

## 2. Confirmation (IMPORTANT!)

After the installation has been completed, use PC's Device Manager to confirm that the virtual drivers have been successfully installed.

### To open the Device Manager screen

#### Windows 10

1. Right-click the Start icon.
2. Click "Device Manager."

#### Windows 8.1

1. Right-click the Start icon.
2. Click "Device Manager."

#### Windows 7

1. Click the Start icon to open the Start menu.
2. Right-click on Control Panel in the right column, then click on Device Manager.

### To confirm the virtual drivers

1. Open the Device Manager screen.  
① If "User Account Control" is displayed, click <Yes>.
2. Double-click "Sound, video and game controllers," and confirm that "Icom Virtual Audio Driver" is included in the list.
3. Double-click "Multi-port serial adapters," and confirm 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 properly installed. Install the virtual driver again, following "Individual installation" in this guide.

**TIP:** To configure the remote control system, refer to the RS-BA1 Instruction Manual included in the CD.

## ■ 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 in as the **administrator**.  
① **Confirm** no other applications are running.
2. Click the Start icon and then "Icom Remote Utility," and then click "Virtual Driver Maintenance."
  - Windows 8.1: The Search charm on the right of the screen → Apps → Icom Remote Utility
  - Windows 7: <Start> → All Programs → Icom Remote Utility① If "User Account Control" is displayed, click <Yes>.

3. "Virtual Driver Installer" is displayed, then click <Install>.
4. If both drivers have not been installed, the installer starts the installation. If either of them has already been installed, a confirmation screen will be displayed. Click <Yes> to start overwriting, or click <No> to skip the installation.
5. After the installation has completed, "Install Finished" is displayed, then click <OK>.
6. If a dialog that requires restarting the PC is displayed, click <Yes>.

## ■ When uninstalling the software or the virtual drivers

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

### To uninstall the software as well as the virtual drivers

Uninstall using the uninstall a program function in "Programs and Features", in the Windows Control Panel.

### To uninstall only the virtual drivers

Uninstall using Windows Device Manager.  
① You can also uninstall using "Virtual Driver Maintenance."  
(See step 2 in "When individually installing the virtual drivers" in this guide.)

# ICOM PREPARATIONS

## IP REMOTE CONTROL SOFTWARE

# RS-BA1

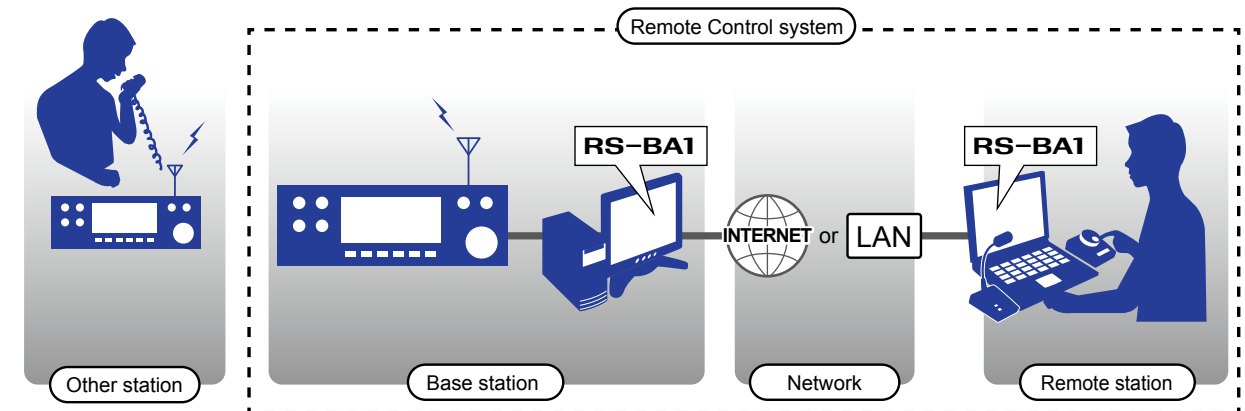
Version 2

Thank you for choosing this Icom product. This product is designed to remotely control an Icom transceiver through a network. Read this guide before using 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 (a transceiver and a Server PC) and a Remote station (Remote PC) through a network.

With the RS-BA1, you can configure the remote control system through a LAN or the Internet. To remotely control the transceiver, it should be connected to a network through a PC, or directly.



① If you use a transceiver with the Server function, a Server PC is not necessary.

### The Transceivers with the Server function

- IC-7851 • IC-7850 • IC-7800 (Firmware version 3.00 or later)
- IC-7700 (Firmware version 2.00 or later) • IC-7610 • IC-9700

## Precautions

**IMPORTANT!** To remotely control transceivers using the RS-BA1, **BE SURE** that you comply with any local regulations. The RS-BA1 is designed to remotely control transceivers that have a LAN\* or USB port (Type B/Mini-B).

\*Only when using a transceiver with the Server function.

Proper audio communication cannot be guaranteed if you connect the Server PC to the transceiver's ACC socket, MIC connector, or S/PDIF jack.

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

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

The RS-BA1 Instruction Manual (PDF file) provides detailed instructions on how to configure your own remote control system. After installing the RS-BA1, a short cut will be automatically made in the program group "RS-BA1 Ver2," to open the Instruction Manual.

You can simply open the file in the program menu.

(Windows 10: <Start> → RS-BA1 Ver2 → Instruction Manual)

(Windows 8.1: The Search charm on the right of the screen → Apps → RS-BA1 Ver2 → Instruction Manual)

(Windows 7: <Start> → All Programs → RS-BA1 Ver2 → Instruction Manual)

① Adobe® Acrobat® Reader® is required to read the PDF file. If necessary, download it from the website of Adobe Systems Incorporated.

# 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

- At least one Icom CI-V command capable transceiver (IP network capable (When connecting a transceiver to a network directly))
  - ① We recommend transceivers that have a USB port (Type B/Mini-B) or a LAN port\*.
- A PC (IP network capable)
  - ① When using the transceiver with the Network function, the PC is not required.

### Remote station

- A PC (IP network capable)
- A speaker and a microphone, or a headset (User supplied)
  - ① Connect it to the PC's audio jack.

① As long as the RS-BA1 is used only within a local area network, the Base and Remote station are not required to be connected to the Internet.

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

If you configure the remote control system through the Internet, you need to configure your router to allow access from the Internet on both the Base station and the Remote station.

Configure the port forwarding settings, and IP filter settings on your router, for port numbers 50001, 50002, and 50003.

① Refer to your router's documentation for details about how to configure the settings.

### NOTE: Before installing RS-BA1

You cannot install multiple RS-BA1s on a single PC. If you installed the previous RS-BA1 in your PC, the previous RS-BA1 is uninstalled and then the RS-BA1 Version 2 is installed.

If you want to continue using the old RS-BA1 version on this PC, install the version 2 on a different PC.

## Minimum system requirements

PC (Server PC or Remote PC)	
When only one transceiver and one PC are connected to the Server PC.	
<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) ① In this guide, the OSs are described as "Windows 10," "Windows 8.1," and "Windows 7."
<b>CPU</b>	1.8 GHz or better
<b>Memory</b>	Windows 10 (32 bit): 2 GB or more Windows 10 (64 bit): 4 GB or more Windows 8.1 (32 bit): 2 GB or more Windows 8.1 (64 bit): 4 GB or more Windows 7 (32 bit): 2 GB or more Windows 7 (64 bit): 4 GB or more
<b>HDD</b>	150 MB or more of available disk space. (The Voice Memory function or recording function will need more space.)
<b>Display Resolution</b>	1024 × 768 pixels, or more
<b>Network data speed</b>	<p><b>When using the Dualwatch function</b> For the Base station: Upload 1.2 Mbps, or faster Download 350 kbps, or faster For the Remote station: Upload 350 kbps, or faster Download 1.2 Mbps, or faster (When the default audio quality is used)</p> <p><b>When not using the Dualwatch function</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)</p>
<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.

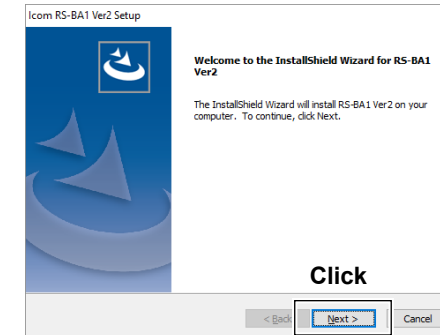
This is the minimum system requirement to use the RS-BA1 software. Because the system requirements may differ, depending on your PC environment (permanently running software such as antivirus software, peripheral devices, network condition, settings of OS and other software), the operation is not guaranteed.

# 1. Software and driver installation

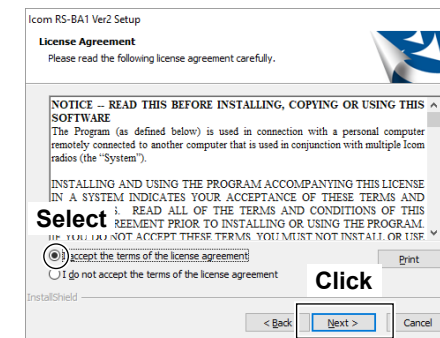
The following steps are required for both the Server PC and the Remote PC when connecting a transceiver to a network through a PC.

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 in as the **administrator**.
  - ① **Confirm** no other applications are running.
2. Insert the CD into a CD drive.
3. Double-click the "setup.exe" in the "RSBA1" folder on the CD.
  - ① If "User Account Control" is displayed, click <Yes>.
4. "Choose Setup Language" is displayed. Select "English" or "Japanese," and then click <Next>.
5. "Welcome to the InstallShield Wizard for RS-BA1 Ver2" is displayed, and then click <Next>.

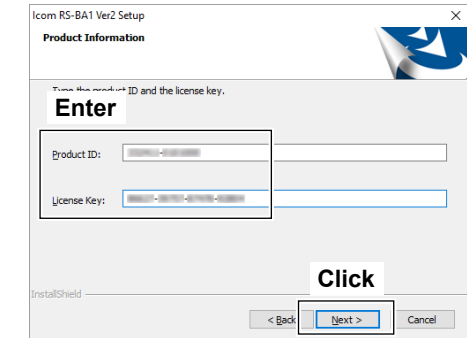


6. If you installed the previous RS-BA1 in your PC, "the previous RS-BA1" is displayed. Click <Next> to uninstall the previous RS-BA1 version, and then install the RS-BA1 Version 2.
  - ① Click <Cancel> to stop installing version 2.
7. "License Agreement" is displayed. After reading the contents, if you agree with it, select "I accept the terms of the license agreement," and then click <Next>.

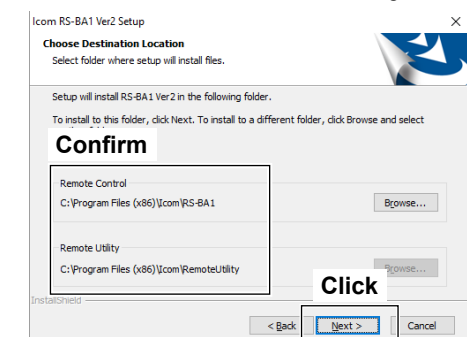


8. "User Information" is displayed, and then enter your name and your company name (optional).

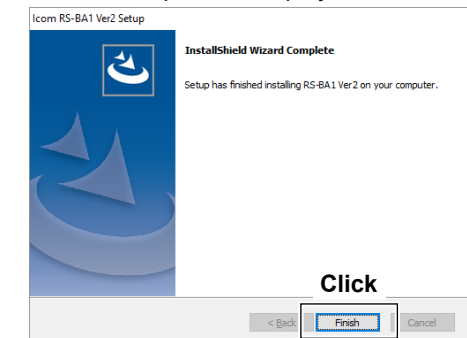
9. "Product Information" is displayed. Enter the product ID number and the License key, and then click <Next>.
  - ① Enter the Product ID and License key that are on the label attached to the CD case.



10. "Choose Destination Location" is displayed, and then click <Next>.
  - ① To select another destination folder, click <Browse...>, and select a new location before clicking <Next>.



11. During the installation, the installer may display security warning dialogs about installing "Icom Virtual Serial Driver" and "Icom Virtual Audio Device." If they are displayed, click <Continue>.
12. After the installation has completed, "InstallShield Wizard Complete" is displayed, then click <Finish>.



13. Eject the CD.