ICOM

SATELLITE PTT
IC−SAT100M | NETWORK SETTING

When the transceiver is connected to the network devices, change the static IP address.
Before using the transceiver, setting a static IP address to the antenna unit and the main unit with EX-4241Utility for IC-SAT100M.
This manual shows system requirements and how to use the software.

Table of contents

System requirements

The following hardware and software are required:

Operating System (OS)
- Microsoft Windows 10 (32/64bit)
- Microsoft Windows 8.1 (32/64bit)*
  *Except for Microsoft Windows RT.

ⓘ The instructions are based on using Microsoft Windows 10.

Cables (Purchase separately)
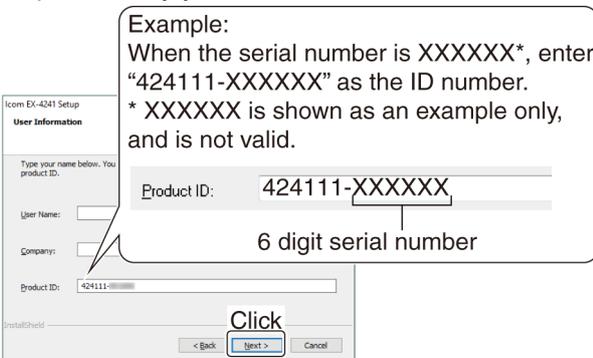- OPC-2357 PROGRAMMING CABLE

Operation note

- The contents of this sheet, the software associated with the EX-4241, and the appearance of the EX-4241 are all subject to change without notice.
- The displays, indications, or operations may differ slightly, depending on your system settings, type of OS, and its service pack level.
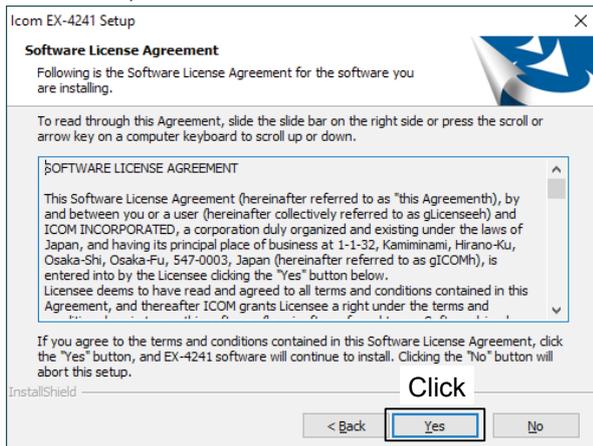
Installing the EX-4241

1. Sign in to the PC as the administrator.
   ⓘ Confirm that no other applications are running.
2. Download and unzip the file.
3. Double-click "setup.exe."
   ⓘ If the "User Account Control" dialog is displayed, click <Yes>.
   • "Choose Setup Language" is displayed.
4. On the "Welcome to the InstallShield Wizard for EX-4241" screen, click <Next>>.

Icom EX-4241 Setup

Welcome to the InstallShield Wizard for EX-4241

The InstallShield Wizard will install EX-4241 on your computer. To continue, click Next.
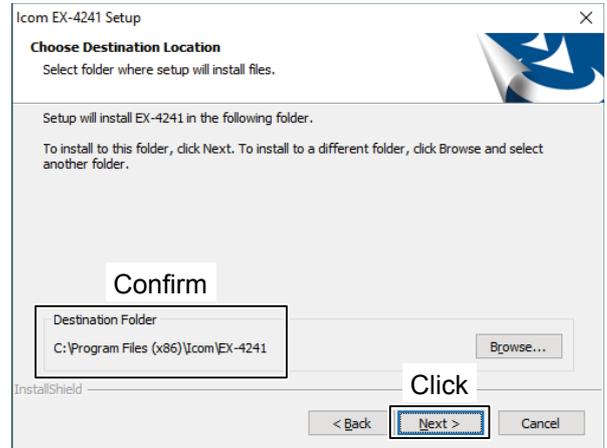
Click
< Back | Next > | Cancel
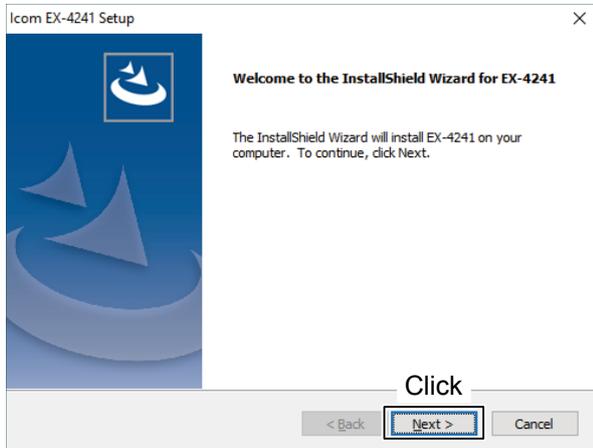
5. "User Information" is displayed. Enter your name (option), your company name (option), and the product ID number as described below. Click <Next >>.
   • Product ID number: 424111-(6 digit serial number)
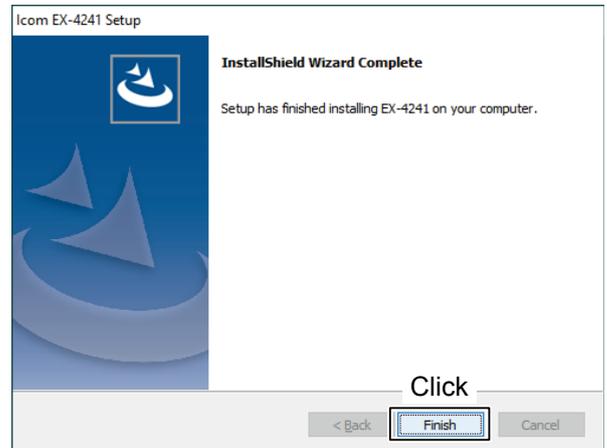   • If you downloaded the software, enter the ID provided by your distributor.

Example:
When the serial number is XXXXXX*, enter "424111-XXXXXX" as the ID number.
* XXXXXX is shown as an example only, and is not valid.

Product ID: 424111-XXXXXX

6 digit serial number

Icom EX-4241 Setup
User Information

Type your name below. You product ID.

User Name:

Company:

Product ID: 424111-▆▆▆▆

Click
< Back | Next > | Cancel

6. "Software License Agreement" is displayed. Read carefully, and if you agree to the terms and conditions, click <Yes>.

Icom EX-4241 Setup

Software License Agreement

Following is the Software License Agreement for the software you are installing.

To read through this Agreement, slide the slide bar on the right side or press the scroll or arrow key on a computer keyboard to scroll up or down.

SOFTWARE LICENSE AGREEMENT

This Software License Agreement (hereinafter referred to as "this Agreement"), by and between you or a user (hereinafter collectively referred to as gLicenseeh) and ICOM INCORPORATED, a corporation duly organized and existing under the laws of Japan, and having its principal place of business at 1-1-32, Kamiminami, Hirano-Ku, Osaka-Shi, Osaka-Fu, 547-0003, Japan (hereinafter referred to as gICOMh), is entered into by the Licensee clicking the "Yes" button below.
Licensee deems to have read and agreed to all terms and conditions contained in this Agreement, and thereafter ICOM grants Licensee a right under the terms and

If you agree to the terms and conditions contained in this Software License Agreement, click the "Yes" button, and EX-4241 software will continue to install. Clicking the "No" button will abort this setup.

Click
< Back | Yes | No

7. On the "Choose Destination Location" screen, click <Next>>.
   ⓘ If desired, click <Browse...> and select another destination folder before clicking <Next >>.

Icom EX-4241 Setup

Choose Destination Location
Select folder where setup will install files.

Setup will install EX-4241 in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Confirm

Destination Folder
C:\Program Files (x86)\Icom\EX-4241   Browse...

InstallShield
Click
< Back | Next > | Cancel

8. After the installation has completed, click <Finish>.

Icom EX-4241 Setup

InstallShield Wizard Complete

Setup has finished installing EX-4241 on your computer.

Click
< Back | Finish | Cancel

9. A "EX-4241" folder is created in the Windows Start menu, and a shortcut icon is added onto the desktop.

ICOM
EX-4241

TIP:
You can uninstall the EX-4241 using the "Apps & features" in the "Apps" menu.
To get started, click on Start > Settings > Apps > Apps & features.

2

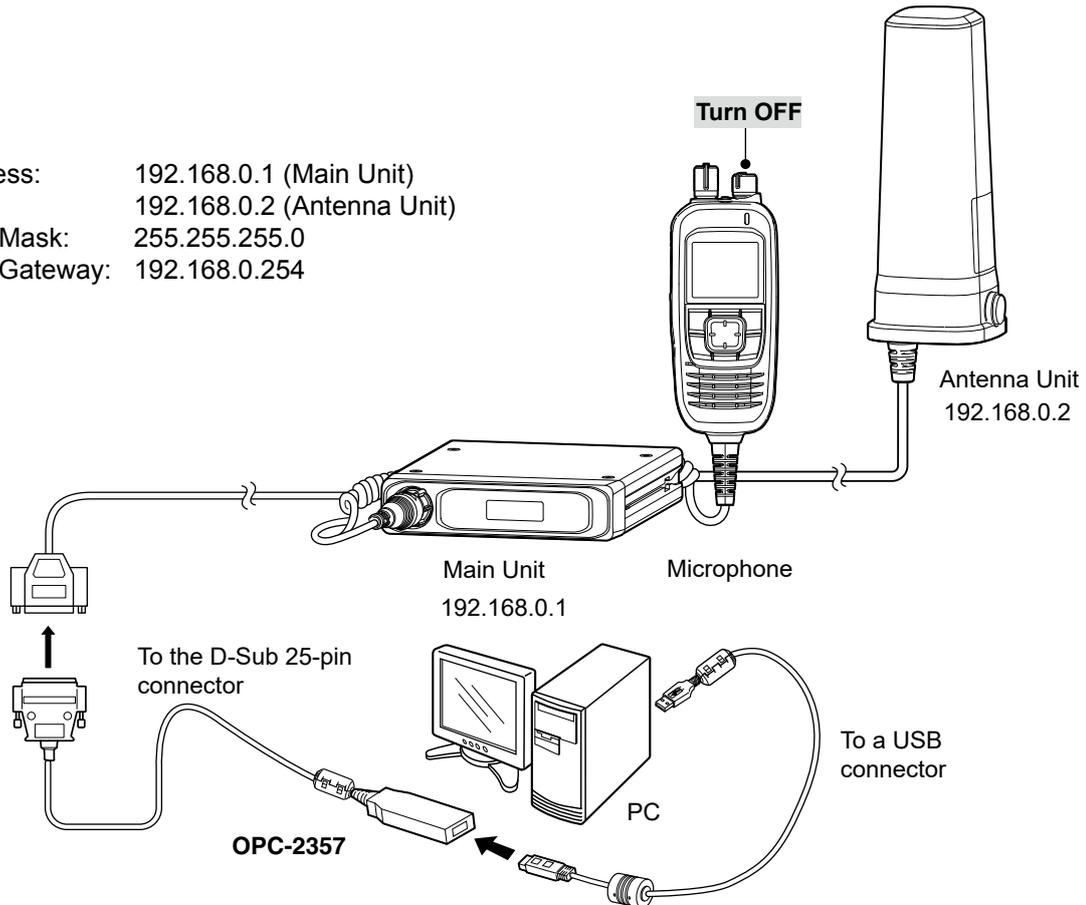## Before connecting the OPC-2357 to the PC

To use the OPC-2357 PROGRAMMING CABLE, you must first install a USB driver.
The driver and installation guide are supplied with the programming cable.
Read the guide carefully before installing the driver.

Connecting with PC

1. Be sure the transceiver is OFF, and Windows has completed its startup.
2. Connect the cable, as shown below.
3. Turn ON the transceiver.

Default
IP address: 192.168.0.1 (Main Unit)
                      192.168.0.2 (Antenna Unit)
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.0.254

Turn OFF

Antenna Unit
192.168.0.2

Main Unit
192.168.0.1

Microphone

To the D-Sub 25-pin
connector

To a USB
connector

OPC-2357

PC

Editing Network Setting

NOTE:
- To prevent data loss, you should first read all the transceiver's setting data into the EX-4241. Before editing or entering, make a backup file onto your PC. A backup file enables easy restoring even if the setting data in the transceiver is accidentally deleted. After that, enter or edit parameters using the EX-4241. If you write the setting data into your transceiver before reading, the settings are overwritten.
  See page 5 to read the data from the transceiver settings and to save the settings file.
- **DO NOT** turn OFF the transceiver or the PC, and **DO NOT** disconnect the cable while reading or writing setting data. Otherwise, the data could be lost or deleted.

1. Click "EX-4241" in the Start menu, and then click "EX-4241" to start the software.
   - Microsoft® Windows® 8.1:
     <Start> ➔ ⊕ ➔ EX-4241
   - ⓘ You can also start the software by simply double-clicking the EX-4241 shortcut icon on the desktop.
2. Click "Port Select" from the <COM Port> menu, and then select the COM port number that the programming cable is connected to.
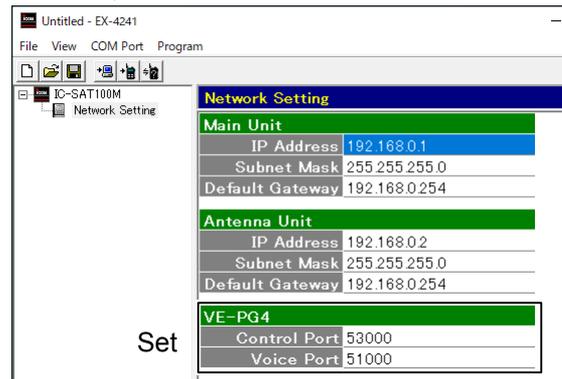
   ❶ Click
   ❷ Select
   ❸ Click
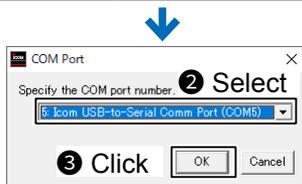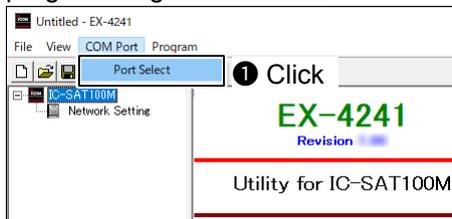
3. Click 🔳, or select "Read ← TR" in the <Program> menu to read the data from the setting data.
4. Click "Network Settings" and set the IP address, Subnet Mask, and Default Gateway for the IC-SAT100M Main Unit and Antenna Unit.

   ❶ Click   ❷ Set

Network Setting	
Main Unit	
IP Address	192.168.0.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.254
Antenna Unit	
IP Address	192.168.0.2
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.254
VE-PG4	
Control Port	53000
Voice Port	51000
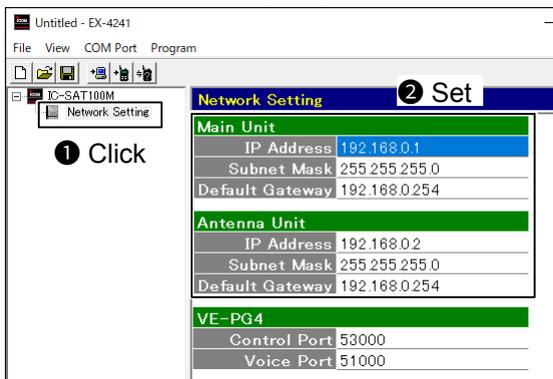
   ⓘ This is a default setting.

5. When registering two or more IC-SAT100M to VE-PG4, set the Control Port and Voice Port.

   Set

 | Network Setting | |
   | --- | --- |
   | **Main Unit** | |
   | IP Address | 192.168.0.1 |
   | Subnet Mask | 255.255.255.0 |
   | Default Gateway | 192.168.0.254 |
   | **Antenna Unit** | |
   | IP Address | 192.168.0.2 |
   | Subnet Mask | 255.255.255.0 |
   | Default Gateway | 192.168.0.254 |
   | **VE-PG4** | |
   | Control Port | 53000 |
   | Voice Port | 51000 |

6. Click 🔳, or select "Write → TR" in the <Program> menu to write the setting data into the transceiver.

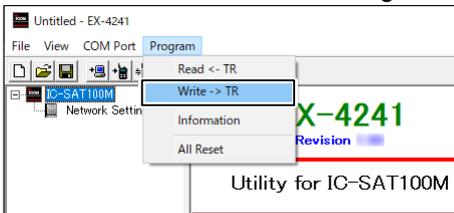## ◇ About basic operation

To read the data from the transceiver

Select "Read ← TR" in the <Program> menu.
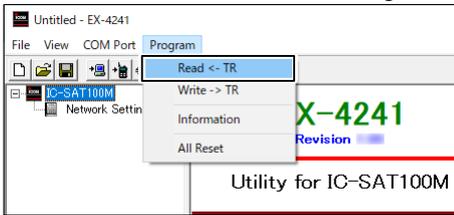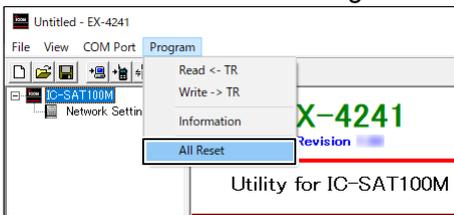

To write the setting data into the transceiver

Select "Write → TR" in the <Program> menu.

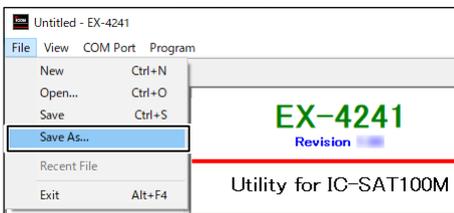
To reset to the transceiver default settings

Select "All Reset" in the <Program> menu.

ⓘ Connect the Main Unit and the Antenna Unit, as shown in the illustration on page 3.
ⓘ If you select "All Reset," the settings on the IC-SAT100M Menu screen is also initialized.

To save the settings file to a folder on your PC

Select "Save" or "Save As..." in the <File> menu.

ⓘ If you have a data file to write to the transceiver, select "Open..." in the <File> menu, and then select the file.

◇ COM Port Searching

To Confirm the COM port number

1. Click the folder icon on the taskbar.

   Click

2. Right-click "This PC," and then click "Properties."

   ❶Right-click
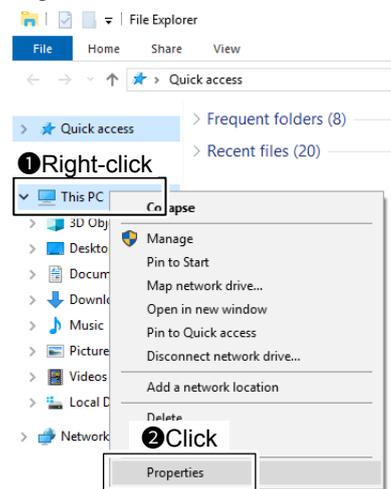
   ❷Click

3. Click [Device Manager].
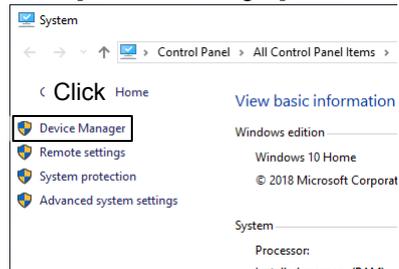
   • The "Device Manager" screen is displayed.

4. Double-click "Ports (COM & LPT)."

   ❶Double-click

   Icom USB-to-Serial Comm Port (COM5)

   ❷Confirm
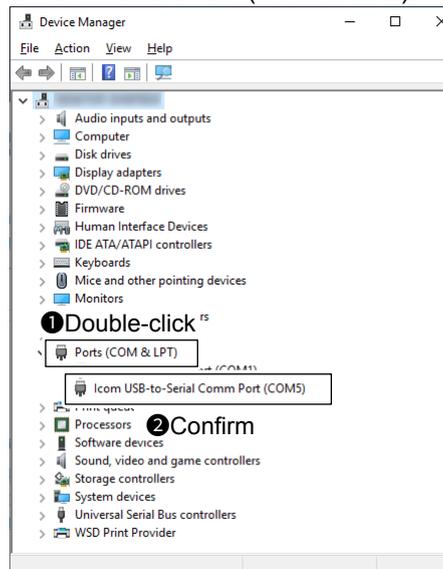
Connecting with the network devices

After changing the IP address of the IC-SAT100M, connect the black LAN cable (for network) and the network devices such as a HUB.

Black: for network
Gray: for the Antenna Unit

HUB

To network

LAN cable
(Purchase separately)
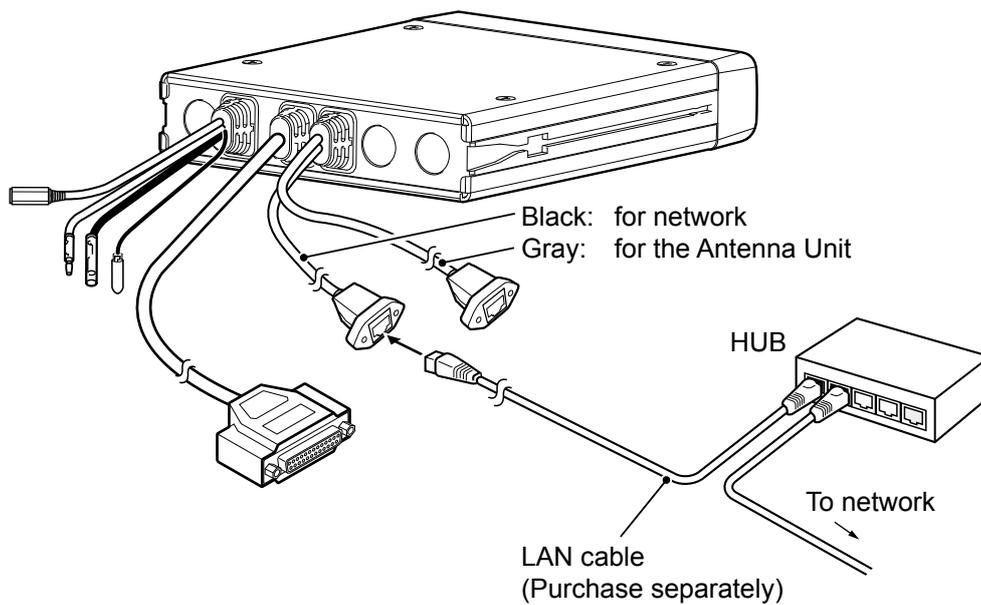
NOTE: Connect the gray LAN cable and the Antenna Unit.

Connecting the VE-PG4

The following is an example of connecting the RoIP Gateway and Satellite PTTs (IC-SAT100M), that enables you to make a call between an IP transceiver and a client Satellite PTT in the set Talkgroup on the RoIP Gateway.

• Each IC-SAT100M connected to the RoIP Gateway is required to be assigned a fixed unique group ID.
• Enter only one fixed Talkgroup to the IC-SAT100M.
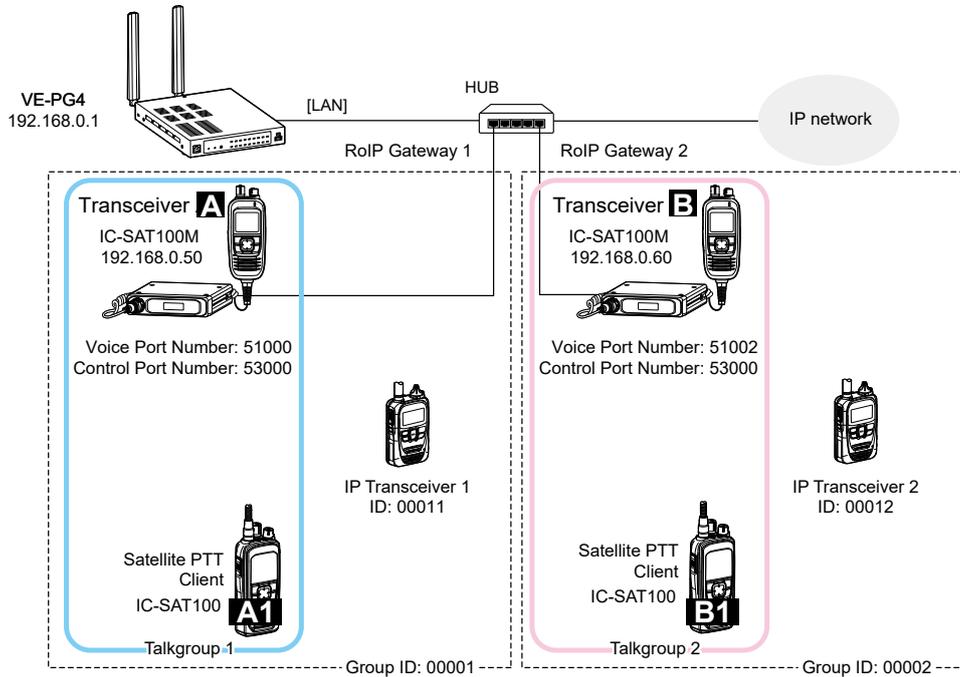
ⓘ **Information**
If you want to use the Emergency Call function:
Connect another IC-SAT100M to the [RoIP Gateway] port for the emergency calls.
Setting Example: Talkgroup 1 (for usual calls):   Uses the IC-SAT100M (IP address: 192.168.0.50)
Talkgroup 15 (for emergency calls): Uses the IC-SAT100M (IP address: 192.168.0.70)

Before connecting the IC-SAT100M to your network:
• On the IC-SAT100M, select "TCP" in the PC Command setting.
  ([OK] > Function > PC Command)
• Check your network configuration and settings, and then ask your dealer to enter the fixed IP addresses, subnet mask, and default gateway addresses to the IC-SAT100M main units and the antenna units.
• Be sure to enter the IP addresses of your IC-SAT100Ms (Main units) to the VE-PG4.

IC-SAT100M default settings

| IC-SAT100M (Main unit)	IP address	192.168.0.1
	Subnet mask	255.255.255.0
	Default gateway	192.168.0.254
Antenna unit	IP address	192.168.0.2
	Subnet mask	255.255.255.0
	Default gateway	192.168.0.254
VE-PG4	Control Port Number	53000
	Voice Port Number	51000

• When connecting two or more IC-SAT100Ms to the VE-PG4, do not conflict the Voice Port Number settings.
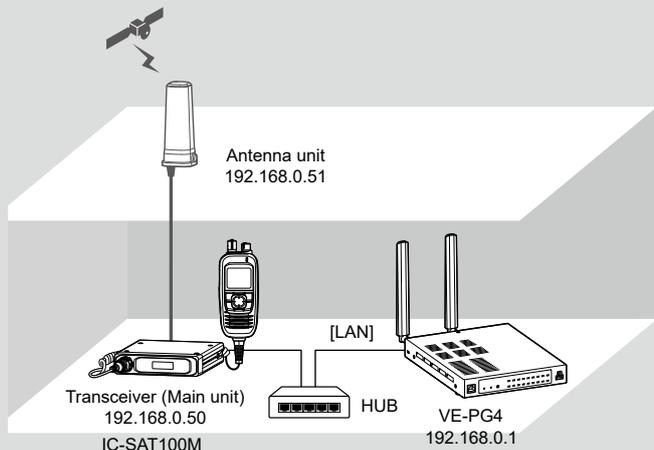
◇ **Connecting to the IP Network**

Connect to the network, and then set up the connection and desttination settings on the RoIP Gateway setting screen.

ⓘ This instruction describes as the IP transceiver setup has been completed.
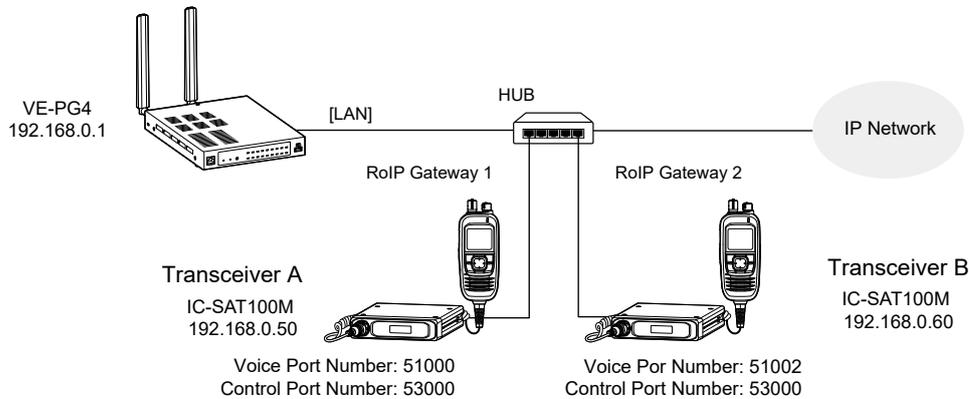
1. Open the RoIP Gateway screen.
   (Connection Port Settings > RoIP Gateway)
2. In [RoIP Gateway Mode], set Mode to "Transceiver" in the RoIP Gateway (1 ~ 8) that you want to connect the Transceiver A (IC-SAT100M) to. (Example: RoIP Gateway 1)

3. In [RoIP Gateway], select a RoIP Gateway port (1 ~ 8) that you set in the step 2, and then confirm that the [Transceiver Model] is set to "IC-SAT100M." (Example: RoIP Gateway 1)

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◇ Connecting to the IP Network

4. In [Transceiver Connection], enter the Transceiver A (IC-SAT100M) settings to Destination Address, Destination Port Number, and Control Port Number. Then click <Apply>.

Transceiver Connection   ❶ Enter

Destination Address :   192.168.0.50
Destination Port Number :   51000
Control Port Number :   53000
Connection Status :   Disconnected Connect   Refresh

TX Volume :   0   ⌄ dB
RX Volume :   0   ⌄ dB
                                        Apply   Reset

❷ Click

5. In [Transceiver Connection], click <Connect>.
   • Connection Status changes to "Connecting."

Transceiver Connection

Destination Address :   192.168.0.50
Destination Port Number :   51000
Control Port Number :   53000
Connection Status :   Disconnected Connect   Refresh

❶ Click

Transceiver Connection

Destination Address :   192.168.0.50
Destination Port Number :   51000
Control Port Number :   53000
Connection Status :   Connecting   Connect   Refresh

❷ Confirm

6. Do the same way in the steps 2 to 5, enter the Transceiver B (IC-SAT100M) settings.

◇ Entering the Destination Settings

ⓘ This instruction describes as the IP transceiver setup has already been completed.
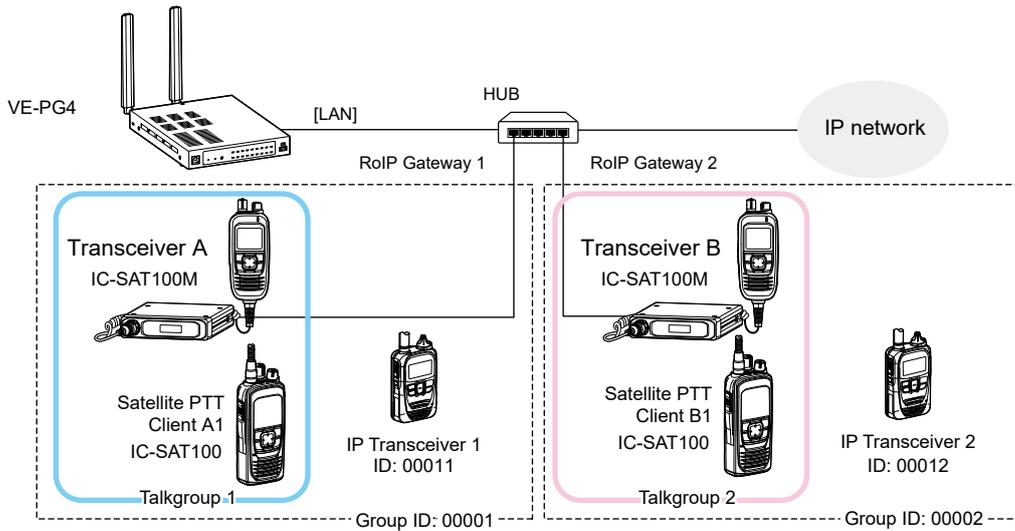
1. Open the Destination Settings screen.
   (Destination Settings > Destination Settings)
2. In [Destination Settings], enter the settings for the Transceiver A (Name, Call Type, Destination ID, and IP Transceiver Controller), and then click <Apply>.

3. Do the same way in the step 2, enter the Group 00002 settings.

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Icom Inc.

Count on us!

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