

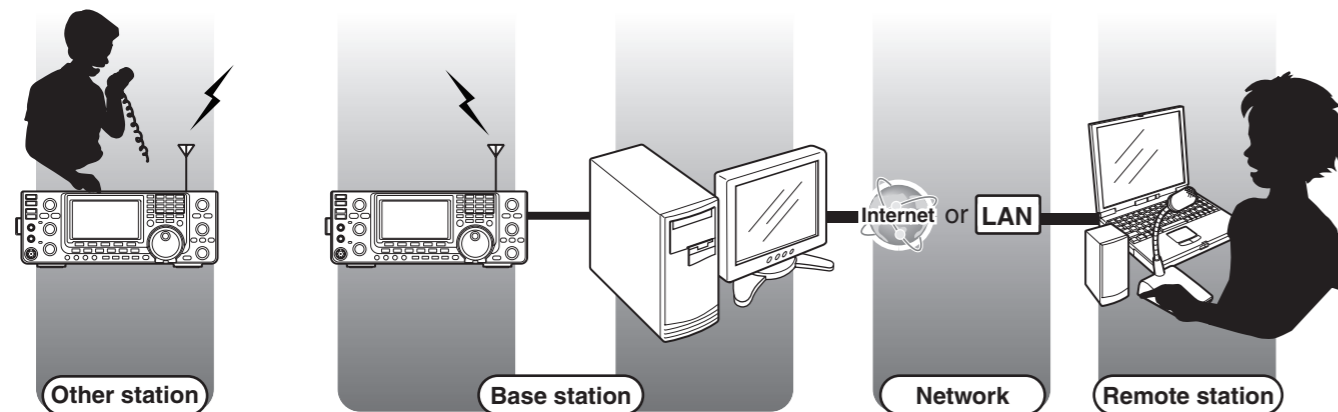
Thank you for purchasing the RS-BA1. The RS-BA1 is designed to remotely control an Icom radio through a network. Read this guide before attempting to configure the software. This guide contains instructions on how to install the RS-BA1.

## About the remote control system

An RS-BA1 remote control system basically consists of a Base station (Radio and Server) and a Remote station (PC) through a network.

With the RS-BA1, you can configure the remote control system through the Internet, or a LAN.

To control the Base station radio, the radio should be connected to the network through a PC or directly.



\* In this illustration, routers or other devices are not described.

Above illustration shows when connecting to the network through a PC.

The following radios have a built-in Network function that can be directly connected to the network. With this function, a Base station PC is not necessary.

- IC-7851 • IC-7850 • IC-7800 (Firmware version 3.00 or later) • IC-7700 (Firmware version 2.00 or later) • IC-7610

## Precautions

**IMPORTANT!** To remotely control radios using the RS-BA1, **BE SURE** that you comply with your local regulations.

The RS-BA1 is designed to remotely control radios that have a USB port (Type B/Mini-B) or a LAN port\*.

\*Only when using a radio with the Network function.

RS-BA1 operation with the Base station's PC connected to the radio's ACC socket, MIC connector, or S/P DIF jack for audio communication cannot be guaranteed.

Depending on your radio, a few functions or modes cannot be used, or you need to update the radio's firmware to operate the CW keyer, using the RS-BA1.

### To read the Instruction Manual (PDF file)

- The RS-BA1 Instruction Manual provides detailed instructions on how to configure your own remote control system. Adobe® Acrobat® Reader® is required to read the PDF file. If you have not installed it, please download it from the website of Adobe Systems Incorporated.
- After installing the RS-BA1, a short cut will be automatically made in the program group "RS-BA1," to open the Instruction Manual. You can simply open the file in the program menu.  
(Windows 10: <Start> → All Apps → RS-BA1 → Instruction Manual )  
(Windows 8.1: The Search charm on the right of the screen → Apps → RS-BA1 → Instruction Manual)  
(Other OS: <Start> → All Programs → RS-BA1 → Instruction Manual)

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## System requirements

### Supplied items

- CD (including the RS-BA1 Instruction Manual, the RS-BA1 installer, the USB driver and the USB driver Installation Guide)
- Preparations (this guide)
- License Agreement
- A USB cable (A-B type)

### Required items

#### Base station

- A PC (with a USB 1.1, 2.0 or 3.0 port, and IP network capability)
  - As long as the RS-BA1 is used only within a local area network, the Base and Remote station PCs are not required to be connected to the network.
  - If the Base station radio has a built-in Network function, the Base station PC is not required.
- At least one Icom CI-V command capable radio
  - We recommend radios that have a USB port (Type B/Mini-B) or a LAN port\*.

#### Remote station

- A PC (IP network capability)
- A speaker and a microphone, or a headset (Purchase separately)
  - Connect it to the PC's audio terminal.

### To configure the remote control system through the Internet

If you configure the remote control system through the Internet, whether you are operating as a Base station or a Remote station, you need to configure your router 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.

Ask the router's manufacturer about how to configure the settings.

### \*Radios with the Network function

- IC-7851
- IC-7850
- IC-7800 (Firmware version 3.00 or later)
- IC-7700 (Firmware version 2.00 or later)
- IC-7610

### Minimum system requirements

#### PC (Base station or Remote station)

When only one radio and one Remote station are connected to the Base station.

<b>Operating System</b>	Microsoft® Windows® 10 (32/64 bit) Microsoft® Windows® 8.1 (32/64 bit) (Except for Microsoft® Windows® RT) Microsoft® Windows® 7 (32/64 bit)
<b>CPU</b>	Pentium 4 1 GHz or better (A multicore CPU is recommended.)
<b>Memory</b>	Windows 10 (32 bit): 1 GB or more Windows 10 (64 bit): 2 GB or more Windows 8.1 (32 bit): 1 GB or more Windows 8.1 (64 bit): 2 GB or more Windows 7 (32 bit): 1 GB or more Windows 7 (64 bit): 2 GB or more
<b>HDD</b>	70 MB of available disk space, or more (The Voice Memory function or recording function will need more)
<b>Display Resolution</b>	1024 × 600 pixels, or more
<b>Network data speed</b>	For the Base station: Upload 500 kbps, or faster Download 350 kbps, or faster For the Remote station: Upload 350 kbps, or faster Download 500 kbps, or faster (When the default audio quality is used)
<b>Remark</b>	We recommend the use of the on-board sound chipset. The CPU may have a heavy load, when an external sound device such as USB audio converter is used.

This is the minimum system requirement to use the RS-BA1. Because the system requirements may differ, depending on your PC environment (permanently running software such as antivirus software, peripheral devices, network condition, settings of OS and other software), the operation is not guaranteed.

**NOTE:** In this guide, the OSs are described as "Windows 10," "Windows 8.1," and "Windows 7."

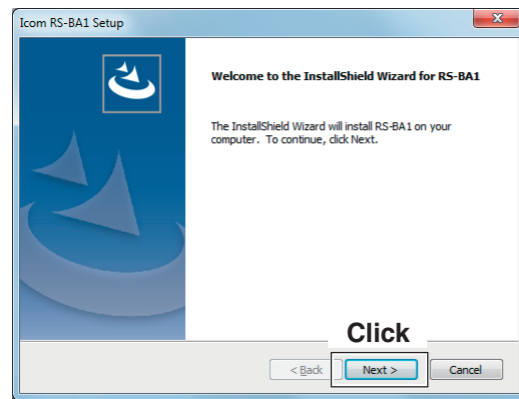
The following steps are required only for the Remote station (Client) PC when using a radio with the Network function.

## 1. Software and driver installation

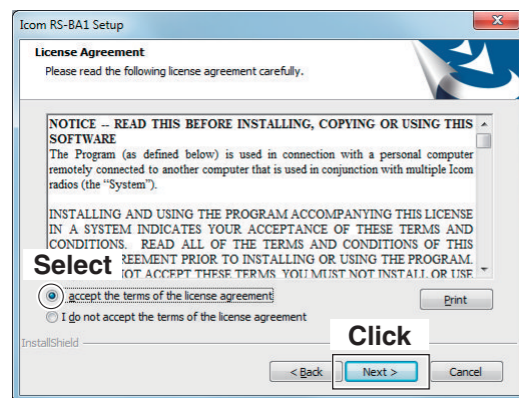
(for both the Base station (Server) and Remote station (Client) PCs)

The RS-BA1 installer will install the Remote Utility (system configuration software), Remote Control (remote control software), Icom Virtual Serial Port and Icom Virtual Audio Device.

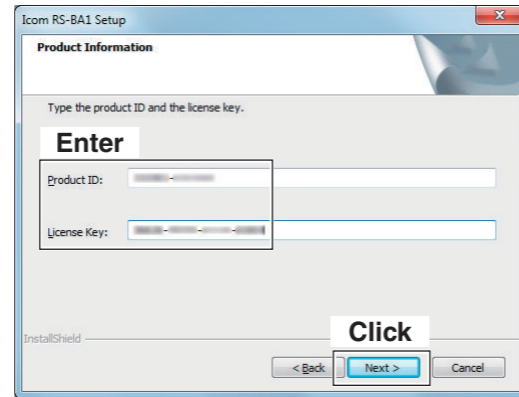
- ① Log on as the **administrator**.
  - **BE SURE** no other applications are running.
- ② Insert the CD into a CD drive.
- ③ Double-click the “setup.exe” in the [RSBA1] folder in the CD.
  - If “User Account Control” is displayed, click [Yes].
- ④ “Choose Setup Language” appears, and select ‘English’ or ‘Japanese,’ and then click [Next>].
- ⑤ “Welcome to the InstallShield Wizard for RS-BA1” appears. Click [Next>].



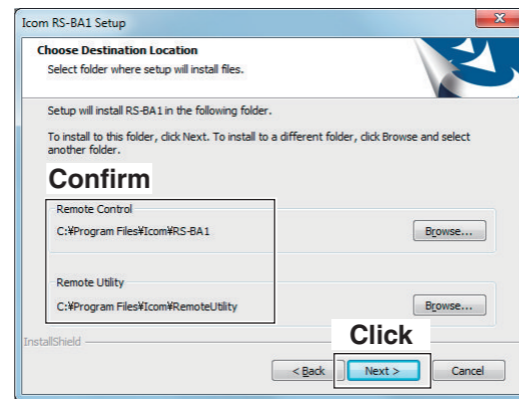
- ⑥ “License Agreement” appears. After reading the contents, when you agree with it, select “I accept the terms of the license agreement,” and then click [Next>].



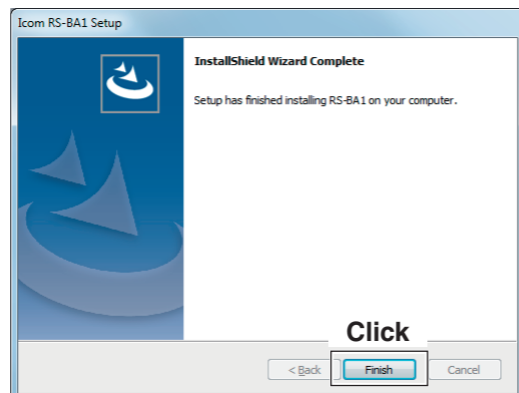
- ⑦ “User Information” appears, and then enter your name and your company name (optional).
- ⑧ “Product Information” appears, and then enter the product ID number and the Licence key. After that, Click [Next>].
  - Enter the Product ID and Licence key on the label attached to the CD case.



- ⑨ “Choose Destination Location” appears, and then click [Next>].
  - To select another destination folder, click [Browse...], and select a new location before clicking [Next >].



- ⑩ During the installation, the installer may display security warning dialogs about installing “Icom Virtual Serial Driver” and “Icom Virtual Audio Device.” When they appear, simply click [Continue].
- ⑪ After the installation has completed, “InstallShield Wizard Complete” appears, then click [Finish].



- ⑫ Eject the CD.

## 2. Confirmation (IMPORTANT!)

After the installation has been completed, confirm with your PC’s Device Manager that the virtual drivers have been successfully installed.

To open the Device Manager screen

Windows 10

- ① Right-click <Start>.
- ② Click [Device Manager].

Windows 8.1

- ① Click the folder icon on the taskbar.
- ② Right-click [Computer], and then click [Properties]. “System” appears.
- ③ Click [Device Manager].

Windows 7

- ① Right-click [Computer] in the <Start> menu, and then click [Properties]. “System” appears.
- ② Click [Device Manager].

To check the virtual drivers

- ① Open the Device Manager screen.
  - If “User Account Control” is displayed, click [Yes].
- ② Double-click the [Sound, video and game controllers] item, and check that “Icom Virtual Audio Driver” is included in the list.
- ③ Double-click the [Multi-port serial adapters] item, and check that “Icom Virtual Serial Driver” is included in the list.

NOTE:

If “Icom Virtual Audio Driver” or “Icom Virtual Serial Driver” is not displayed, the driver may not have been normally installed. Install the virtual driver again, following “Individual installation” in this guide.

See the RS-BA1 Instruction Manual included in the CD, to connect a radio to the Base station’s PC, and to configure the remote control system.

### When individually installing the virtual drivers

If a virtual driver, “Icom Virtual Audio Driver” or “Icom Virtual Serial Driver,” has not been successfully installed, individually install them according to the following procedure.

- ① Log on as the **administrator**.
  - **BE SURE** no other applications are running.
- ② Click [All Programs] in the <Start> menu and then [Icom Remote Utility], and then click [Virtual Driver Maintenance]. (Windows 10: <Start> → All Apps → Icom Remote Utility) (Windows 8.1: The Search charm on the right of the screen → Apps → Icom Remote Utility)
  - If “User Account Control” is displayed, click [Yes].

- ③ “Virtual Driver Installer” appears, then click [Install].
- ④ If both the drivers have not been installed, the installer starts the installation. When either of them has already been installed, a confirmation screen will appear, then click [Yes] to start over-writing, or click [No] to skip the installation.
- ⑤ After the installation has completed, “Install Finished” appears, then click [OK].
- ⑥ If a dialog that requires restarting the PC appears, click [Yes].

### When uninstalling the software

To uninstall the software or virtual drivers, follow the procedures below.

To uninstall the software as well as virtual drivers

Uninstall using “Uninstall a program” in the Windows Control Panel.

To uninstall only virtual drivers

Uninstall using Windows Device Manager.
 

- You can also uninstall using the “Virtual Driver Maintenance.” (See step ② in “When individually installing the virtual drivers” in this guide.)

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Count on us!

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