

This guide contains instructions on how to configure the remote control system, and how to remotely control a radio.

Before reading this guide, please finish the installation and connection, following the RS-BA1 Preparations and Installation guide ①.

See the RS-BA1 Instruction Manual included in the CD, for detailed instructions.

Step1: Preparations

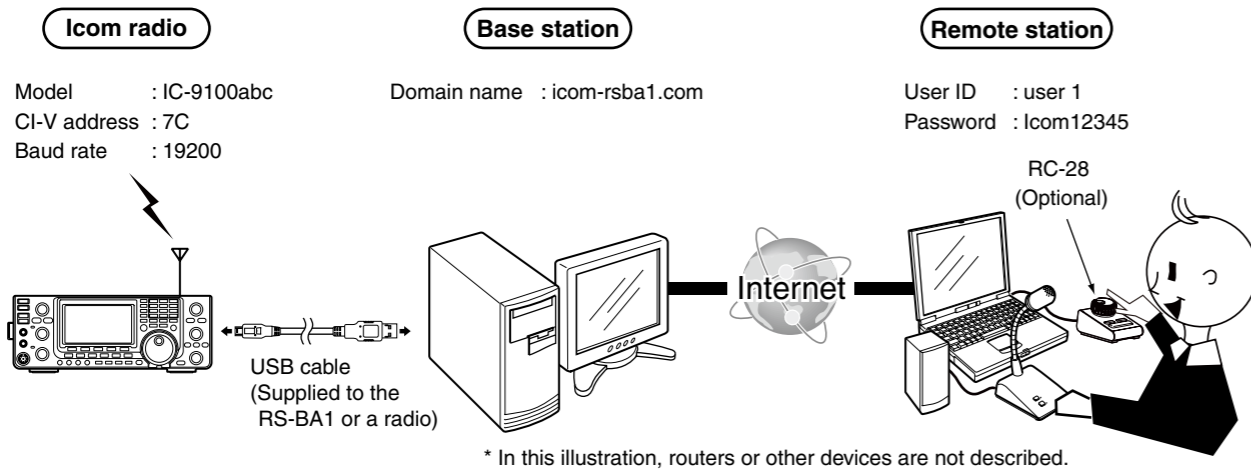
Step2: Installation guide ①

Step3: Installation guide ②

Example of the remote control system

This guide explains the minimum required settings to configure a remote control system, taking the following illustration as an example. In this example, a radio is connected to the Base station's PC with the supplied USB cable, and a remote station remotely controls the radio through the Internet.

- We recommend that you place the Remote station's PC near to the Base station's PC and a radio, to check that the settings are correct, and that you can correctly control the radio.
- Only users whose ID and password are registered on the Base station's PC can access the Base station, or the radio. **BE CAREFUL** in managing IDs and passwords.
- See the Instruction Manual included in the CD, for detailed instructions on the RS-BA1. You can also refer to each software's help file, for assistance with the functions and settings. While the software is open, push the [F1] key of the PC's keyboard to open the help file.



NOTE:
The domain name, password, and other settings in this illustration are only an example. Please configure the system using your own settings.

For your convenience:
If you connect an RC-28 REMOTE ENCODER to the Remote station, you can use the RS-BA1 and feel like you are operating the actual transceiver's main dial, [TRANSMIT] key and so on.

Before configuration

To configure the remote control system, the following settings are required.

- To let the Remote Utility work properly, it must be added as an exception in the Firewall. See the RS-BA1 Instruction Manual included in the CD, for details.
- If you configure the remote control system through the Internet, you need to configure your Base station and Remote station routers to allow access from the Internet. Configure the port forwarding settings, and IP filter settings on your router, for port numbers 50001, 50002, and 50003. See your router's manual for details of how to configure the settings.
- Before you start communicating using the RS-BA1, the PC's audio volume must be set to a proper level. When your PC is used as a Base station, adjust the audio level of the device that is connected to your radio. When your PC is used as a Remote station, adjust the audio level of the device that your microphone, speaker, or headset is connected to. See the RS-BA1 Instruction Manual included in the CD, for details.

1. Configure the remote control system

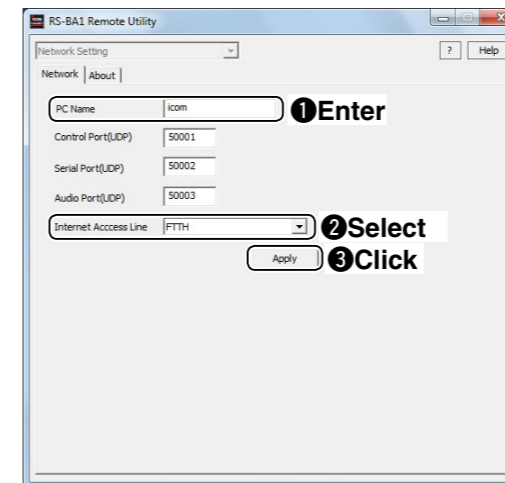
1. Settings on the Base station's PC

This section describes how to setup the Base station (Server) PC.

Before configuring the settings, connect a radio to the PC following the RS-BA1 Installation guide ①, and then turn on the radio.

1 Network setting

- ① Double-click the "Remote Utility" icon on your desktop to open the Remote Utility.
- ② "Please set your own PC information" appears, then click [OK].
- ③ The Network Setting screen appears. Configure the network settings as described below.
 - ① Enter a name for your PC in the **PC Name** field. (ex. icom)
 - ② Select your internet access line type in the **Internet Access Line** menu. (ex. FTTH)
 - ③ Click [Apply] to save the network settings.

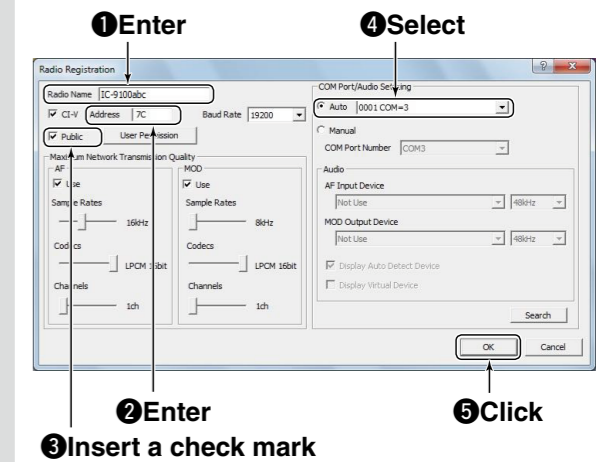


- ④ After clicking, "Take effect after restarting the application" appears, then click [OK], and restart the Remote Utility.

2 Radio registration

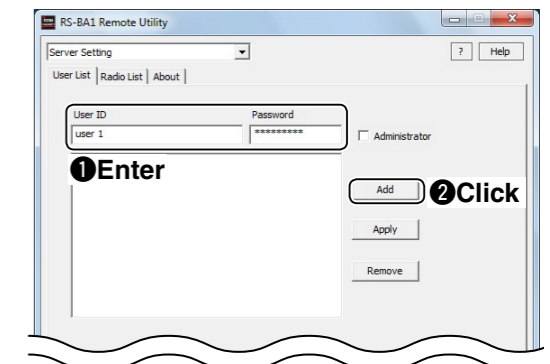
- ① Select the Server Setting mode from a drop-down list located at the top of the screen, and then click the [Radio List] tab.
- ② The Radio List screen appears, then click [Add].
- ③ The Radio Registration screen appears. Register a radio as described below.
 - ① Enter a name for the radio in the **Radio Name** field. (ex. IC-9100abc)
 - ② Enter the radio's CI-V address in the **Address** field. (ex. 7C)
 - ③ Click the **Public** box to insert a check mark.
 - ④ Click the **COM Port/Audio - Auto** radio button. Select an appropriate one from the drop-down list, then the COM port and audio device will be automatically set.
 - ⑤ Click [OK] to save the settings and close the screen.

2 • Radio Registration screen

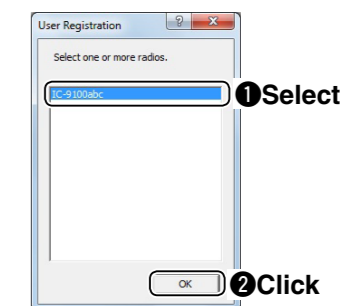


3 User registration

- ① Click the [User List] tab.
- ② The User List screen appears, then register a Remote station as described below.
 - ① Enter a user ID in the **User ID** field. (ex. user 1), and then enter a password of eight characters or more, in the **Password** field. (ex. Icom12345)
 - ② Click [Add].



- ③ The User Registration screen appears, then select a radio for the user to control.
 - ① Select a radio. (ex. IC-9100abc)
 - ② Click [OK] to save the settings and close the screen.



To prevent unauthorized access:
Set a long and strong password so that no one can possibly guess it.
Mix upper and lower case letters, numbers or characters.

1. Configure the remote control system (Continued)

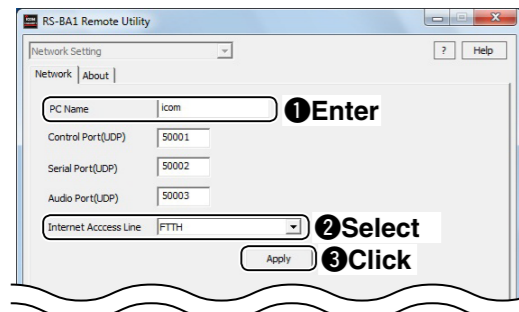
2. Settings on the Remote station's PC

This section describes how to setup the Remote station (Client) PC.

Before configuring the settings, connect a speaker and microphone, or headset to the Remote station's PC.

1 Network setting

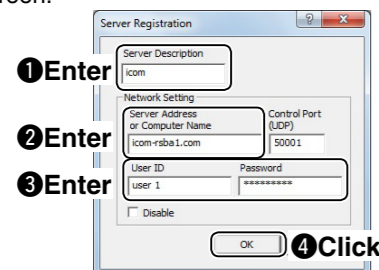
- 1 Double-click the "Remote Utility" icon on your desktop to open the Remote Utility.
- 2 "Please set your own PC information" appears, then click [OK].
- 3 The Network Setting screen appears. Configure the network settings as described below.
 - 1 Enter a name for your PC in the **PC Name** field. (ex. icom)
 - 2 Select your internet access line type in the **Internet Access Line** menu. (ex. FTTH)
 - 3 Click [Apply] to save the network settings.



- 4 After clicking, "Take effect after restarting the application" appears, then click [OK], and restart the Remote Utility.

2 Connecting to the Base station

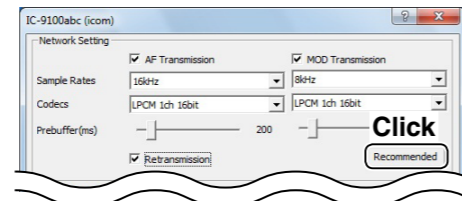
- 1 Select the Radio Operation mode from a drop-down list located at the top of the screen, and then click the [Server List] tab.
- 2 The Server List screen appears, then click [Add].
- 3 The Server Registration screen appears. Register a Base station as described below.
 - 1 Enter a name for the Base station in the **Server Description** field. (ex. Icom)
 - 2 Enter the IP address, domain name or computer name of the Base station's PC in the **Server Address or Computer Name** field. (ex. icom-rsba1.com)
 - 3 Enter your user ID (ex. user 1) and password (ex. Icom12345) which are registered in the Base station, in the **User ID** and **Password** fields.
 - 4 Click [OK] to save the settings and close the screen.



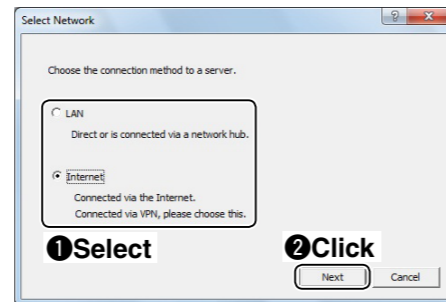
- 4 In the Server List screen, select the registered Base station, and then click [Connect].
 - "CONNECTING" appears under the Base station name when the connection has succeeded.

3 Connecting to the radio through a network

- 1 Click the [Radio List] tab.
- 2 The Radio List screen appears, then select a radio (ex. IC-9100abc), and then click [Settings].
- 3 The Connection Setting screen appears, then click [Recommended].

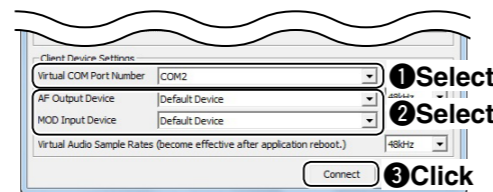


- 4 The Select Network screen appears. Select the connection to a radio, either through a LAN, or the Internet (ex. Internet), and then click [Next].

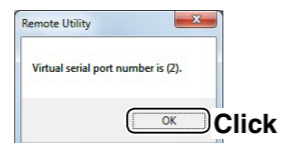


- 5 The recommended values for your network are displayed. Click [Yes] to automatically set the displayed values and close the Select Network screen.
- 6 In the Connect Setting screen, connect to the radio as described below.

- 1 Select a COM port number in the **Virtual COM Port Number** menu. (ex. COM2)
- 2 Select an audio device in the **AF Output Device** and **MOD Input Device** menu to which your speaker, microphone or headset is connected. (ex. Default Device)
- 3 Click [Connect].



- 7 A dialog appears, showing the COM port number which is used to exchange CI-V commands between your PC and a radio, then click [OK].



- "<<CONNECT>>" appears under the radio name when the connection has succeeded.

2. Remote control operation

This section describes how to connect and remotely control a radio from a Remote station, using the Remote Controller.

- Since cannot turn the radio ON or OFF with remote control operation, the radio must be turned ON.
- The description in this section is based on the assumption that the connection to the radio using the Remote Utility has succeeded ("<<CONNECT>>" is displayed under the radio name).

1 Connect setting using the Remote Controller

- 1 Double-click the "Remote Control" icon on your desktop to open the Remote Controller.
- 2 Click the right icon in the toolbar, or click "Connect Setting..." in the [Option] menu.
- 3 The Connect Setting screen appears.

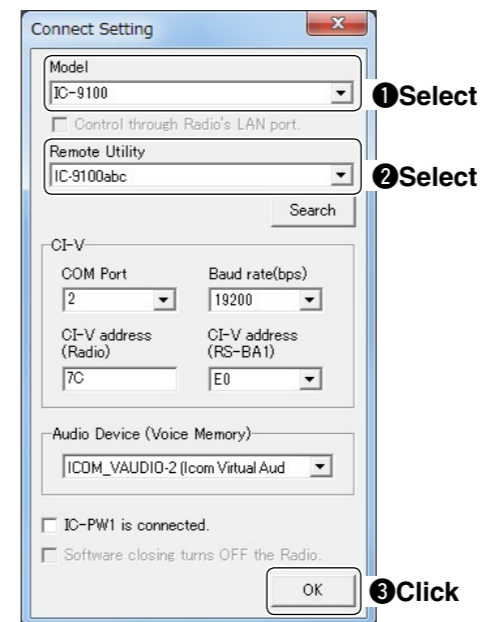
Configure the connect settings as described below.

- 1 Select a radio that you want to control in the **Model** menu. (ex. IC-9100)
- 2 Select a radio that you are accessing using the Remote Utility, in the **Remote Utility** menu. (ex. IC-9100abc)

- The CI-V settings are automatically loaded from the Remote Utility to the CI-V field. The settings include the virtual COM Port number, radio's CI-V address and baud rate and the virtual audio device for the Voice Memory function.

- If the desired radio is not displayed in the **Remote Utility** menu, click [Search] to load the radios' information from the Remote Utility.

- 3 Click [OK] to save the settings and close the screen.



NOTE: DO NOT allow the PC to go into the sleep or standby mode while using the RS-BA1. Otherwise, it might not work properly after the PC resumes normal activity.

Importing the repeater list:

You can easily program the DV mode repeater information by importing the repeater list preprogrammed for each product. See the RS-BA1 Remote Controller's Help file for importing details.

2 Connecting to the radio using the Remote Controller

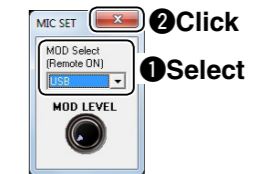
- 1 Click the right icon in the toolbar, or click "Connect ON" in the [File] menu, to connect to the radio.
- When the connection has succeeded, the radio's current data will be displayed on the main panel.

3 Selecting a modulation input connector

In order to transmit audio when remotely controlling the radio from the Remote Controller, configure the following settings, depending on the radio's connector.

- 1 Click [MIC SET] on the Remote Controller.
- 2 The MIC SET screen appears.

Select an appropriate connector in the **MOD Select (Remote ON)** menu (ex. USB), to input transmit audio from the PC to the radio. Then, click the close button to close the screen.



4 Remote control operation

See the RS-BA1 Remote Controller's help file for remote operation details, such as how to change the frequency, or turn ON each function.

To display the help file, click "Contents" in the Help menu on the Remote Controller, or push the [F1] key on your PC's keyboard.

When not using the radio:

- Disconnect the radio from both the Remote Controller and Remote Utility. Even if you disconnect from the radio, it does not turn OFF the radio.
- When using a radio that can be turned ON or OFF with the CI-V Power ON/OFF command:
 - If you check the **Software closing turns OFF the Radio**. box, when you close the Remote Controller, the radio's power is also turned OFF.
 - If you do not check the **Software closing turns OFF the Radio**. box, be sure to disconnect the radio from Remote Controller, first. And close the Remote Controller, and then close the Remote Utility.
- When you manually select the transmit audio input connector(s) to be used after finishing the Remote mode, click the right icon in the toolbar, or click "Remote Setting..." in the [File] menu to select.
 - Regularly, it automatically returns to the original setting before you start the Remote mode.