

Even if you cannot access a D-STAR repeater, you can make Gateway calls with the DV Gateway function.

The function has 2 modes, the Terminal mode and the Access Point mode.

① Other stations can also directly communicate using the DV Gateway function, only if they use call sign routing.

① When using the DV Gateway function, you cannot make a direct Local Area call.

① D-STAR (Digital Smart Technology for Amateur Radio) is a digital radio protocol developed by JARL (Japan Amateur Radio League).

In this document, the following transceivers are described.

ID-5200A/ID-5200E

① The ID-5200A/ID-5200E is used as an example.

① The ID-5200A/ID-5200E can simultaneously receive the Normal mode and the Terminal mode in the Dualwatch function.

IMPORTANT:

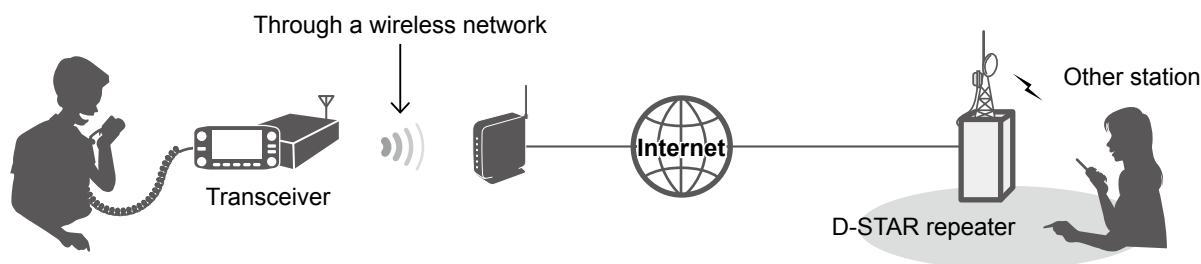
- Before operating in the Terminal mode or the Access Point mode, **BE SURE** to check your local regulations or laws.
- Register your call sign (MY) at a gateway server.*
- Register the Terminal/AP call sign that is set in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I application software with the RS-RP3C GATEWAY CONTROL SOFTWARE as the access point.*

* Ask the gateway repeater administrator for details.

Terminal mode

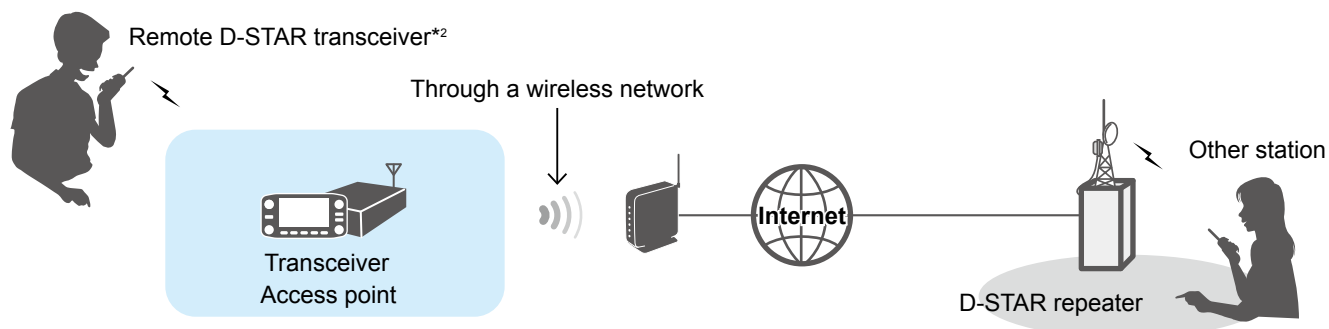
The Terminal mode enables you to make Gateway calls through the Internet.

In the Terminal mode, the transceiver does not transmit or receive RF signals through the antenna.



Access Point mode

The Access Point mode enables you to use another D-STAR transceiver and remotely*¹ make Gateway calls through an Access Point transceiver.



*¹ Within the transmit and receive range of the Access point transceiver. The range will vary, depending on the operating environment.

*² Any model as long as the transceiver is D-STAR capable. Only one D-STAR transceiver can access the Access Point at a time.

NOTE: When using the DV Gateway function

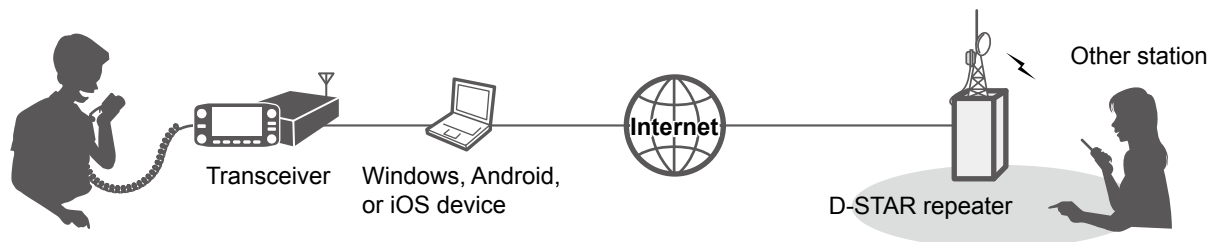
- When operating in the Access Point mode, you need 2 call signs. One for the Access Point transceiver and one for the Remote D-STAR transceiver. (p. 7)
- You need an Internet connection with an IPv4 Global IP address. If you use a cellular system, you need an IPv4 Global IP address assigned to your Windows, Android, or iOS device.

■ When using the External Gateway function

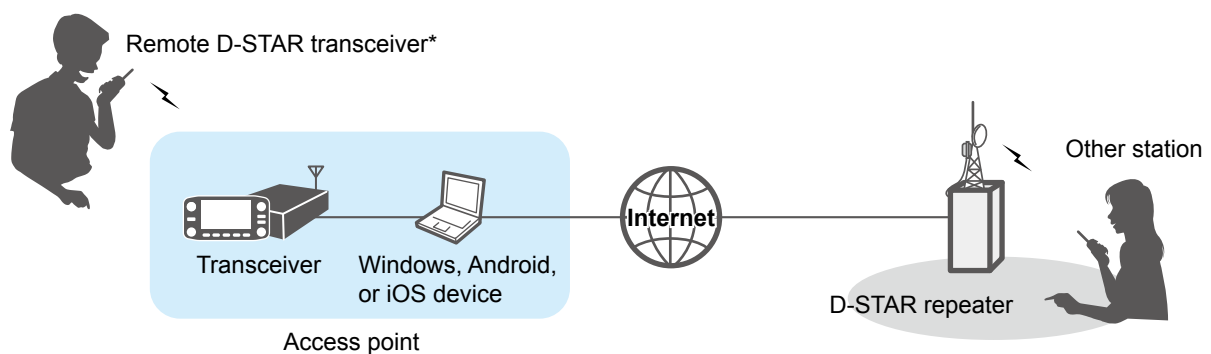
Even if you cannot connect the transceiver to the Internet directly, or you want to use a cellular system, you can use the DV Gateway function by using a Windows, Android, or iOS device that is running the RS-MS3W, RS-MS3A, or RS-MS3I application software.

① See page 3 for the combination of the transceiver and USB cable or Bluetooth.

Terminal mode



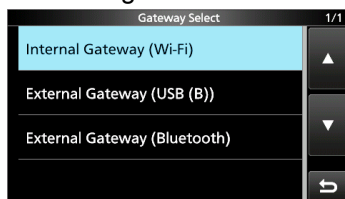
Access Point mode



* Any model as long as the transceiver is capable of D-STAR. Only one D-STAR transceiver can access the Access Point at the same time.

Set “Gateway Select” to “External Gateway”

1. Open the “Gateway Select” screen.
[MENU] > DV GW > **Gateway Select**
2. Touch “External Gateway (USB (B))” or “External Gateway (Bluetooth),” depending on your connecting method.



External Gateway (USB (B)):

Connects the transceiver to a Windows or Android device using a USB cable.

External Gateway (Bluetooth):

Connects the transceiver to an Android or iOS device using Bluetooth.

■ About the transceivers

In this document, using the following transceivers is described.

System requirements	ID-5200A ID-5200E
Internal Gateway function	
Wireless LAN	○
Wired LAN	N/A
Gateway function (External)	
Transceiver connector type	Type-C
(1) RS-MS3W (For Windows PCs)	
Cables for USB connection	Optional OPC-2480 or User-supplied USB cable
(2) RS-MS3A (For Android devices)	
USB connection	○
Cables for USB connection	User-supplied USB cable*
Bluetooth connection	○ (Application version 1.40 or later)
(3) RS-MS3I (For iOS devices)	
Bluetooth connection	○

N/A: Not Applicable

* The OPC-2418 cannot be used.

NOTE: When you use a PC, download the USB driver and the installation guide from the Icom website. When using a USB cable, enter the transceiver's model name into the Search box in the site.

Icom website

<https://www.icomjapan.com/support/>

■ System requirements

(As of August 2026)

Software / Application	System requirements
When you use a PC RS-MS3W	Operating system Microsoft Windows 11 (64 bit) ① Except for Windows on ARM. USB port A USB 1.1 or USB 2.0
When you use an Android device RS-MS3A	Data device for Android - Android version 8.0 or later The RS-MS3A has been tested with Android 8.x, 9, 10, 11, 12, 13, 14, 15, and 16. - USB host function on the Android device ① The USB host function is needed to use a USB device with an Android device. To check whether or not your Android device has the USB host system, ask the Android device's manufacturer. - Bluetooth function on the Android device
When you use an iOS device RS-MS3I	Data device for iOS - iOS version 15 or later, iPadOS version 15 or later The RS-MS3I has been tested with iOS 15, 16, 17, 18, and 26, and iPadOS 15, 16, 17, 18, and 26. - Bluetooth function on the iOS device

① Display indications may differ, depending on the PC, Android, or iOS device's OS.

① In addition to this document, read the RS-MS3W, RS-MS3A, or RS-MS3I instruction manual. They can be downloaded from the Icom website.

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1 Preparation

■ About the Terminal and Access Point (AP) call sign

◇ When operating in the Terminal mode

IMPORTANT:

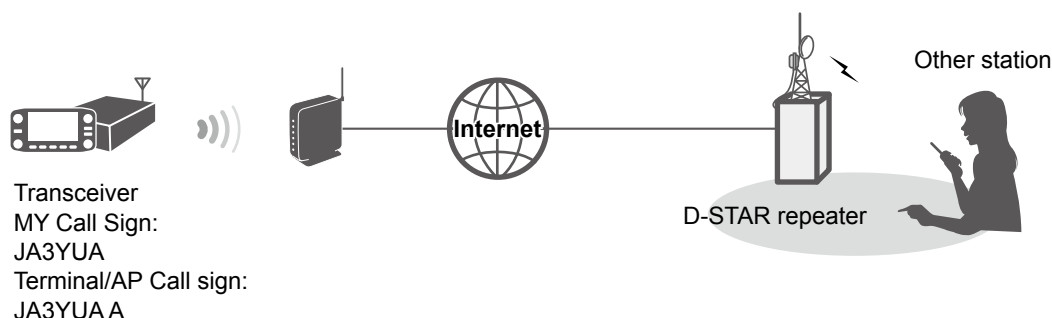
- Register your call sign (MY) at a gateway server.*
- Register the Terminal/AP call sign that is set in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I application software with the RS-RP3C REPEATER GATEWAY SOFTWARE as the access point.*
- * Ask the gateway repeater administrator for details.

① Information

- The Terminal/AP call sign should be 8 characters long. Enter spaces between MY call sign and the 8th character.
- Enter a unique ID suffix between A and Z, except for G, I, and S, at the end of MY call sign for the 8th character.
- Call signs shown below are just examples.

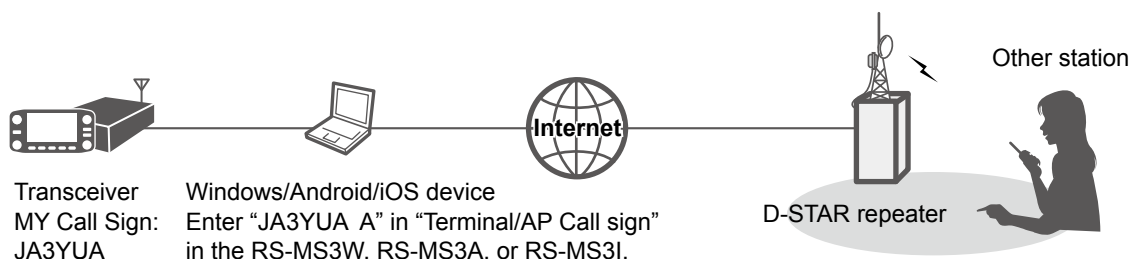
When using the Internal Gateway function:

Enter the Terminal call sign in “Terminal/AP Call sign” in the transceiver. (p. 14)
([MENU] > DV GW > Internal Gateway Settings > **Terminal/AP Call sign**)



When using the External Gateway function:

Enter the Terminal call sign in “Terminal/AP Call sign” in the RS-MS3W, RS-MS3A, or RS-MS3I.



NOTE for your own call sign on the Terminal mode:

You can set your own call sign in the Terminal mode. ([MENU] > SET > My Station > **My Call Sign (TM)**)

① As the default, “Same as Normal DV” is selected. ([MENU] > SET > My Station > **My Call Sign**)

① If you edit My Call Sign (TM), your own call sign will also be changed.

1 Preparation

■ About the Terminal and Access Point (AP) call sign

◇ When operating in the Access Point mode

IMPORTANT:

- Register your call sign (MY) at a gateway server.*
- Register the Terminal/AP call sign that is set in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I application software with the RS-RP3C REPEATER GATEWAY SOFTWARE as the access point.*

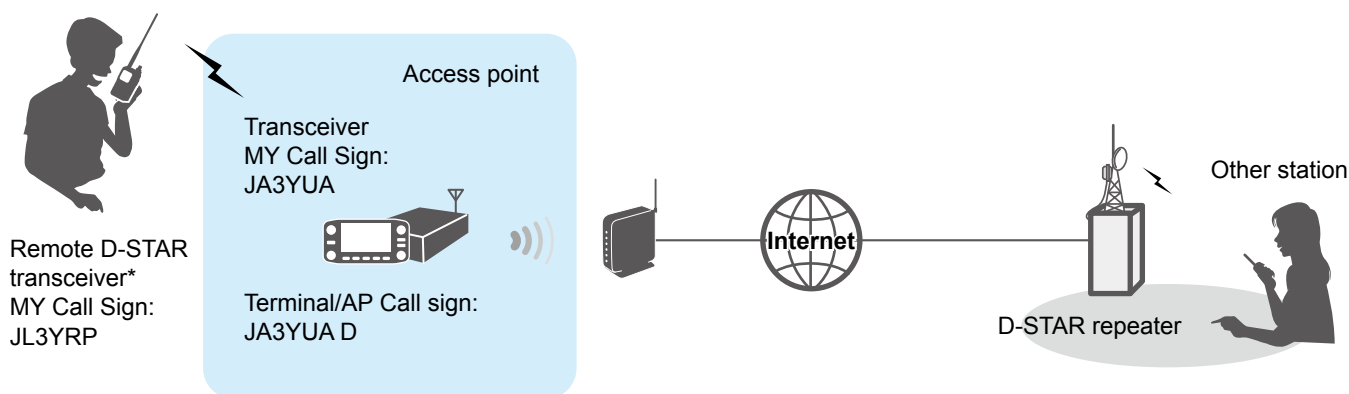
* Ask the gateway repeater administrator for details.

① Information

- The Terminal/AP call sign should be 8 characters long. Enter spaces between Access Point (AP) transceiver's MY call sign and the 8th character.
- Enter a unique ID suffix between A and Z, except for G, I, and S, at the end of MY call sign for the 8th character.
- Call signs shown below are just examples.

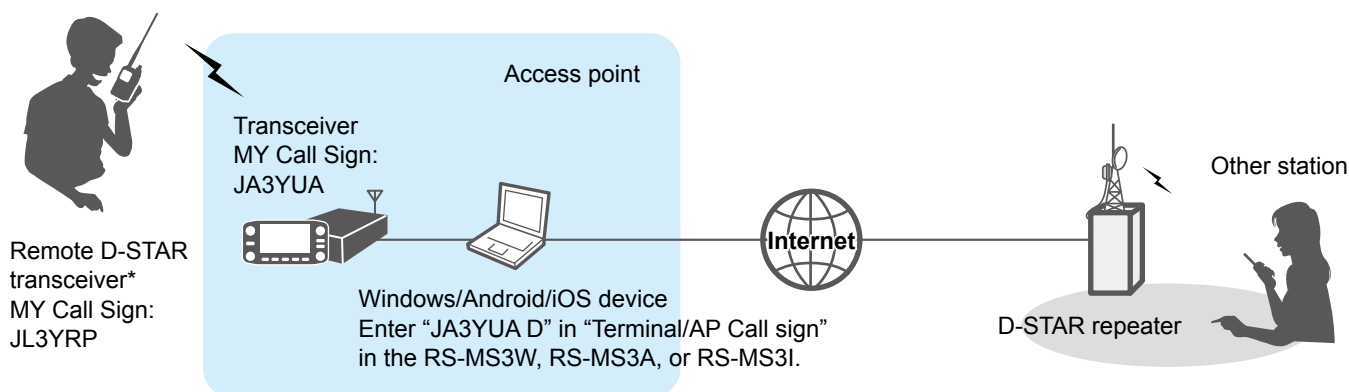
When using the Internal Gateway function:

Enter the AP call sign in "Terminal/AP Call sign" in the transceiver. (p. 14)
([MENU] > DV GW > Internal Gateway Settings > **Terminal/AP Call sign**)



When using the External Gateway function:

Enter the AP call sign in "Terminal/AP Call sign" in the RS-MS3W, RS-MS3A, or RS-MS3I.



* Any model as long as the transceiver is capable of D-STAR.
Only one D-STAR transceiver can access the Access Point at the same time.

1 Preparation

■ Setting up a network

Before using the DV Gateway function, you have to set up a network.

When using the Internal Gateway function

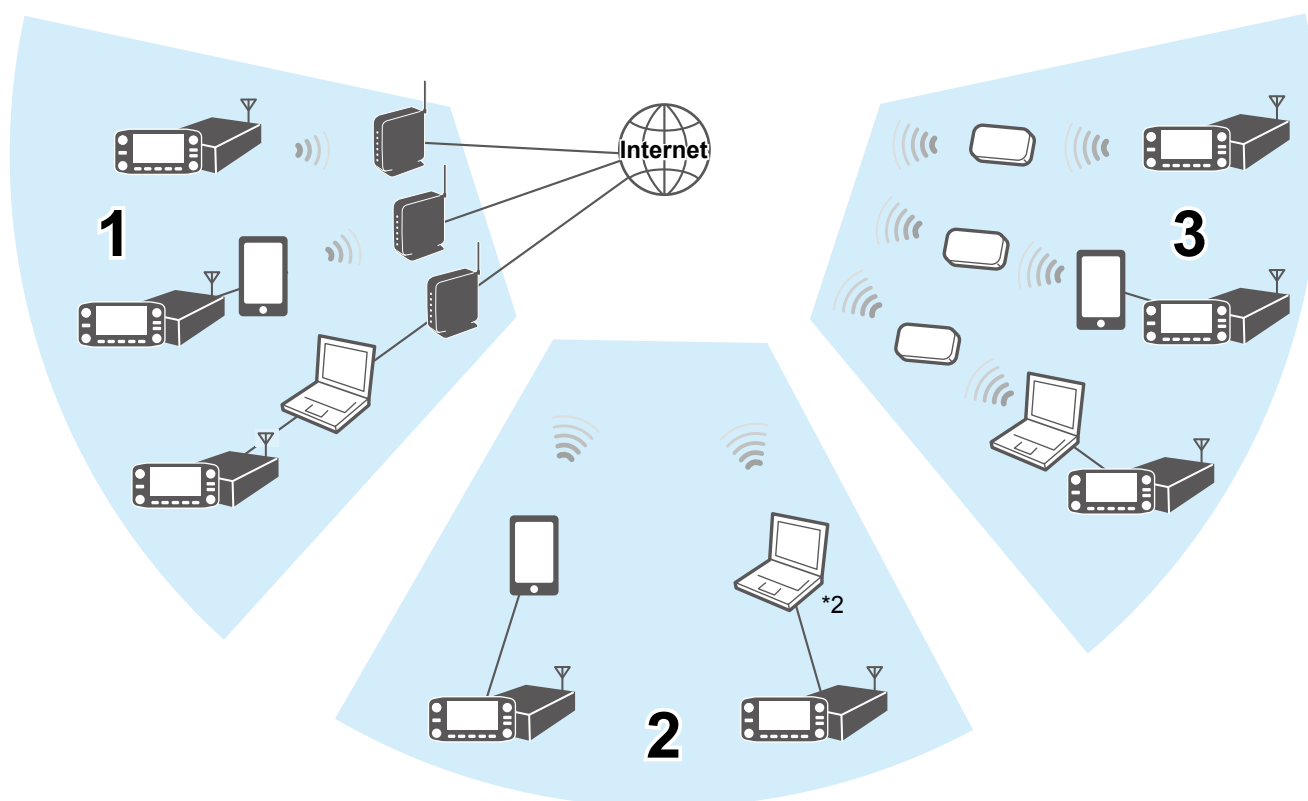
1. When connecting your transceiver to the Internet using a router (p. 10)
3. When connecting your transceiver to the Internet using a mobile router (p. 13)

When using the External Gateway function

1. When connecting your device*¹ to the Internet using a router (p. 10)
2. When connecting your device*¹ to the Internet using a cellular system (p. 12)
3. When connecting your device*¹ to the Internet using a mobile router (p. 13)

*¹ Windows, Android, or iOS device

NOTE: Depending on your contract, you may be charged a large or additional communication fee. Ask your Internet service provider about the content of your contract.



*² You can use a computer compatible with a cellular system.

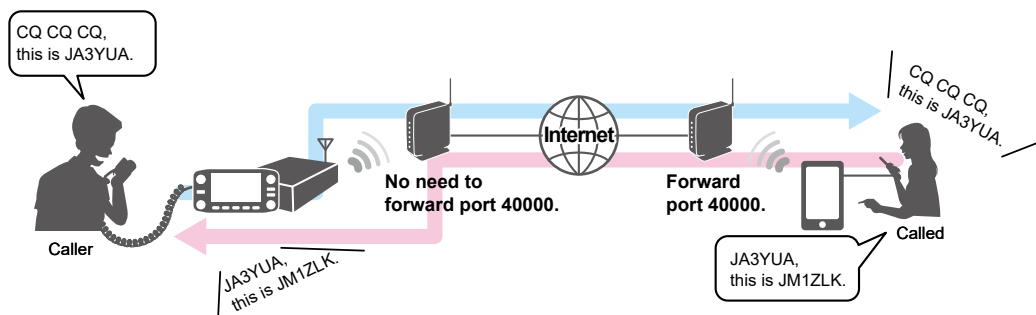
1 Preparation

■ Setting up a network

◇ About the UDP Hole Punch function

When both the caller station and the called station use the Terminal or Access Point mode, the caller station does not need to:

- Forward port 40000 when connecting to the Internet using the router.
- Use a device assigned a static or dynamic Global IP address.



① Information

- Depending on your Network environment, you may not be able to use this function.
- The caller station must set “UDP Hole Punch” to “ON” in the transceiver*¹ (When using the Internal Gateway function) or RS-MS3W/RS-MS3A/RS-MS3I (When using the External Gateway function) to use this function.

*¹ [MENU] > DV GW > Internal Gateway Settings > **UDP Hole Punch**

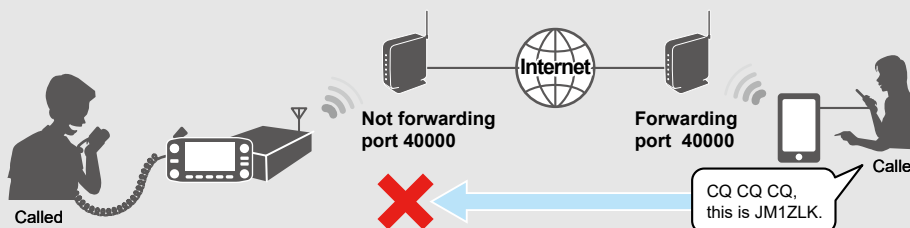
When not using this function, set “UDP Hole Punch” to “OFF.”

- A few minutes*² after the call, the caller station has still not received a call back from the called station. In this case, the caller station must transmit to the called station again.

*² Less than 3 minutes, depending on the router.

NOTE:

- When using the External Gateway function, Use version of the RS-MS3W/RS-MS3A/RS-MS3I application software, as shown below.
RS-MS3W: version 1.30 or later
RS-MS3A: version 1.31 or later
RS-MS3I: version 1.0.0 or later
- The caller station cannot communicate with the called station when:
 - The caller station is using an earlier version software or firmware.
 - The called station is using an earlier version software or firmware.
 - The called station calls through a local repeater instead of using the Terminal or Access Point mode.
- Even if using the latest version, the called station needs to forward port 40000 when connecting to the Internet using a router, or to use a device assigned a static or dynamic Global IP address to communicate with the caller station.



1 Preparation

■ Setting up a network

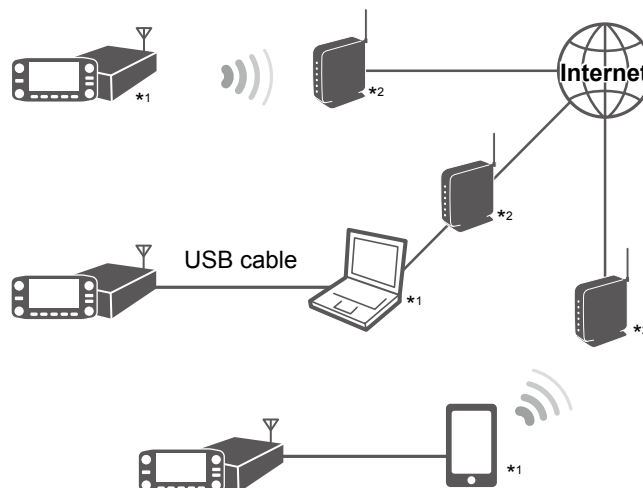
◇ When connecting your device to the Internet using a router

The following items are needed to use the DV Gateway function.

- An Internet connection with an IPv4 Global IP address
- A static^{*1} local IP address set to your transceiver, Windows, Android, or iOS device
- Forwarding port 40000

^{*1} A static IP address to the transceiver, Windows, Android, or iOS device is recommended.

^{*2} Needs a Global IP address and forwarding port 40000.



When Global IP address is not assigned, or the port is not forwarded, see “About the UDP Hole Punch function.” (p. 9)

1. A Global IP address

A static or dynamic IPv4 Global IP address assigned to the router is needed.

- ① Your router may not have a Global IP address, depending on your Internet service provider. Ask your Internet service provider about the Global IP address setting.

2. Setting a static local IP address

When using a router, you need to set a static local IP address to the transceiver, Windows, Android, or iOS device.

- ① Usable IP addresses differ, depending on your router. Ask the router's manufacturer for details.
- ① Do not set the same IP address to two or more devices that are connected to the same router.
- ① Ask your device's manufacturer about the setting details.

Transceiver setting

When using the Internal Gateway function, set “Wi-Fi” (Wireless LAN) to “ON,” open the CONNECTION SETTINGS screen, and set these items.

[MENU] > SET > Wi-Fi Set > **Wi-Fi**

[MENU] > SET > Wi-Fi Set > **Connection Settings (* Valid after Restart)**

Items	Contents
DHCP *	ON (Default) → OFF
IP Address *	An IP address that is not assigned to any other device. Example: 192.168.0.10 (Default)
Subnet Mask *	The subnet mask of the IP address Example: 255.255.255.0 (Default) ① Normally, use the default value.
Default Gateway *	An IP address of the LAN side on the router Example: 192.168.0.1
Primary DNS Server *	An IP address of the DNS Server. ① Normally, enter the default gateway IP address. Example: 192.168.0.1
Secondary DNS Server *	An IP address of the secondary DNS Server. ① Enter this item if necessary.

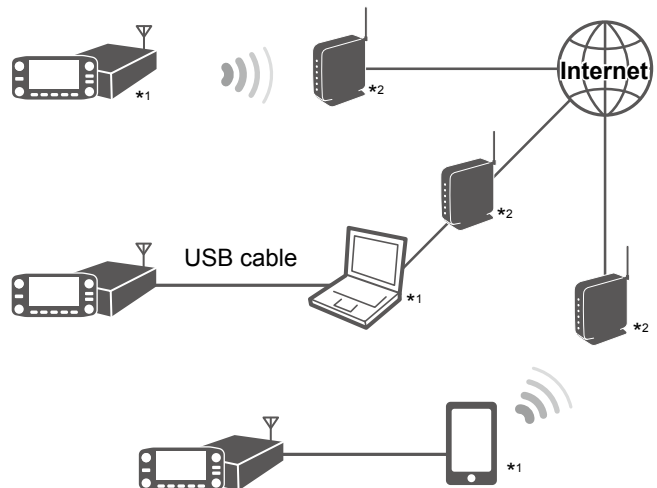
1 Preparation

■ Setting up a network

◇ When connecting your device to the Internet using a router

*1 A static IP address to the transceiver, Windows, Android, or iOS device is recommended.

*2 Needs a Global IP address and forwarding port 40000.



3. Port forwarding

When using a router, enable communication with the Internet, as described below.

- Forward port 40000 to the transceiver, Windows, Android, or iOS device.
 - “UDP” should be used as the port protocol.
 - Set a static local IP address in Procedure 2 (2. Setting a static local IP address) as a destination port.
- ① Ask the router’s manufacturer about how to forward the port.
- ① Only one transceiver, Windows, Android, or iOS device connected to the router can use the DV Gateway function at the same time.
- ① Depending on the router settings, you must configure the IP filter settings. Check the router’s manual on how to configure the settings.

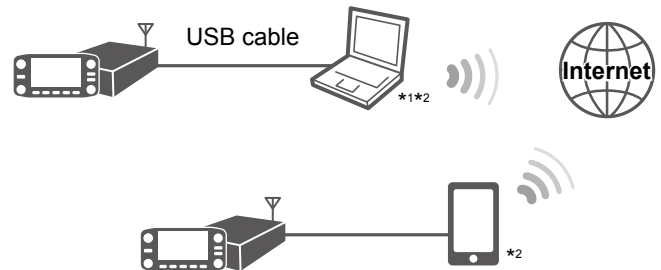
- When using the Internal Gateway function, go to “When using the Internal Gateway function.” (p. 14)
- When using a Windows device, go to “When using the RS-MS3W.” (p. 16)
- When using an Android device, go to “When using the RS-MS3A.” (p. 17)
- When using an iOS device, go to “When using the RS-MS3I.” (p. 19)

1 Preparation

■ Setting up a network

◇ When connecting your device to the Internet using a cellular system

A Global IP address is required to use the DV Gateway function.



When Global IP address is not assigned, or the port is not forwarded, see “About the UDP Hole Punch function.” (p. 9)

- *1 You can use a computer compatible with a cellular system.
*2 Needs a Global IP address.

A Global IP address

A static or dynamic IPv4 Global IP address assigned to your Windows, Android, or iOS device is needed. Ask your cellular system company to provide a Global IP address to your device.

NOTE:

- Turn OFF your Wi-Fi setting when you operate using a cellular system.
- Communication errors may occur when using a cellular system.
- Depending on your contract, you may be charged a large or additional communication fee. Ask your cellular system company about the content of your contract.

- When using a Windows device, go to “When using the RS-MS3W.” (p. 16)
→ When using an Android device, go to “When using the RS-MS3A.” (p. 17)
→ When using an iOS device, go to “When using the RS-MS3I.” (p. 19)

1 Preparation

■ Setting up a network

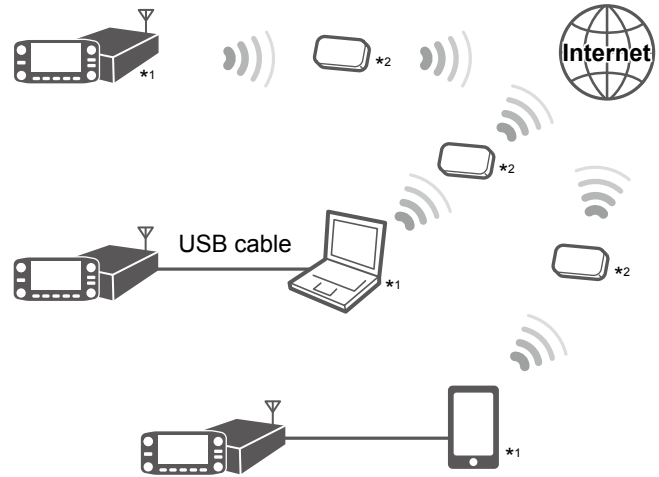
◇ When connecting your device to the Internet using a mobile router

The following items are needed to use the DV Gateway function.

- An Internet connection with an IPv4 Global IP address
- A static^{*1} local IP address set to your transceiver, Windows, Android, or iOS device
- Forwarding port 40000

^{*1} A static IP address to the transceiver, Windows, Android, or iOS device is recommended.

^{*2} Needs a Global IP address and forwarding port 40000.



When Global IP address is not assigned, or the port is not forwarded, see “About the UDP Hole Punch function.” (p. 9)

1. A Global IP address

A static or dynamic IPv4 Global IP address assigned to the router is needed.

- ① Your router may not have a Global IP address, depending on your Internet service provider. Ask your Internet service provider about the Global IP address setting.

2. Setting a static local IP address

When using a mobile router, you need to set a static local IP address to the transceiver, Windows, Android, or iOS device.

- ① Usable IP address differs depending on your router. Ask the router's manufacturer for details.
- ① Do not set the same IP address to 2 or more devices that are connected to the same router.
- ① Ask your device's manufacturer about the setting details.
- ① See page 10 for the transceiver's setting details.

3. Port forwarding

When using a mobile router, enable communication with the Internet, as described below.

- Forward port 40000 to the transceiver, Windows, Android, or iOS device.
- “UDP” should be used as the port protocol.
- Set a static local IP address in Procedure 2 (2. Setting a static local IP address) as a destination port.
- ① Ask the mobile router's manufacturer about how to forward the port.
- ① Only one transceiver, Windows, Android, or iOS device connected to the mobile router can use the DV Gateway function at the same time.
- ① Depending on the router settings, you must configure the IP filter settings. Check the mobile router's manual on how to configure the settings.

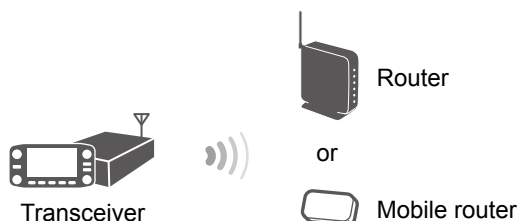
- When using the Internal Gateway function, go to “When using the Internal Gateway function.” (p. 14)
- When using a Windows device, go to “When using the RS-MS3W.” (p. 16)
- When using an Android device, go to “When using the RS-MS3A.” (p. 17)
- When using an iOS device, go to “When using the RS-MS3I.” (p. 19)

2 Setting up the device

■ When using the Internal Gateway function

Connecting to a router

Turn ON the Wireless LAN function, and connect to a router or a mobile router.

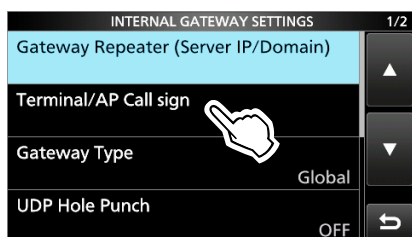


Setting the Internal Gateway Settings

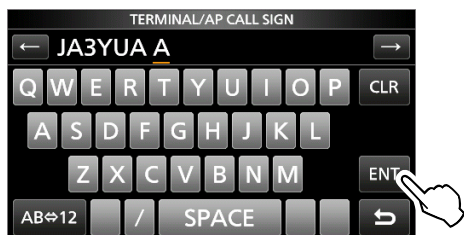
1. Open the INTERNAL GATEWAY SETTINGS screen.

[MENU] > DV GW > Internal Gateway Settings

2. Touch to select the item to set.
(Example: Terminal/AP Call sign)



3. Enter a call sign, and then touch [ENT].
(Example: JA3YUAA)
① See the right column for details on the setting items and their options.



4. To close the INTERNAL GATEWAY SETTINGS screen, push [EXIT] several times.

Gateway Repeater (Server IP/Domain)

Enter the gateway repeater's address or domain name.

① The address consists of up to 64 characters.

NOTE: You must have your call sign registered with a gateway server that has the RS-RP3C installed. Ask the gateway repeater administrator for details.

Terminal/AP Call sign

Enter the Terminal/AP call sign that is registered as the access point on the RS-RP3C's Personal Information screen.

① The call sign should be 8 characters long.

① Enter a desired ID suffix between A and Z, except for G, I, and S, for the 8th character.

Gateway Type

(Default: Global)

Selects the gateway type.

① Select "Global" when operating outside of Japan.

UDP Hole Punch

(Default: OFF)

Selects whether or not to use the UDP Hole Punch function. This function enables you to communicate with another station that uses the Terminal or Access Point mode even if you do not forward port 40000 of a router. (p. 9)

① You cannot communicate using this function when the destination station uses software that is not compatible with the UDP Hole Punch function.

① When forwarding port 40000 of a router, select "OFF."

2 Setting up the device

■ When using the Internal Gateway function

Allowed Call Sign (Access Point Mode) (Default: Disable)

Selects to use the call sign restriction for the Access Point mode. When “Enable” is selected, this allows only stations with registered call signs to transmit through the Internet.

- Disable: Allows all call signs to transmit.
- Enable: Allows only the call sign entered on the “Allowed Call sign List” to transmit.

① When using the Terminal mode, select “Disable.”

Allowed Call Sign List

Enter the call sign of the stations that you allow to transmit through the Internet while “Enable” is selected for “Allowed Call sign (Access Point Mode).”

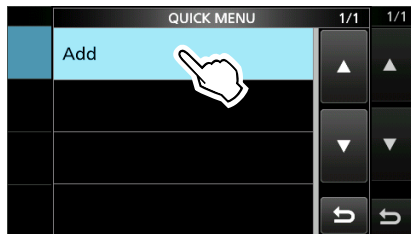
① You can add up to 30 call signs.

Adding a call sign

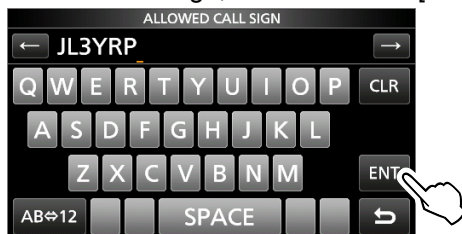
1. Touch for 1 second.



2. Touch “Add.”

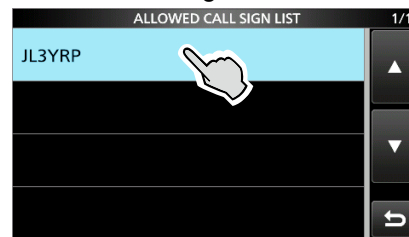


3. Enter the call sign, and then touch [ENT].

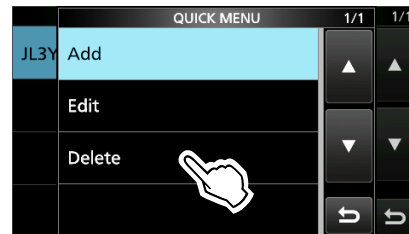


Deleting a call sign

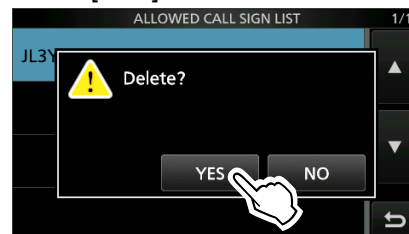
1. Touch the call sign for 1 second.



2. Touch “Delete.”



3. Touch [YES].



2 Setting up the device

■ When using the RS-MS3W

The RS-MS3W is an application for Windows devices to use the External Gateway function. You can download it from the Icom website.

① See page 3 for system requirements.

◇ Installing the RS-MS3W

Download the latest RS-MS3W and its instruction manual from the Icom website.

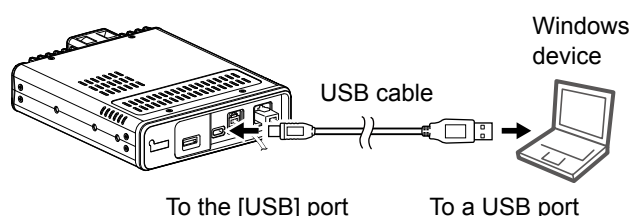
Read the RS-MS3W instruction manual on how to install the software.

① Search by "RS-MS3W."

<https://www.icomjapan.com/support/>

◇ Connecting a USB cable

Connect the transceiver to the Windows device using a USB cable. (Example: ID-5200A/ID-5200E)



When using the ID-5200A/ID-5200E

Confirm "USB Connect" in the Set mode is set to "Serialport."

([MENU] > SET > Connectors > **USB Connect**)

① For the ID-5200A/ID-5200E, "USB COM" is displayed when connecting to a PC in the Serialport mode.

① You can also set "USB" to "COM" on the FUNCTION screen, opened by pushing [FUNC], to change to the Serialport mode.

NOTE: Turn OFF the transceiver before connecting or disconnecting the USB cable.

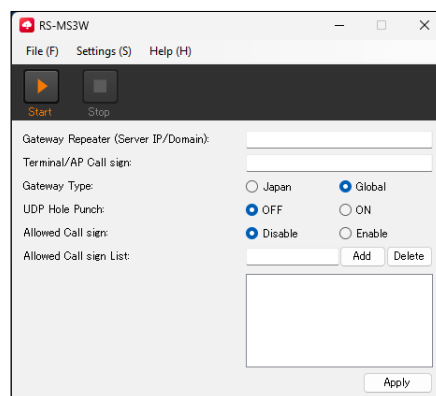
◇ COM port settings

Set the COM port.

1. After connecting, turn ON the transceiver.
2. Click "Com Port (P)" in the "Settings (S)."
 - The Com Port Setting window is displayed.
3. Select the COM port number that the USB cable is connected to.
 - ① Click "▼" to display the COM ports on a drop-down list.
 - ① See the USB cable's Installation Guide that you can download on the Icom website, for details on checking the COM port number.
4. Click <OK>.

◇ Setting the RS-MS3W

Set the RS-MS3W to start using the DV Gateway function.



① The screen may be different, depending on the application version.

Read the RS-MS3W instruction manual about each setting item.

NOTE: About the Firewall setting

When you use a firewall security software, a communication error may occur by the firewall blocking the necessary ports or data. Before using the DV Gateway function, confirm that the RS-MS3W's communication is not blocked.
① Ask your firewall security software's manufacturer about the setting details.

2 Setting up the device

■ When using the RS-MS3A

The RS-MS3A is an application for Android devices to use the External Gateway function.

Download the application from Play Store.

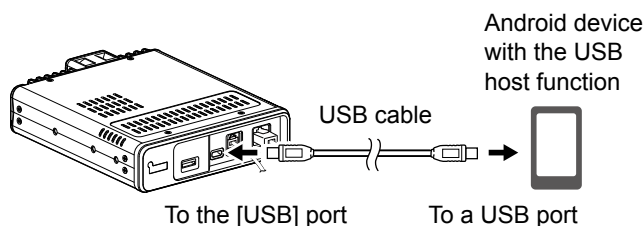
① See page 3 for system requirements.

◇ Installing the RS-MS3A

1. Start the Android device.
2. Touch "Play Store."
3. Enter "RS-MS3A."
 - ① Enter the application's full name to be sure to find it.
4. Touch "🔍 (search)."
5. Touch "RS-MS3A."
 - The RS-MS3A application information is displayed.
 - ① If your Android device is not compatible with the RS-MS3A, the application may not be displayed.
6. Touch "Install."
7. Touch "Agree to download."
 - Starts installing the application.
 - After the installation is completed, the icon is displayed on your home screen.

◇ When connecting with a USB cable

Connect the transceiver to the Android device using a USB cable. (Example: ID-5200A/ID-5200E)



When using the ID-5200A/ID-5200E

Confirm "USB Connect" in the Set mode is set to "Serialport."

([MENU] > SET > Connectors > **USB Connect**)

① When connecting the transceiver to an Android device, "USB COM" is displayed on the ID-5200A/ID-5200E.

① You can also set "USB" to "COM" on the FUNCTION screen, opened by pushing [FUNC], to change to the Serialport mode.

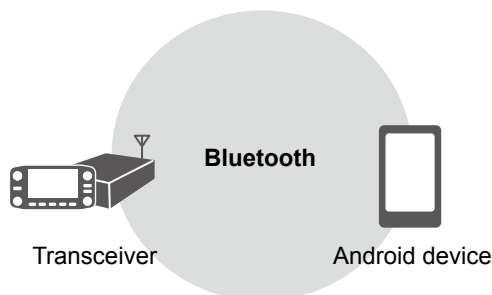
NOTE:

- Turn OFF the transceiver before connecting or disconnecting the USB cable.
- Remove the USB cable when not using. Otherwise, the battery will be quickly exhausted.
- If the application selection window is displayed, select "RS-MS3A" to start the application.

2 Setting up the device

■ When using the RS-MS3A

◇ When connecting using the Bluetooth function

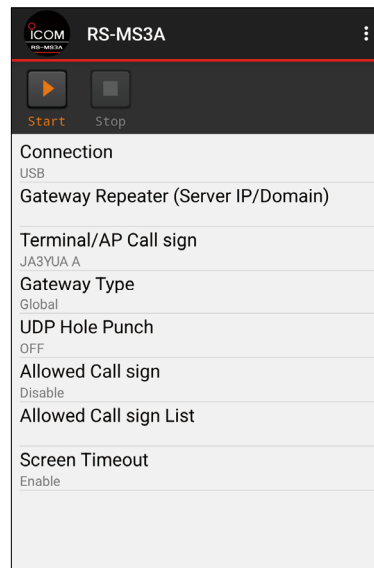


Before connecting to an Android device, you must pair with it. See the transceiver's Advanced manual for connection details.

NOTE: Disconnect a paired the Android device when you are not using the RS-MS3A. When you leave it connected, the Android device's battery is quickly exhausted.

◇ Setting the RS-MS3A

Set the RS-MS3A to start using the DV Gateway function.



① The screen may be different, depending on the application version.

Read the RS-MS3A instruction manual about each setting item.

① Search by "RS-MS3A."

<https://www.icomjapan.com/support/>

NOTE for connecting with a USB cable:

When the Android device does not work properly, move the Access Point transceiver farther away from the Android device.

2 Setting up the device

■ When using the RS-MS3I

The RS-MS3I is an application for iOS devices to use the External Gateway function.

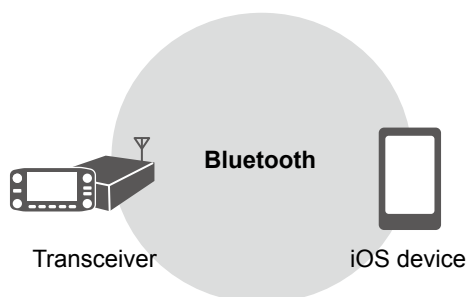
Download the application from App Store.

① See page 3 for system requirements.

◇ Installing the RS-MS3I

1. Start the iOS device.
2. Touch “App Store.”
3. Touch “🔍 (search)”
4. Enter “RS-MS3I” in the search field.
 - The RS-MS3I will be displayed as the search result.
 - ① You may need to enter “RS-MS3I” as a complete word to get the search result.
 - ① If your iOS device is not compatible with the RS-MS3I, the application is not displayed.
5. Touch “RS-MS3I.”
6. Touch “<GET>.”
 - Starts installing the application.
 - After the installation is completed, the icon is displayed on your home screen.

◇ Connecting using the Bluetooth function



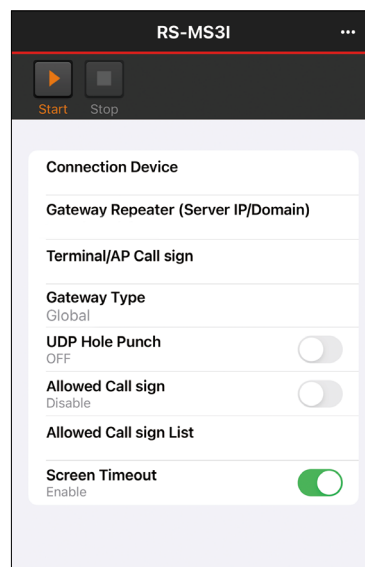
Before connecting to an iOS device, you must pair with it. See the transceiver's Advanced manual for connection details.

NOTE:

- You cannot pair with an iOS device in its Settings app. To pair with an iOS device, use the Icom application.
- Disconnect a paired the iOS device when you are not using the RS-MS3I. When you leave it connected, the iOS device's battery is quickly exhausted.

◇ Setting the RS-MS3I

Set the RS-MS3I to start using the DV Gateway function.



① The screen may be different, depending on the application version.

Read the RS-MS3I instruction manual about each setting item.

① Search by “RS-MS3I.”

<https://www.icomjapan.com/support/>

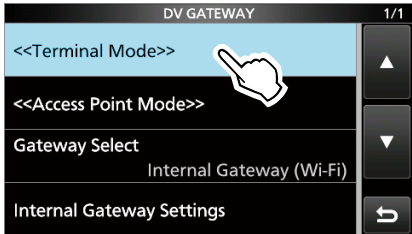
3 Terminal mode operation

■ Setting the Terminal mode

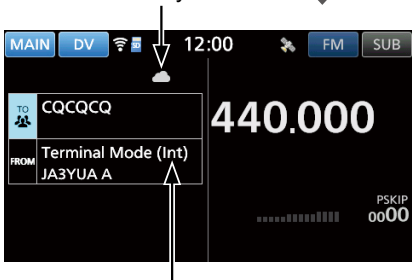
1. Open the DV GATEWAY screen.

[MENU] > DV GW

2. Touch “<<Terminal Mode>>.”



Internal Gateway icon



“Ext” is displayed when using the External Gateway function.

① ID-5200A/ID-5200E can change the MAIN band or SUB band in the Terminal mode.

When using the External Gateway function

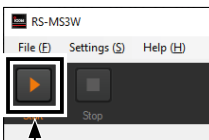
After the transceiver is in the Terminal mode, click (touch) <Start> in the RS-MS3W, RS-MS3A, or RS-MS3I.

① See page 2 about the External Gateway setting.

① When using the RS-MS3A application, select “Bluetooth Connection Device” or “USB” in the RS-MS3A “Connection.”

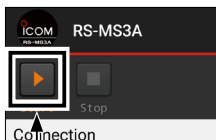
① If an error message is displayed, see page 33 for tips on how to solve the problem.

RS-MS3W



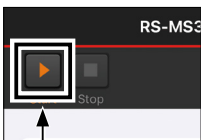
Click

RS-MS3A



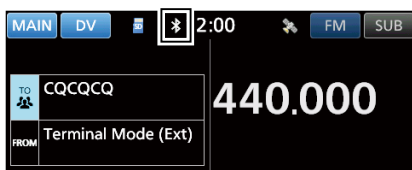
Touch

RS-MS3I



Touch

① For Bluetooth connection, the Bluetooth icon is displayed on the Standby screen of the transceiver.



NOTE: In the Terminal mode

- The Time-Out Timer function is not activated.
- The following items are automatically set.
Operating mode: DV mode*
DR function: ON*
FROM: MY Call Sign
- * These settings do not return to the previous settings, even if you cancel the Terminal mode.
- The Terminal mode is not automatically canceled, even if you turn OFF the transceiver, and then turn it ON again.

TIP: Canceling the Terminal mode

Touch “<<Normal Mode>>” on the QUICK MENU screen or the DV GATEWAY screen.

([MENU] > DV GW > <<Normal Mode>>)

① To display the QUICK MENU screen, push [QUICK].

① When using the External Gateway function, click (touch) <Stop> in the RS-MS3W, RS-MS3A, or RS-MS3I before the transceiver returns to the Normal mode.

About the Internal Gateway icon

When using the Internal Gateway function, displays the communication status.

Icon	Status
	In the Standby mode
	While transmitting
	While receiving
	Transmission error (The repeater is busy.)
	Transmission error
	Network error
	Receiving while transmitting
	Receive error

① If an error icon is displayed, see page 27 for tips on how to solve the problem.

3 Terminal mode operation

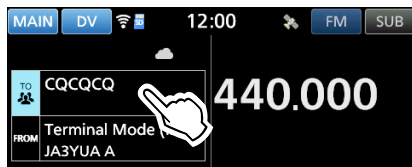
■ Operating in the Terminal mode

NOTE: In the Terminal mode, you can make a Gateway CQ call, or a call to a specific station, using call sign routing.

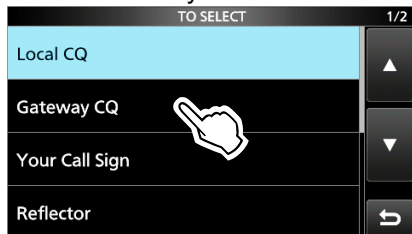
① You cannot make a call if you select “Local CQ” or “Reflector.”

Example: Making a Gateway CQ call

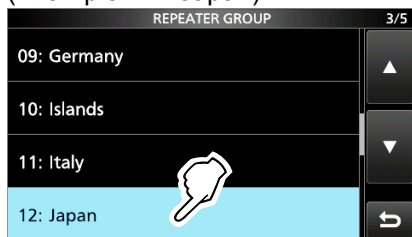
1. Touch “TO.”



2. Touch “Gateway CQ.”



3. Select the repeater group where your destination repeater is listed.
(Example: 12: Japan)



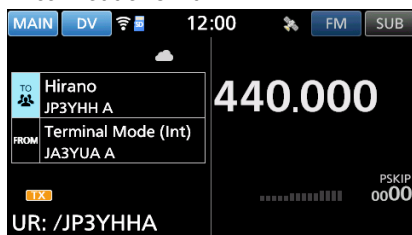
4. Select your destination repeater.
(Example: Hirano)



• Returns to the DR screen, and selected repeater name is set in “TO.”

5. Hold down [PTT] to transmit.

① While receiving a signal through the Internet, you cannot transmit.

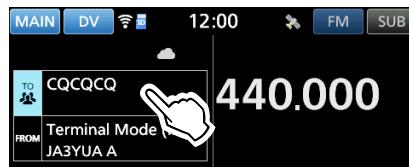


6. Release [PTT] to receive.

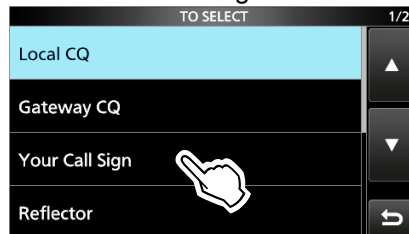
① If you do not receive a reply, see page 28 for tips on how to solve the problem.

Example: Making a call to a specific station

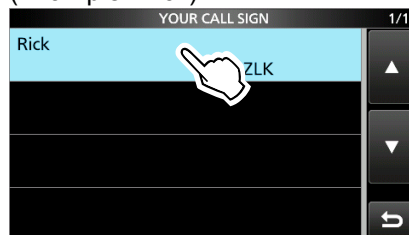
1. Touch “TO.”



2. Touch “Your Call Sign.”



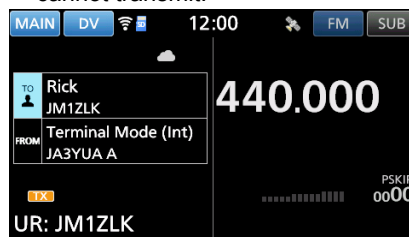
3. Select your destination station.
(Example: Rick)



• Returns to the DR screen, and the selected name is set in “TO.”

4. Hold down [PTT] to transmit.

① While receiving a signal through the Internet, you cannot transmit.



5. Release [PTT] to receive.

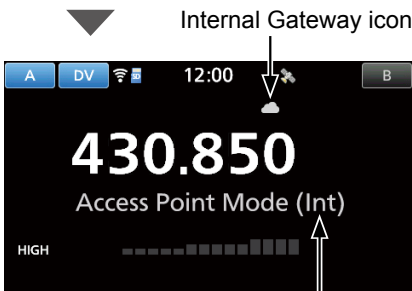
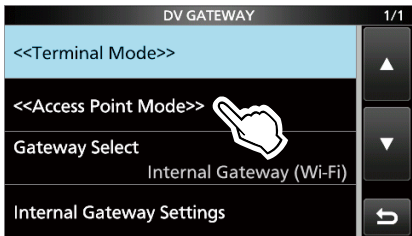
① If you do not receive a reply, see page 28 for tips on how to solve the problem.

4 Access Point mode operation

■ Setting the Access Point mode

In this section, set an Access Point transceiver.

- 1. Open the DV GATEWAY screen.
[MENU] > DV GW
- 2. Touch “<<Access Point Mode>>.”



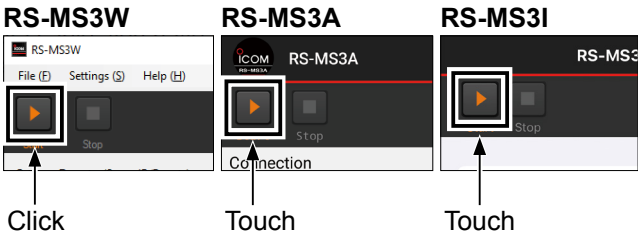
“Ext” is displayed when using the External Gateway function.

- 3. Rotate [DIAL] to set the operating frequency.
 - ① The frequency is used to communicate with the Remote D-STAR transceiver.
 - ① In the Access Point mode, you can change the operating frequency.

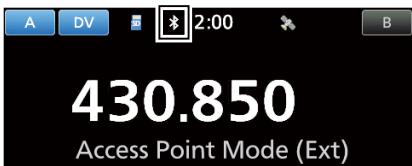
When using the External Gateway function

After the transceiver is in the Access Point mode, click (touch) <Start> in the RS-MS3W, RS-MS3A, or RS-MS3I.

- ① See page 2 about the External Gateway setting.
- ① When using the RS-MS3A application, select “Bluetooth Connection Device” or “USB” in the RS-MS3A “Connection.”
- ① If an error message is displayed, see page 33 for tips on how to solve the problem.



- ① For Bluetooth connection, the Bluetooth icon is displayed on the Standby screen of the transceiver.



NOTE: BE SURE to check your local regulations or laws to select the appropriate operating frequency.

NOTE: In the Access Point mode

- The following items are automatically set.
 - Mode: VFO mode*
 - Frequency band: VHF* or UHF* (Only when a frequency that is in the AIR band is selected, when a frequency that is out of the amateur radio band is selected, or when a frequency that cannot be set in the DV mode is selected)
 - Operating mode: DV mode*
 - Duplex mode: OFF*
 - VOX function: OFF
 - MONITOR function: OFF
- * These settings do not return to the previous settings even if you cancel the Access Point mode.
- The Access Point mode is not automatically canceled, even if you turn OFF the transceiver, and then turn it ON again.

TIP: Canceling the Access Point mode

Touch “<<Normal Mode>>” on the QUICK MENU screen or the DV GATEWAY screen.

([MENU] > DV GW > <<Normal Mode>>)

- ① To display the QUICK MENU screen, push [QUICK].
- ① When using the External Gateway function, click (touch) <Stop> in the RS-MS3W, RS-MS3A, or RS-MS3I before the transceiver returns to the Normal mode.

About the Internal Gateway icon

When using the Internal Gateway function, displays the communication status.

Icon	Status
	In the Standby mode
	While transmitting
	While receiving
	Transmission error (The repeater is busy.)
	Transmission error
	Network error
	Receiving while transmitting
	Receive error

- ① If an error icon is displayed, see page 27 for tips on how to solve the problem.

4 Access Point mode operation

■ Making a Gateway call through an Access Point transceiver

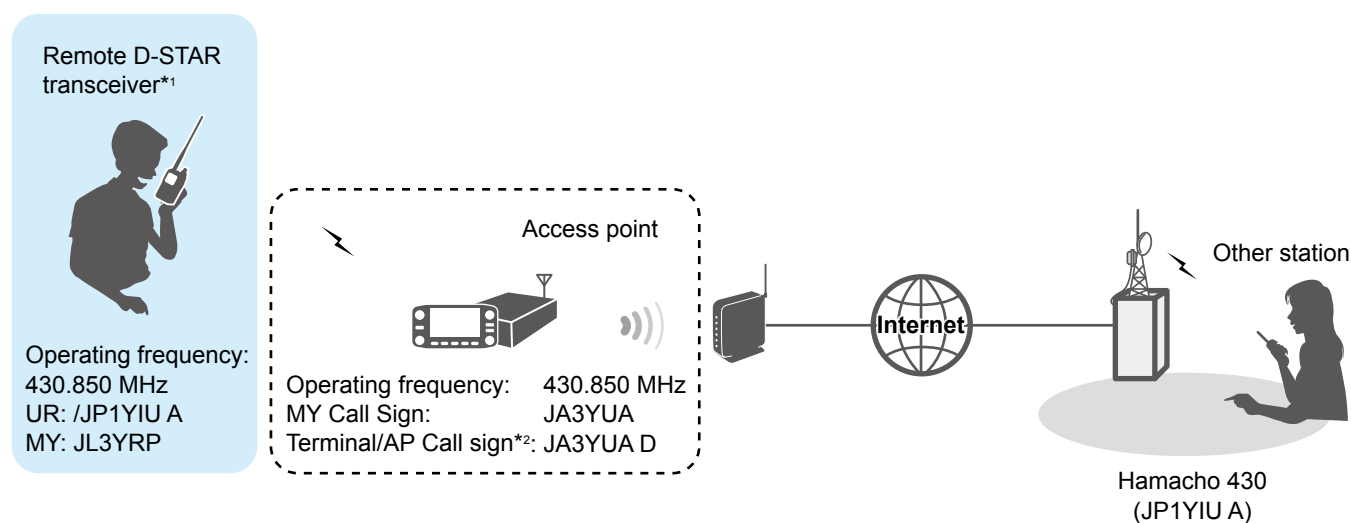
In this section, set up the Remote D-STAR transceiver you are going to operate.

① Read the Remote D-STAR transceiver's instruction manual for setting details.

NOTE: While in the Access Point mode, you can make a Gateway CQ call or a call to an individual station using call sign routing.

① You can select the "Local CQ," but cannot make a call.

Example: When setting the operating frequency to 430.850 MHz, and making a Gateway CQ call.



*1 Any model as long as the transceiver is capable of D-STAR. Only one D-STAR transceiver can use the Access Point at a time.

*2 When you use the External Gateway function, enter the call sign in "Terminal/AP Call sign" in the RS-MS3W, RS-MS3A, or RS-MS3I.

◇ When using the DR function

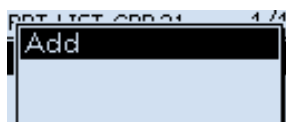
NOTE: If you have imported the repeater list, you have to register the Access Point information again because the repeater list is overwritten.

In this document, the ID-51A (PLUS2)/ID-51E (PLUS2) is used as an example of a Remote D-STAR transceiver.

1. Register the Access Point information to the repeater list

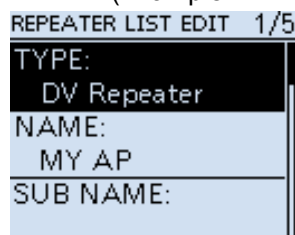
① Register the Access Point information in the MENU screen.
([MENU] > DV Memory > **Repeater List**)

1. Select a group you want to add your Access Point information to.
2. After selecting a group, open the Repeater List Edit screen. (QUICK MENU > **Add**)



3. Set "TYPE" to "DV Repeater."
① "DV Repeater" is used for Repeater operation in the DV mode.

4. Enter your favorite name into "NAME" and "SUB NAME." (Example: MY AP)



4 Access Point mode operation

■ Making a Gateway call through an Access Point transceiver

◇ When using the DR function

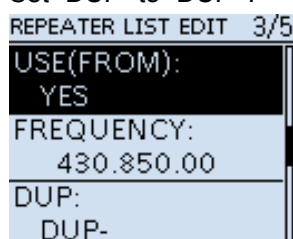
1. Register the Access Point information to the repeater list

5. Set "CALL SIGN" to the Access Point transceiver's call sign. (Example: JA3YUA)
① After setting "CALL SIGN," "GW CALL SIGN" is automatically set.



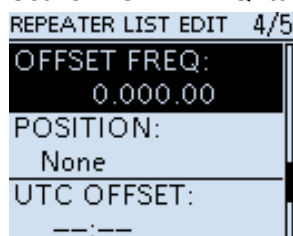
REPEATER LIST EDIT 2/5
CALL SIGN:
JA3YUA
GW CALL SIGN:
JA3YUA G
GROUP:
21 Simplex

6. Set "USE (FROM)" to "YES."
7. Set "FREQUENCY" to the Access Point transceiver's operating frequency. (Example: 430.850)
8. Set "DUP" to "DUP-."



REPEATER LIST EDIT 3/5
USE(FROM):
YES
FREQUENCY:
430.850.00
DUP:
DUP-

9. Set "OFFSET FREQ" to "0.000.00."

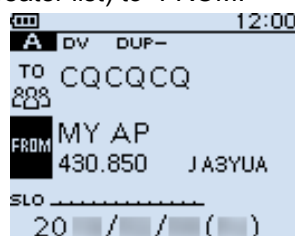


REPEATER LIST EDIT 4/5
OFFSET FREQ:
0.000.00
POSITION:
None
UTC OFFSET:
--:--

10. Select "<<Add Write>>" and write the Access Point information.

2. Set the Access Point using the DR function

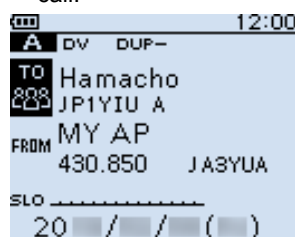
Set the Access Point registered in Procedure 1 (1. Register the Access Point information to the repeater list) to "FROM."



12:00
A DV DUF-
TO CQ CQ CQ
888
FROM MY AP
430.850 JA3YUA
SLO 20 / / ()

3. Set "TO" and transmit

1. Set "TO" to a destination. (Example: Hamacho 430)
① You can select the "Local CQ," but cannot make a call.



12:00
A DV DUF-
TO Hamacho
888 JP1YIU A
FROM MY AP
430.850 JA3YUA
SLO 20 / / ()

2. Hold down [PTT] to transmit.
3. Release [PTT] to receive.
① If you do not receive a reply, see page 30 for tips on how to solve the problem.

4 Access Point mode operation

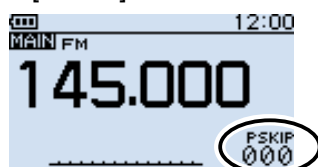
■ Making a Gateway call through an Access Point transceiver

◇ When not using the DR function

In this document, the ID-51A (PLUS2)/ID-51E (PLUS2) is used as an example of a Remote D-STAR transceiver.

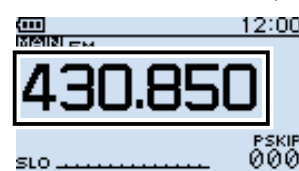
1. Enter the VFO mode

Push [V/MHz].



2. Set the operating frequency

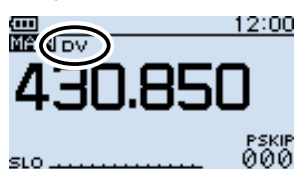
Rotate [DIAL] to set the frequency that is set in the Access Point transceiver. (Example: 430.850)



3. Set the Receive mode to "DV mode"

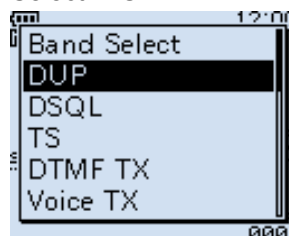
Push [MODE] several times until "DV" is displayed.

① When the "GPS TX Mode" is set, "DV-G" or "DV-A" is displayed.

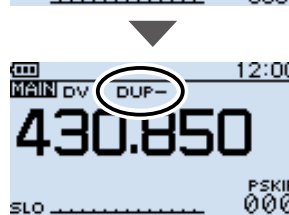
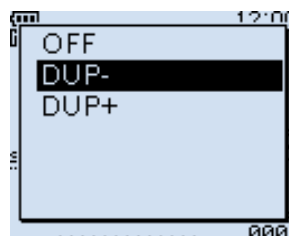


4. Set the duplex direction

1. Push [QUICK].
2. Select "DUP."



3. Select "DUP-."



4 Access Point mode operation

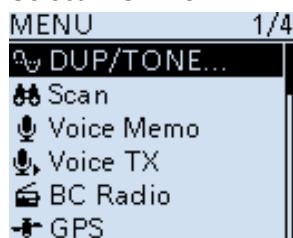
■ Making a Gateway call through an Access Point transceiver

◇ When not using the DR function

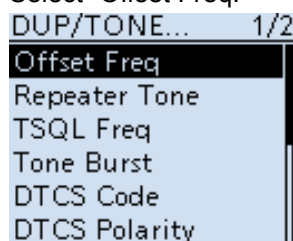
5. Set the frequency offset

1. Push [MENU].

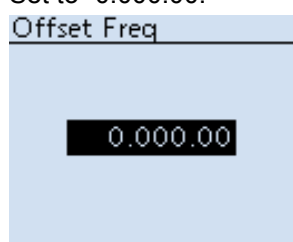
2. Select "DUP/TONE...."



3. Select "Offset Freq."



4. Set to "0.000.00."



5. Push [MENU].

- Returns to the Standby screen.

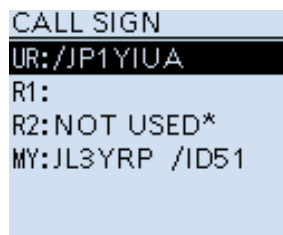
6. Set "UR" to the destination station call sign

1. Hold down [CS] for 1 second to enter the Operating Call Sign Select mode.

2. Select "UR."

3. Set the destination repeater or destination station's call sign.

① In the Access Point mode, you can select the "CQCQCQ" but cannot make a call.



4. Push [MENU].

- Returns to the Standby screen.

7. Hold down [PTT] to transmit

1. Hold down [PTT] to transmit.

2. Release [PTT] to receive.

① If you do not receive a reply, see page 30 for tips on how to solve the problem.

TIP: When the settings are saved into a memory channel, you can quickly select them. Read the Remote D-STAR transceiver's instruction manual for details.

5 Troubleshooting

■ Error icons of the transceiver

If an error icon is displayed when using the Internal Gateway function, read the following chart. If you are unable to locate the cause of a problem, or solve it through the use of this chart, contact your Icom Dealer or Service Center.

Icon	Possible Cause	Solution	Reference
	Transceiver connection is wrong.	Check the connection between the transceiver and the router.	p. 14
	Gateway Repeater cannot be found.	Check the Wi-Fi settings.	p. 10
	When using the Access Point mode, the call sign has not been added to "Allowed Call Sign List" in the transceiver, when "Allowed Call Sign" is set to "Enable."	Set "Allowed Call Sign" to "Disable" on the INTERNAL GATEWAY SETTINGS screen.	p. 15
		Add the Remote D-STAR transceiver's call sign to "Allowed Call Sign List" on the INTERNAL GATEWAY SETTINGS screen.	p. 15
	Your call sign (MY) has not been registered at a gateway server.	Register your call sign (MY) at a gateway server.	The transceiver's instruction manual
	The Terminal/AP call sign that is set in the transceiver has not been registered in the RS-RP3C as the access point.	Register the Terminal/AP call sign that is set in the transceiver in the RS-RP3C as the access point.	p. 6
	The destination station's call sign (UR) has not been registered with the gateway server, or the call sign does not match your transceiver's setting.	Check the destination station's registration information.	—
	The destination station that uses the Terminal mode or Access Point mode does not transmit periodically.	Destination station makes a call.	—
	The repeater is busy.	Wait for a while, and try again.	—
	A signal is received while transmitting.	Destination station makes a call again.	—
	The transceiver cannot receive the signal.	Destination station makes a call again.	—

5 Troubleshooting

■ Troubleshooting for the Terminal mode operation

The following chart is designed to help you correct problems which are not equipment malfunctions.

If you are unable to locate the cause of a problem, or solve it through the use of this chart, contact your Icom Dealer or Service Center.

Problem	Possible Cause	Solution	Reference
After your call, the repeater does not return a status reply.	Transceiver connection is wrong.	When using the Internal Gateway function, check the connection between the transceiver and the router.	p. 14
		When using the External Gateway function, check the connection between the transceiver and the Windows, Android, or iOS device.	—
	“Allowed Call Sign” is set to “Enable.”	When using the Internal Gateway function, set “Allowed Call Sign” to “Disable” on the INTERNAL GATEWAY SETTINGS screen.	p. 15
		When using the External Gateway function, set “Allowed Call sign” to “Disable” in the RS-MS3W, RS-MS3A, or RS-MS3I.	RS-MS3W, RS-MS3A, or RS-MS3I's instruction manual
After your call, the repeater replies “UR?,” Your own call sign (MY) and ID suffix “G.”	When using the External Gateway function, you did not click (touch) <Start>  in the RS-MS3W, RS-MS3A, or RS-MS3I.	Click (touch) <Start>  in the RS-MS3W, RS-MS3A, or RS-MS3I.	
	The call was successfully sent, but no station immediately replied.	Wait for a while, and try again.	—
	The destination network is down.	Wait for the destination network to be restored.	—

5 Troubleshooting

■ Troubleshooting for the Terminal mode operation

Problem	Possible Cause	Solution	Reference
After your call, the repeater replies "RX" or "RPT?" and your own call sign (MY) and ID suffix "G."	Your call sign (MY) has not been registered at a gateway server.	Register your call sign (MY) at a gateway server.	The transceiver's instruction manual
	The Terminal/AP call sign that is set in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I has not been registered in the RS-RP3C as the access point.	When using the Internal Gateway function, register the Terminal/AP call sign that is set in the transceiver in the RS-RP3C as the access point.	p. 6
		When using the External Gateway function, register the Terminal/AP call sign that is set in the RS-MS3W, RS-MS3A, or RS-MS3I in the RS-RP3C as the access point.	p. 6
	The destination station's call sign (UR) has not been registered with the gateway server, or the registered contents do not match your transceiver's setting.	Check the destination station's registration information.	—
	The destination station that uses the Terminal mode or Access Point mode does not transmit periodically.	The destination station makes a call again.	—
After your call, the repeater replies 'RPT?' and the access repeater's call sign.	The repeater cannot connect to the destination repeater.	Wait for a while, and try again.	—
	The repeater is busy.		
"L" appears on the LCD.	While receiving through the Internet, some packets may be lost due to network error (poor data throughput performance).	It is not a malfunction, and no action is required. ① If "L" continues to be displayed on the LCD, confirm the network and Bluetooth settings and connection condition. ② When the transceiver receives corrupted data, and misidentifies it as Packet Loss, "L" is displayed.	—
You can transmit, but cannot receive from the destination repeater.	You cannot connect to the Internet, or Global IP address is not assigned.	Check the Internet connection and Global IP address assignment.	p. 8
		If the Global IP address cannot be used, set "UDP Hole Punch" to "ON" in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I.	p. 9
	The router or mobile router's port is not correctly forwarded.	Forward the router or mobile router's correct port to your device.	p. 8
	The firewall is blocking the necessary port.	Check your firewall settings.	p. 16

5 Troubleshooting

■ Troubleshooting for the Access Point mode operation

The following chart is designed to help you correct problems which are not equipment malfunctions. If you are unable to locate the cause of a problem, or solve it through the use of this chart, contact your Icom Dealer or Service Center.

Problem	Possible Cause	Solution	Reference
After your call, the repeater does not return a status reply. (No S-meter indication)	The wrong Access Point mode transceiver is selected in the Remote D-STAR transceiver.	Set "FROM" to the correct Access Point mode transceiver.	p. 23
	The manually entered frequency or duplex setting is wrong in the Remote D-STAR transceiver.	Set the correct frequency or duplex setting.	p. 23
	The transmission from the Remote D-STAR transceiver did not reach the Access Point mode transceiver.	Move to a place where the Remote D-STAR transceiver can reach the Access Point mode transceiver.	—
	Transceiver connection is wrong.	When using the Internal Gateway function, check the connection between the transceiver and the router.	p. 14
		When using the External Gateway function, check the connection between the transceiver and the Windows, Android, or iOS device.	—
	The Remote D-STAR transceiver's call sign has not been added to "Allowed Call Sign List" in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I, when "Allowed Call Sign" is set to "Enable."	When using the Internal Gateway function, add the Remote D-STAR transceiver's call sign to "Allowed Call Sign List" on the INTERNAL GATEWAY SETTINGS screen.	p. 15
		When using the External Gateway function, add the Remote D-STAR transceiver's call sign to "Allowed Call Sign List" in the RS-MS3W, RS-MS3A, or RS-MS3I.	RS-MS3W, RS-MS3A, or RS-MS3I's instruction manual
After your call, the repeater replies "UR?," the Access Point call sign and ID suffix "G."	The call was successfully sent to the Access Point, but no station immediately replied.	Wait for a while, and try again.	—
	The destination network is down.	Wait for the destination network to be restored.	—

5 Troubleshooting

■ Troubleshooting for the Access Point mode operation

Problem	Possible Cause	Solution	Reference
After your call, the repeater replies “RX” or “RPT?” and the Access Point call sign and ID suffix “G.”	The Remote D-STAR transceiver’s call sign has not been set in the transceiver.	Set the Remote transceiver’s call sign in the transceiver.	The Remote D-STAR transceiver’s instruction manual
	The Remote D-STAR transceiver’s call sign has not been registered at a gateway server.	Register the Remote D-STAR transceiver’s call sign at a gateway server.	
	The Terminal/AP call sign that is set in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I has not been registered in the RS-RP3C as the access point.	When using the Internal Gateway function, register the Terminal/AP call sign that is set in the transceiver into the RS-RP3C as the access point.	p. 7
		When using the External Gateway function, register the Terminal/AP call sign that is set in the RS-MS3W, RS-MS3A, or RS-MS3I into the RS-RP3C as the access point.	p. 7
	The destination station’s call sign (UR) has not been registered with the gateway server, or the registered contents do not match your transceiver’s setting.	Check the destination station’s registration information.	–
	A wrong destination repeater’s call sign is set to “TO.”	Set “TO” to the correct destination repeater’s call sign.	p. 23
	The transceiver’s Internal Gateway settings or the application software settings are wrong.	When using the Internal Gateway function, correctly set the transceiver’s Internal Gateway settings.	p. 14
		When using the External Gateway function, correctly set the RS-MS3W, RS-MS3A, or RS-MS3I.	RS-MS3W, RS-MS3A, or RS-MS3I’s instruction manual
	The destination station that uses the Terminal mode or Access Point mode does not transmit periodically.	The destination station makes a call again.	–

5 Troubleshooting

■ Troubleshooting for the Access Point mode operation

Problem	Possible Cause	Solution	Reference
After your call, the repeater replies 'RPT?' and the access repeater's call sign.	The repeater cannot connect to the destination repeater.	Wait for a while, and try again.	—
	The repeater is busy.		
"L" appears on the LCD.	While receiving through the Internet, some packets may be lost due to network error (poor data throughput performance).	It is not a malfunction, and no action is required. ① If "L" continues to be displayed on the LCD, confirm the network and Bluetooth settings and connection condition. ② When the transceiver receives corrupted data, and misidentifies it as Packet Loss, "L" is displayed.	—
"DV" and "FM" icons alternately blink.	While in the DV mode, an FM signal is received.	Use a different operating frequency until there are no FM signals on the original frequency.	The transceiver's instruction manual
You can transmit, but cannot receive from the destination repeater.	You cannot connect to the Internet, or Global IP address is not assigned.	Check the Internet connection and Global IP address assignment.	p. 8
		If the Global IP address cannot be used, set "UDP Hole Punch" to "ON" in the transceiver, RS-MS3W, RS-MS3A, or RS-MS3I.	p. 9
	The router or mobile router's port is not correctly forwarded.	Forward the router or mobile router's correct port to your device.	pp. 11, 13
	The firewall is blocking the necessary port.	Check your firewall settings.	p. 16

5 Troubleshooting

■ Error messages of the RS-MS3W, RS-MS3A, and RS-MS3I

If an error message is displayed when clicking (touching) <Start>  in the RS-MS3W, RS-MS3A or RS-MS3I, read the following chart. If you are unable to locate the cause of a problem, or solve it through the use of this chart, contact your Icom Dealer or Service Center.

Message	Possible Cause	Solution	Reference
Gateway Repeater (Server IP/Domain) cannot be found.	The gateway repeater address is not correctly entered.	Correctly enter the gateway repeater address.	RS-MS3W, RS-MS3A, or RS-MS3I's instruction manual
	Your device does not connect to the Internet.	Connect your device to the Internet, and check whether or not you can access a web site on the web browser.	—
Terminal/AP Call sign is incorrect.	The Terminal/AP call sign is not correctly entered.	Correctly enter the call sign. ① The call sign consists of 8 characters. ① Enter a desired ID suffix between A to Z, except for G, I, and S, for the 8th character.	RS-MS3W, RS-MS3A, or RS-MS3I's instruction manual
RS-MS3W/RS-MS3A The USB cable is not connected. (1 * *)*	<When using the RS-MS3W> The transceiver and Windows device are not correctly connected.	Check the connection between the transceiver and the Windows device.	p. 16
	<When using the RS-MS3A> The transceiver and the Android device are not correctly connected.	Check the connection between the transceiver and the Android device.	p. 17
RS-MS3W/RS-MS3A The USB cable is not connected. (2 * *)*	The transceiver is not turned ON.	Turn ON the transceiver.	—
	The transceiver is in the Normal mode.	Enter the Terminal mode or Access Point mode.	pp. 20, 22
	<When using the RS-MS3A> The “Gateway Select” in the transceiver is set to “Internal Gateway (Wi-Fi)” or “External Gateway (Bluetooth).”	Change the “Gateway Select” in the transceiver to “External Gateway (USB (B)).” ([MENU] > DV GW > Gateway Select)	p. 2

* * *: Error code

5 Troubleshooting

■ Error messages of the RS-MS3W, RS-MS3A, and RS-MS3I

Message	Possible Cause	Solution	Reference
RS-MS3A/RS-MS3I Bluetooth has been disconnected.	The transceiver is not turned ON.	Turning ON the transceiver.	—
	The transceiver is far from your Android or iOS device.	Decrease the space between the transceiver and your Android or iOS device.	—
	Microwave ovens or Wireless LAN may cause interference.	Use your Bluetooth device away from the other devices, or stop using those devices.	—
	<When using the RS-MS3I> You touch <Stop>  .	Touch <Start>  to connect again.	—
RS-MS3A/RS-MS3I Bluetooth connection failed.	The device name displayed in the application is not the transceiver that you want to connect to.	Update the Bluetooth connection and confirm it matches the device name. ([MENU] > SET > Bluetooth Set > Bluetooth Device Information)	
	The “Gateway Select” in the transceiver is set to “Internal Gateway (Wi-Fi)” or “External Gateway (USB (B)).”	Change the “Gateway Select” in the transceiver to “External Gateway (Bluetooth).” ([MENU] > DV GW > Gateway Select)	p. 2
Failed to connect to the network.	The application cannot create a socket for sending and receiving data.	Check whether or not the port number (40000/40002) competes with other applications. If so, stop the competing application.	—
		Restart the RS-MS3W, RS-MS3A, or RS-MS3I. If an error message does not disappear, restart the Windows, Android, or iOS device.	—
RS-MS3W/RS-MS3A A Network error occurred.	A system error occurs when receiving data from a network.	Restart the RS-MS3W, RS-MS3A, or RS-MS3I. If an error message does not disappear, restart the Windows, Android, or iOS device.	—
RS-MS3I An error has occurred.			
RS-MS3W/RS-MS3A Failed to start the service.	The gateway repeater address or Terminal/AP call sign is not correctly entered.	Correctly enter the gateway repeater address or Terminal/AP call sign.	RS-MS3W, RS-MS3A, or RS-MS3I's instruction manual
	A system error occurs when the service started.	Restart the RS-MS3W or RS-MS3A. If an error message does not disappear, restart the Windows or Android device.	—

Information about Icom's D-STAR transceivers compatible with the DV Gateway function

The following table shows documents describing the DV Gateway function, as well as software and applications available for each transceiver.

(As of August 2026)

	ID-52A/E PLUS	ID-52A/E	ID-50A/E	ID-51A/E PLUS2 ID-31A/E PLUS	ID-4100A/E	ID-5200A/E	IC-705	IC-905	IC-9700
Descriptions	About the DV Gateway function (For Handhelds) (Function guide common to the above transceivers)				ID-4100A/ ID-4100E About the DV Gateway function	About the DV Gateway function (For Mobiles)	ADVANCED MANUAL Section 15 ABOUT THE DV GATEWAY FUNCTION	ADVANCED MANUAL Section 12 ABOUT THE DV GATEWAY FUNCTION	ADVANCED MANUAL Section 12 ABOUT THE DV GATEWAY FUNCTION
Internal Gateway function									
Wireless LAN	N/A	N/A	N/A	N/A	N/A	○	○	N/A	N/A
Wired LAN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	○	○
Gateway function (External)									
Transceiver connector type	Type-C	Micro-B	Type-C	DATA jack [DATA]	DATA jack [DATA]	Type-C	Micro-B	Type-C	DATA jack [DATA]
(1) RS-MS3W (For Windows PCs)									
Cables for USB connection	Supplied USB cable (Type-A to Type-C)	OPC-2418 (Micro-B to Type-C) or user-supplied USB cable	Supplied USB cable (Type-A to Type-C)	OPC-2350LU* ¹	OPC-2350LU* ¹	OPC-2480 (Type-A to Type-C) or user-supplied USB cable	OPC-2418 (Micro-B to Type-C) or user-supplied USB cable	User-supplied USB cable	OPC-2350LU*
(2) RS-MS3A (For Android devices)									
USB connection	○* ²	○* ²	○* ²	○	○	○	○* ²	○* ²	○
Cables for USB connection	User-supplied USB cable* ³	OPC-2417 (Micro-B to Micro-B) or OPC-2418 (Micro-B to Type-C)	User-supplied USB cable* ³	OPC-2350LU* ¹	OPC-2350LU* ¹	User-supplied USB cable* ³	OPC-2417 (Micro-B to Micro-B) or OPC-2418 (Micro-B to Type-C)	User-supplied USB cable* ³	OPC-2350LU*
Bluetooth connection	○* ⁴	N/A	N/A	N/A	N/A	○* ⁴	N/A	N/A	N/A
(3) RS-MS3I (For iOS devices)									
Bluetooth connection	○* ⁵	N/A	N/A	N/A	N/A	○	N/A	N/A	N/A

○: Applicable

N/A: Not Applicable

*¹ If your device only has a USB Type-C port, you will need to purchase a commercially available USB On-The-Go (OTG) adapter to use the OPC-2350LU.

OPC-2350LU + Supplied cable (Mini-B to Type-A) + USB OTG adapter (Type-A to Type-C)

(For your reference)



Type-A



Micro-B



Type-C

*² Usable only when the RS-MS3A version is 1.31 or later.

*³ The OPC-2418 cannot be used.

*⁴ Usable only when the RS-MS3A version is 1.40 or later.

*⁵ Usable only when the transceiver's Main CPU(CPU M) version is 1.10 or later.