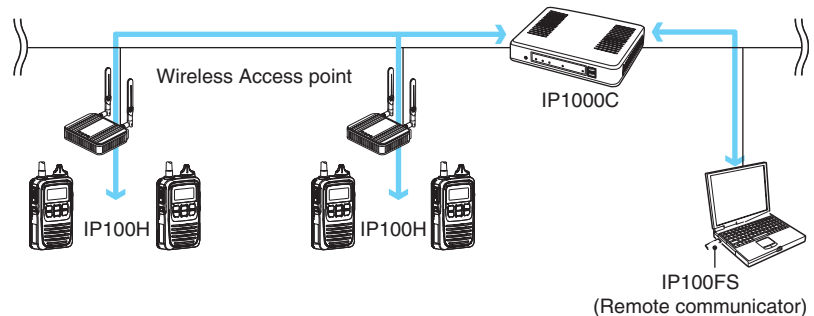
- ① **No.** ..... Select the number to register the destinations.  
Up to 1000 destinations can be registered.
- ② **Name** ..... Enter the destination name. (Up to 31 characters)
- ③ **Call Type** ..... Select “All” to use the All call.
- ④ **Communication Type** ... Select “Simplex” or “Full-Duplex” 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**



- ⑤ **<Apply>** ..... Click to apply the entries.
- ⑥ **<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: 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

0001(Sales1)  0002(Sales2)  0003(100fs)

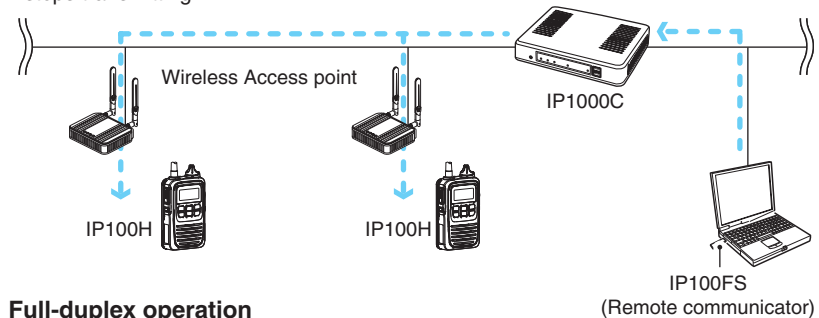
⑦  ⑧

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

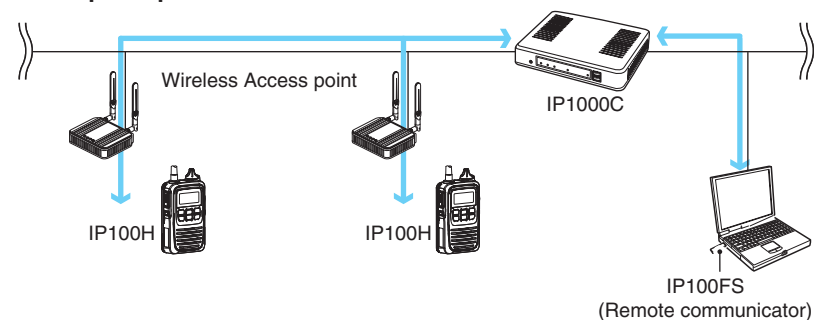
- ① **No.** ..... Select the number to register the destination groups. Up to 1000 destinations can be registered.
- ② **Name** ..... Enter the destination name. (Up to 31 characters)
- ③ **Call Type** ..... Select “Group” to use the Group call.
- ④ **Destination ID** ..... Enter the 4 digit destination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

Set the destinations to call the group through the Internet.

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

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

- 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.
- ⑦ **<Apply>** ..... Click to apply the entries.
- ⑧ **<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**  

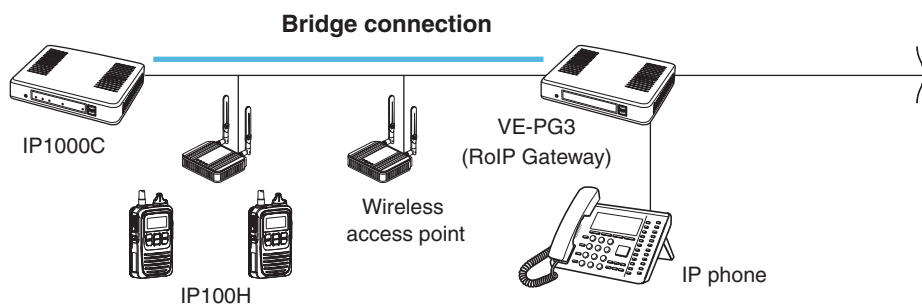
---

|                             |           |   |
|-----------------------------|-----------|---|
| ① No.:                      | 3         | ▼ |
| ② Name:                     | Office1   |   |
| ③ Call Type:                | Telephone | ▼ |
| ④ Bridge Number:            | 1         | ▼ |
| ⑤ Destination Phone Number: | 500       |   |

⑥     ⑦

(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 **Bridge Number** ..... Select the bridge connection device (VE-PG3) to call the IP phone.
  - It is necessary to complete the bridge connection setting between the IP1000C and the VE-PG3s that are registered in the [Bridge] screen on the [RoIP Server Setting] menu.
- ⑤ **Destination Phone Number** ..... Enter the phone number.  
Up to 31 digits numbers and symbols (#, \*).
- ⑥ **<Apply>** ..... Click to apply the entries.
- ⑦ **<Reset>** ..... Click to restore the settings.
  - You cannot restore after clicking <Apply>.



## ■ List of Destination Setting Entries (All Call)

The list of the registered All Call.

| No. | Name       | Communication Type | ①    | ②      |
|-----|------------|--------------------|------|--------|
| 2   | Sales Dept | Simplex            | Edit | Delete |

(This is only an example.)

- ① <Edit> ..... Click to edit the setting on the [Destination Setting] field.
- ② <Delete> ..... Click to delete the entries.
  - After clicking <Delete>, the content cannot be recalled.

## ■ List of Destination Setting Entries (Group Call)

The list of the registered Group Calls.

| No. | Name         | Destination ID | Number of Transceivers | ①    | ②      |
|-----|--------------|----------------|------------------------|------|--------|
| 1   | Sales group1 | 0001           | 3                      | Edit | Delete |
| 4   | Sales group2 | 0002           | 2                      | Edit | Delete |

Delete All

(This is only an example.)

- ① <Edit> ..... Click to edit the entries in the [Destination Setting] field.
- ② <Delete> ..... Click to delete the selected entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

## ■ List of Destination Setting Entries (Telephone)

The list of the registered Phone Calls.

| List of Destination Setting Entries (Telephone) |         |                          |               |            |        |
|---|---------|--------------------------|---------------|------------|--------|
| No.   | Name    | Destination Phone Number | Bridge Number | ①          | ②      |
| 3   | Office1 | 500                      | 1             | Edit       | Delete |
|   |         |                          |               | Delete All |        |

(This is only an example.)

- ① <Edit> ..... Click to edit the setting on the [Destination Setting] field.
- ② <Delete> ..... Click to delete the selected entries.
  - After clicking <Delete>, the content cannot be recalled.
- ③ <Delete All> ..... Click to delete all the entries.
  - After clicking <Delete All>, the contents cannot be recalled.

### Administrator Password

Set the administrator password.

**Administrator Password**

---

① Username:            admin

② Current Password:   

③ New Password:       

④ New Password (confirm) :

⑤            ⑥

- 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:      | 2014/01/16 11:56 (Etc/UTC) <span style="float: right;">③</span>   |
| ② Manually Set Time: | <input type="text" value="2014"/> / <input type="text" value="01"/> / <input type="text" value="16"/> <input type="text" value="20"/> : <input type="text" value="56"/> (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 <b>DEBUG</b> .....           | Select "Enable" to display the debug information. | (Default: Disable) |
| ② <b>INFO</b> .....            | Select "Enable" to display the INFO messages.     | (Default: Enable)  |
| ③ <b>NOTICE</b> .....          | Select "Enable" to display the NOTICE messages.   | (Default: Enable)  |
| ④ <b>Host IP Address</b> ..... | Enter the SYSLOG host's address.                  |                    |
| ⑤ <b>&lt;Apply&gt;</b> .....   | Click to apply the entries.                       |                    |
| ⑥ <b>&lt;Reset&gt;</b> .....   | 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):**

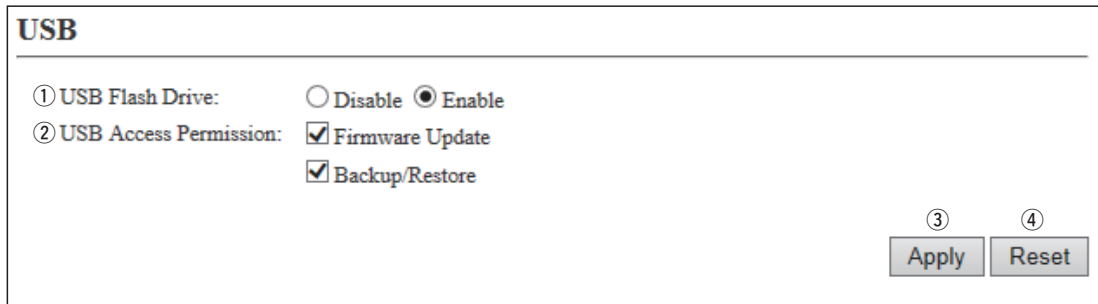
③ **System Location:**

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.



- 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 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.

The screenshot shows a configuration window titled "Traceroute Test". It contains the following elements:

- ① Node:** A text input field for entering an IP address.
- ② Max Hop Count:** A dropdown menu currently set to "16".
- ③ Timeout:** A dropdown menu currently set to "3" with the unit "seconds" next to it.
- ④ DNS Lookup:** Two radio buttons, "Disable" and "Enable", with "Enable" selected.
- ⑤ Traceroute:** A button labeled "Traceroute" with a circled "5" above it.

- 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.

The screenshot shows a window titled "Traceroute Result" with the following text:

```
traceroute to 192.168.61.1 (192.168.61.1) from 172.22.72.61, 16 hops max
 1:  0 ms  0 ms  0 ms  192.168.61.1
```

At the bottom right of the window are two buttons: "Save" and "Back".

(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.



Settings Backup

Save to File:

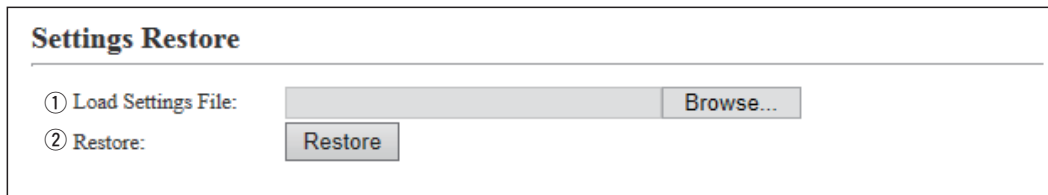
**Save to File** ..... Click <Backup> to save the settings to a PC as a backup file (Extension: sav).  
See the topic below to load the saved file into the IP1000C.

**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.



Settings Restore

① Load Settings File:

② Restore:

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.

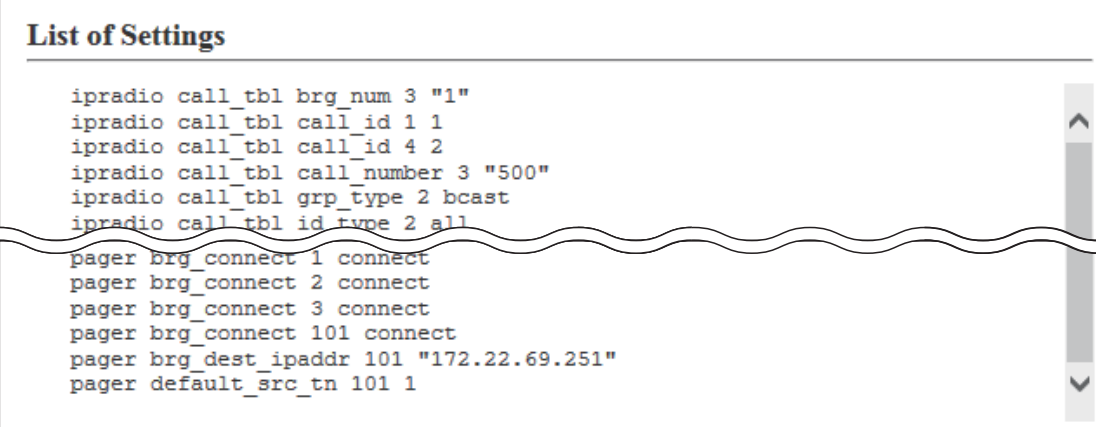
- An SFTP server is required for this function.

- |                                |  |                    |
|--------------------------------|--|--------------------|
| ① <b>Online Settings</b> ..... | Select "Enable" to use this function.  | (Default: Disable) |
| ② <b>Sever Host Name</b> ..... | Enter the SFTP server IP address or FQDN (Fully Qualified Domain Name) up to 128 characters.             |                    |
| ③ <b>Subscriber Name</b> ..... | Enter the SFTP server username up to 128 characters.   |                    |
| ④ <b>Password</b> .....        | Enter the SFTP server password up to 128 characters.   |                    |
| ⑤ <b>Upload</b> .....          | Click to upload the IP1000C's setting file to the SFTP server.   |                    |
| ⑥ <b>Download</b> .....        | Click to download the IP1000C's setting file to the SFTP server.<br>• The IP1000C automatically reboots. |                    |
| ⑦ <b>&lt;Apply&gt;</b> .....   | Click to apply the entries.  |                    |
| ⑧ <b>&lt;Reset&gt;</b> .....   | Click to restore the settings.<br>• You cannot restore after clicking <Apply>.                           |                    |

### ■ List of Settings

Displays the changed settings.

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

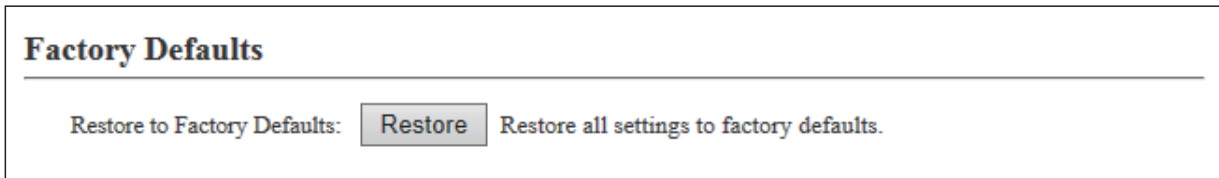


```
List of Settings
-----
ipradio call_tbl brg_num 3 "1"
ipradio call_tbl call_id 1 1
ipradio call_tbl call_id 4 2
ipradio call_tbl call_number 3 "500"
ipradio call_tbl grp_type 2 bcast
ipradio call_tbl id_type 2 all
-----
pager brg_connect 1 connect
pager brg_connect 2 connect
pager brg_connect 3 connect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

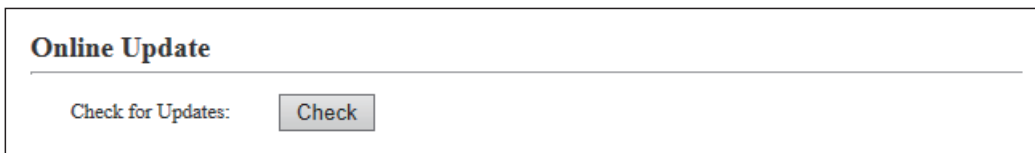
|          |   |
|----------|---|
| IPL:     | Rev. 1  |
| Version: | IP1000C Ver. 1.02 Copyright 2007-2011 Icom Inc. |

(This is only an example.)

## ■ Online Update

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

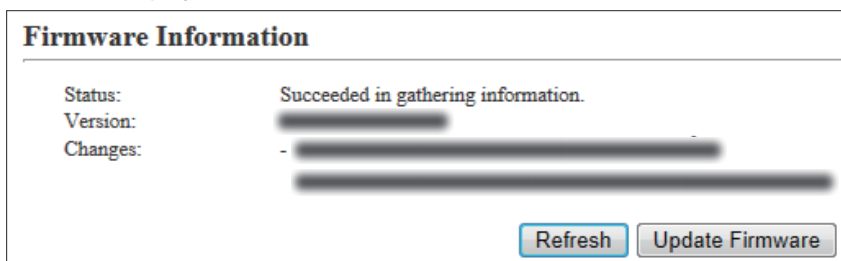
Note: To use this function, an internet connection, DNS and default gateway settings are necessary.



**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.



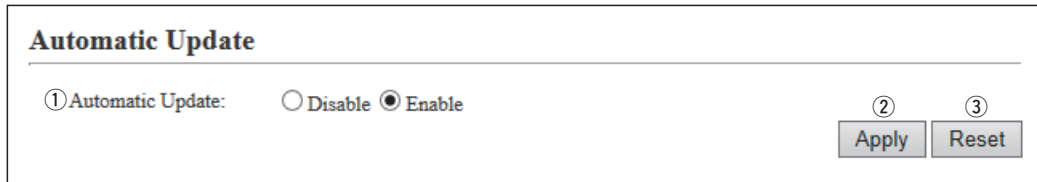
(This is only an example.)

### 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 **Update Firmware using File** ..... Click <Browse...> to select the firmware file (extension: "dat").
  - The selected file appears in the "Update Firmware using File" item.
- ② **Firmware Update** ..... Click <Update> to update the firmware.  
Note: After updating, the IP1000C automatically reboots.

---

|   |      |
|---|------|
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| ■ Saving the setting .....  | 5-2  |
| 2. How to load the saved file to an IP1000C .....                 | 5-3  |
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## 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.

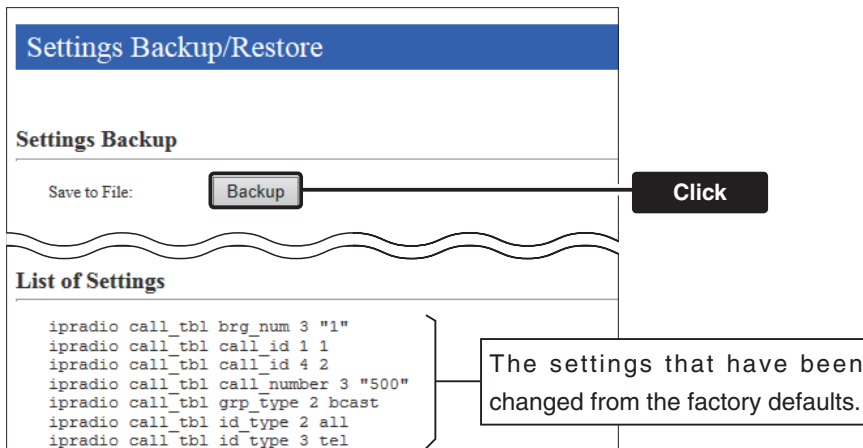
### ■ Saving the setting

**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)

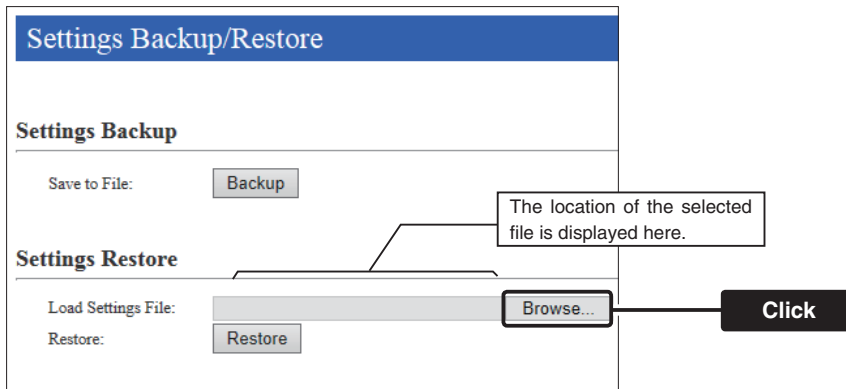
### ■ Reloading the settings file into the IP1000C

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

- The [Settings Backup/Restore] screen appears.

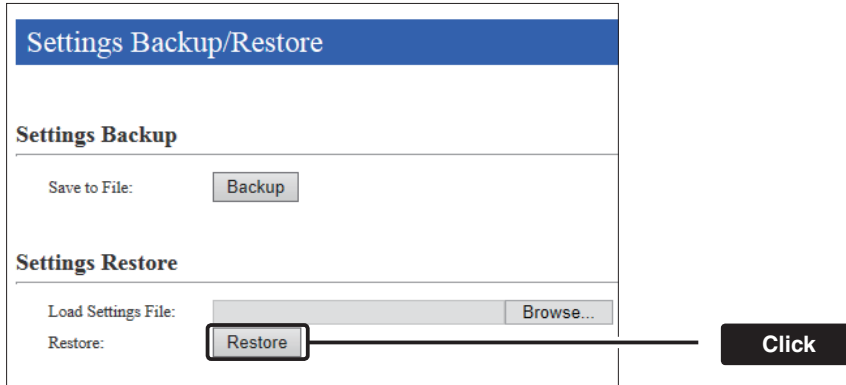
**2** Click <Browse...>.

- 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

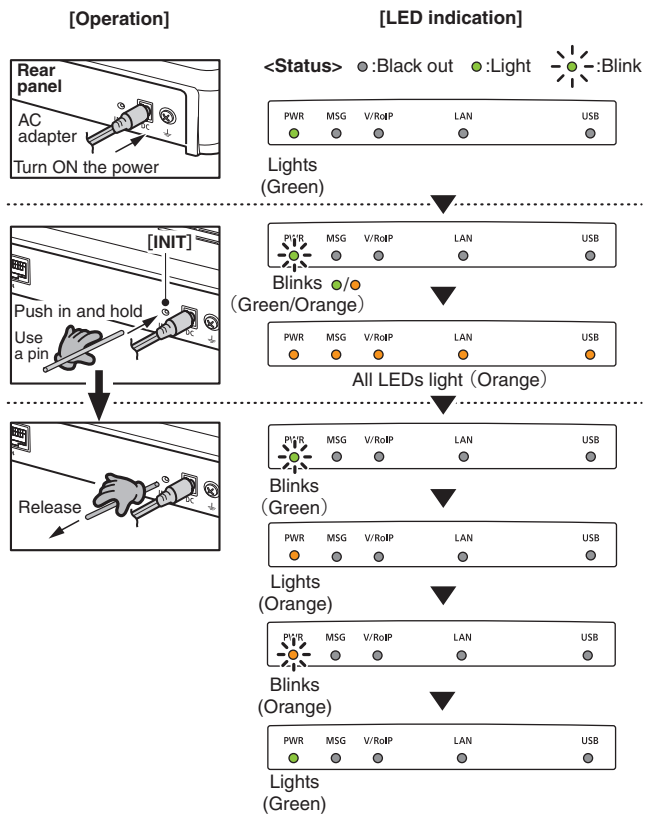
Initializing clears all the settings.

- 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

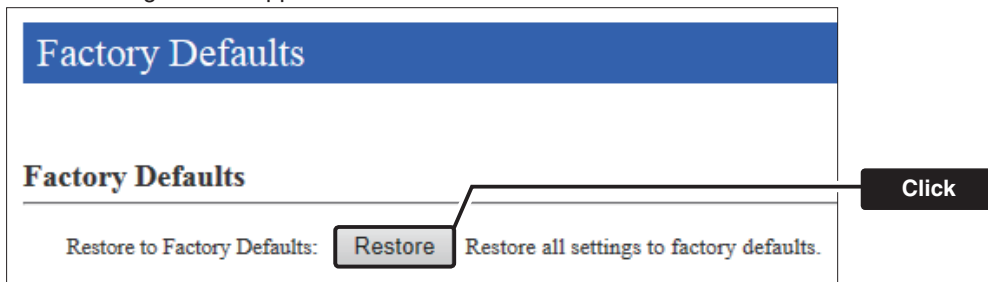
You can restore all the IP1000C's settings. The IP1000C's IP address is set to "192.168.0.1," when initialized. Set the PC's IP address to "192.168.0.xxx." (You can set xxx to any number from 2 to 254.)

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

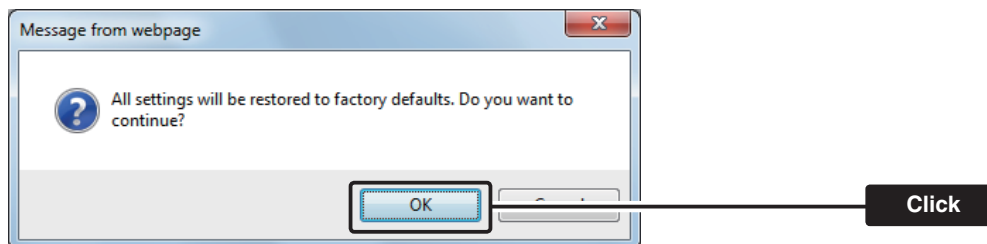
### B: Using the IP1000C's setting screen

- 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.

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

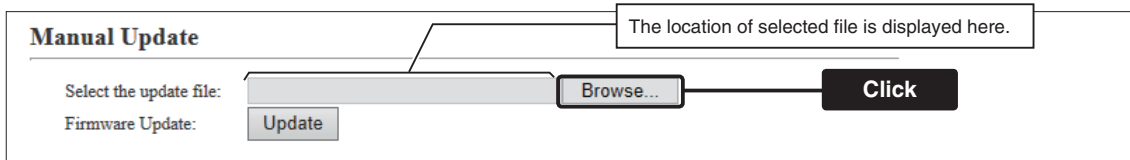
- Restricting access to the setting screen is recommended. (p. 3-2)

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

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

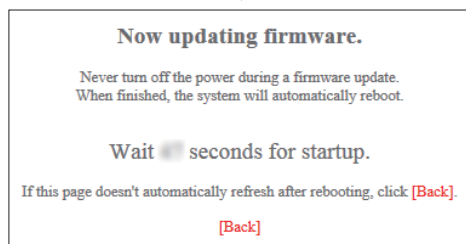
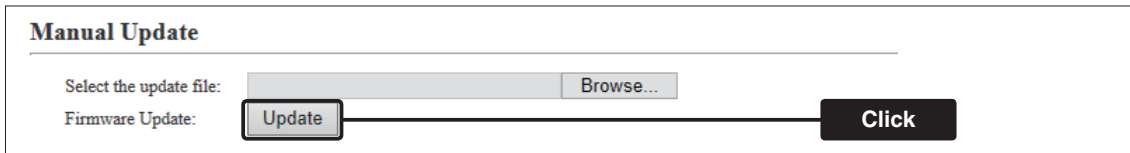
- The [Firmware Update] screen appears.

**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

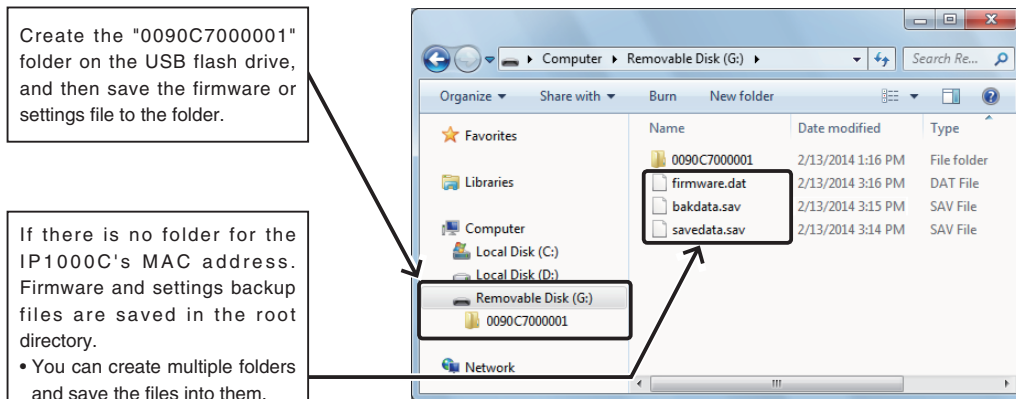
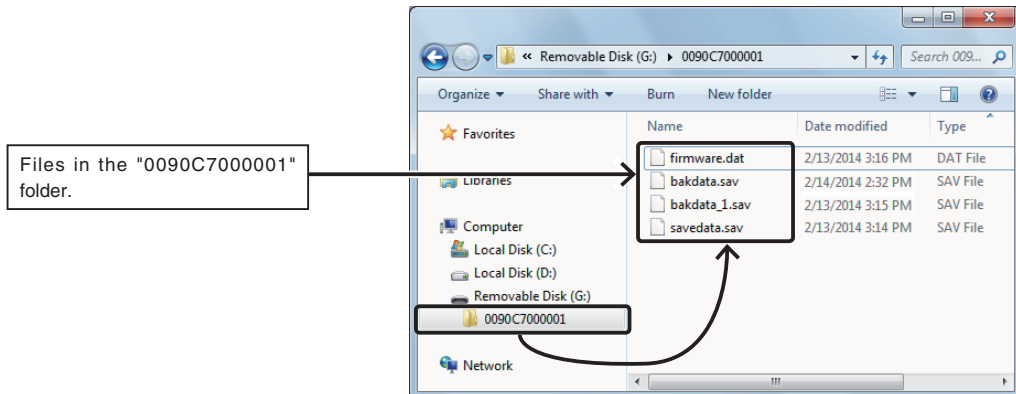


Figure 2



## 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].

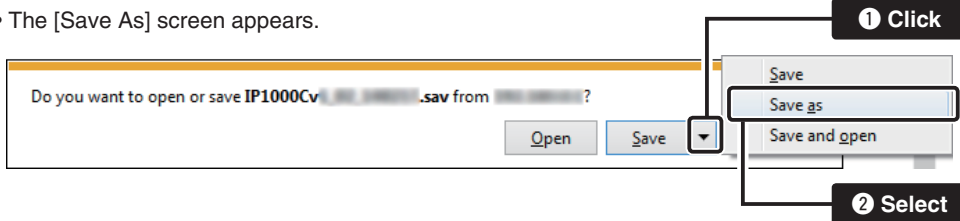
- The [Settings Backup/Restore] screen appears.

**4** Click <Backup>.



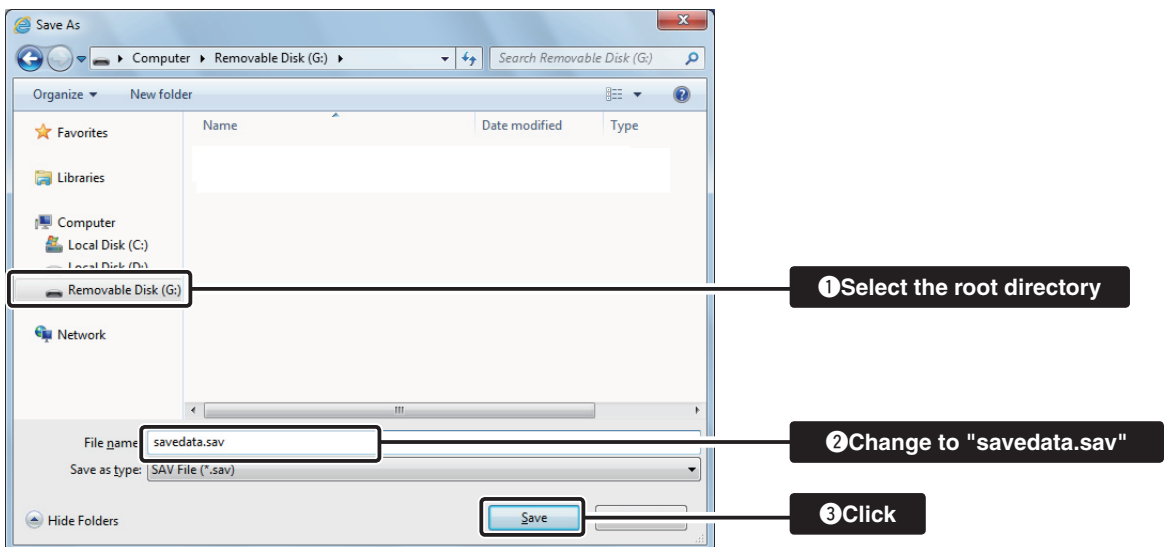
**4** Click "▼" of <Save>, and then select "Save as."

- The [Save As] screen appears.



**5** Select the root directory of the USB flash drive, and save the settings file as "savedata.sav."

- Any other file name is not acceptable.

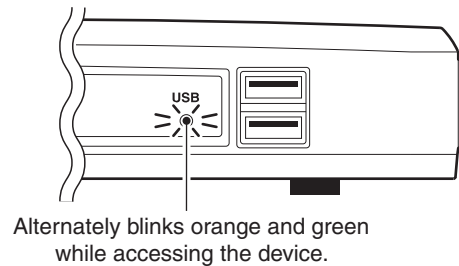
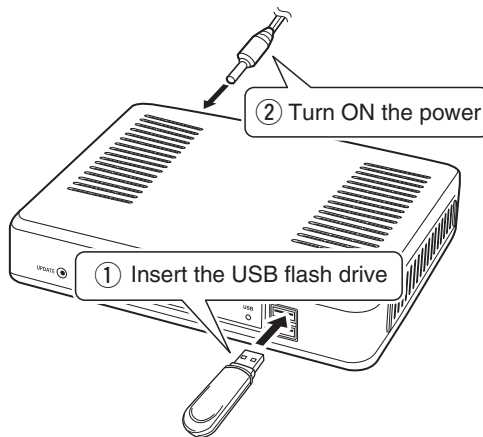


(Continued on the next page.)

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

#### ■ Loading the settings from the USB flash drive

- 1 Remove the USB flash drive from the PC appropriately.
- 2 Prepare the IP1000C to load the settings.
- 3 Turn OFF the power.  
NOTE: Turn OFF the IP1000C's power, before inserting the USB flash drive.
- 4 Insert the USB flash drive, that contains the setting data (savedata.sav), into a [USB] port, and then turn ON the power.
  - While setting data, the [USB] LED alternately blinks orange and green.



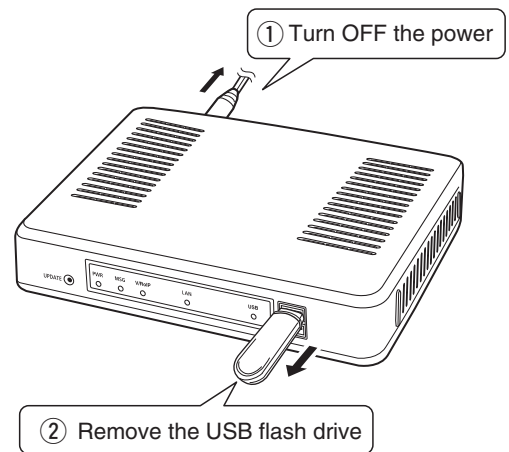
**Note:** NEVER remove the USB flash drive or turn OFF the IP1000C's power, while setting data. It will cause data corruption, or damage the USB flash drive.

(Continued on the next page.)

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

#### Loading the settings from the USB flash drive (continued)

- 5** When the all data has been loaded, the [USB] LED turns OFF, and the IP1000C automatically restarts. Verify that the [PWR] LED lights green, then turn OFF the power. Then remove the USB flash drive from the IP1000C.
- Note: The IP1000C's old setting data is automatically saved in the USB flash drive as "bakdata.sav."
- Note: NEVER remove the USB flash while the IP1000C's power is ON.



**NOTE:**

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

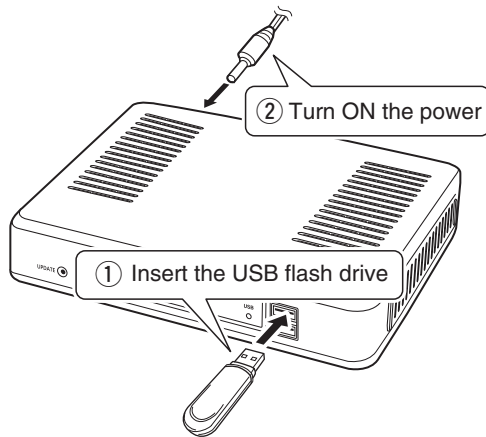
### 7. How to update the firmware using a USB flash drive

The firmware update can be done by using a USB flash drive.

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

#### ■ Updating the firmware

- 1 Download a new firmware (extension: "dat") from Icom website.
- 2 Insert the USB flash drive to the PC.
- 3 Select the root directory of the USB flash drive, and save the firmware file as "firmware.dat."
  - Any of other file name is not acceptable.
  - If you made the folder name is the IP1000C's LAN MAC address (example: "0090C7000001"), save the file to the folder.
- 4 Remove the USB flash drive from the PC appropriately.
- 5 Prepare the IP1000C to update the firmware.
- 6 Turn OFF the power.  
Note: Turn OFF the IP1000C's power, before inserting the USB flash drive.
- 7 Insert the USB flash drive to the [USB] port, and then turn ON the power.
  - While transferring data, the [USB] indicator alternately blinks orange and green.



#### NOTE:

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

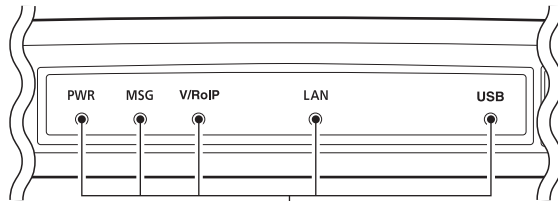
(Continued on the next page.)

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

### Updating the firmware (continued)

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

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

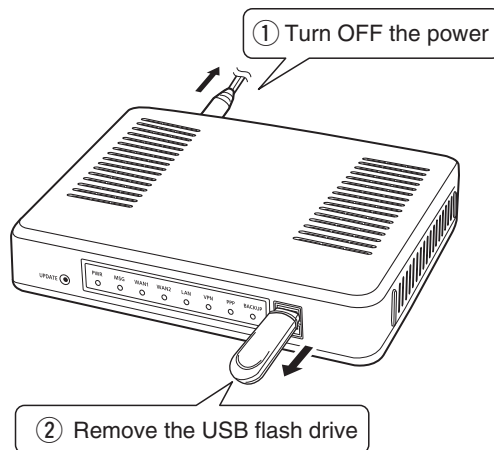


Lights orange while updating the firmware.

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

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

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



**NOTE:**

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

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### 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.**

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- **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.**

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- **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.**

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- **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.**

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- **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**

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- **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)

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

- **The distance between the IP100H and its wireless access point is too far.**
  - Move closer to the access point.
- **The wireless access point does not turn ON.**
  - Turns ON the access point.
- **The wireless LAN setting of the IP100H does not match the access point’s.**
  - Check the wireless LAN settings of the access point.
  - Using the cloning software CS-IP100H, check and modify the wireless LAN settings of the IP100H.
- **In the 5 GHz band operation, the access point is set a stealth SSID setting such as “Refuse ANY.”**
  - Turns OFF “Refuse ANY.”

---

#### The IP100H displays “Setting Error...”

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

- **The provisioning server settings of the IP100H are different than the connected the IP1000C.**
  - Using the cloning software CS-IP100H, check and modify the provisioning server settings.
  - In the IP1000C software, check and modify the provisioning server settings of the IP100H.
- **The IP1000C does not connect to the network.**
  - Check the connections between the IP1000C or Hub and check the LAN cables.

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#### 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.

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#### The IP100H cannot use the Area call function

- **The function setting of the Area Call is set to “Disable.”**
  - Set the “Area Call” item in the Transceiver Settings screen. (p. 4-35)
  - Reboot the IP100H and get the setting from the IP1000C.
  - Push [FUNC] on the IP100H’s front panel, then turn ON the “Area Call” function.
- **The wireless access point that the IP100H connects to in the Area Call, is not set.**
  - Enter the “Area Setting” item in the [Area Call] screen. (p. 4-25)

## 2. How to connect to the IP1000C using Telnet

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

### ■ How to connect

- 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.

- |                                 |  |
|---------------------------------|--|
| <b>Command list</b> .....       | Push the [Tab] key to display the Telnet command list.<br>After typing a Telnet command, push the [Tab] key to display the sub command list.   |
| <b>Command help</b> .....       | After typing "help," enter a command to display the command description.<br>Example: "help save" (the "save" command description is displayed.)  |
| <b>Automatic complement</b> ... | After typing the first few characters of the command, push the [Tab] key. The rest of the characters for the command are automatically entered.<br>Example: "n" + [Tab] -> network<br>Suggested commands are displayed.<br>Example: "res" + [Tab] -> <b>reset, restart</b> |

## 3. Specifications

Note: All specifications are subject to change without notice.

### ■ General

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

### ■ Communication Interfaces

|                            |  |
|----------------------------|--|
| <b>Interface:</b>          | [LAN] port (RJ-45 type) $\times 4$ (Auto MDI/MDI-X) <ul style="list-style-type: none"><li>• IEEE802.3/10BASE-T</li><li>• IEEE802.3u/100BASE-TX</li><li>• IEEE802.3ab/1000BASE-T</li></ul> [CONSOLE] port (RJ-11 type) $\times 1$ <ul style="list-style-type: none"><li>• RS-232C</li></ul> |
| <b>Communication rate:</b> | [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!**



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