

## Manual installation of USB driver

If the automatic USB driver installation is not successful, download the driver from the Icom website and manually install it on the “Device Manager” screen.

1. Go to the Icom website.  
(<https://www.icomjapan.com/support/>)  
In the “Firmware / Software”\* menu, enter the model name and click the “Search” button to download the latest USB driver.  
\* The menu name may be changed without notice.
2. Unzip the file downloaded from the Icom website.
3. Right-click [FT232R USB UART] displayed under “Other devices” on the “Device Manager” screen, and then click [Update driver].
4. “How do you want to search for drivers?” is displayed.  
Click [Browse my computer for drivers].
5. “Browse for drivers on your computer” is displayed.  
Click [Browse...].
6. Select the unzipped file in step 2, and then click [OK].
7. Click [Next] to start the installation.
8. After the installation has completed, “Windows has successfully updated your drivers” is displayed.  
Click [Close].
9. Again, right-click [USB Serial Port], and then click [Update driver].
10. Repeat steps 4 to 8, to install the “USB Serial Port.”  
① Confirm the driver availability and the port number on the “Device Manager” screen.

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# ICOM INSTRUCTIONS

## PROGRAMMING CABLE

**OPC-478UC-1**

**OPC-966U-1**

**OPC-2344-1**

**OPC-2338-1**

**OPC-2363-1**

## DATA CABLE

**OPC-2357-1**


Thank you for choosing this Icom product.  
**READ ALL INSTRUCTIONS** carefully and completely before using this product.

## Important

**SAVE THESE INSTRUCTIONS** — These instructions contain important safety and operating details for the cable.

The programming cable is designed to connect an Icom transceiver or receiver and a PC for data programming using an Icom programming software. The data cable is designed to connect an Icom transceiver (Rekeying Management transceiver) and a PC for doing the OTAR (Over-The-Air-Rekeying) operation.


## Explicit definitions

WORD	DEFINITION
 <b>WARNING!</b>	Personal injury, fire hazard or electric shock may occur.
<b>CAUTION</b>	Equipment damage may occur.
<b>NOTE</b>	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.


Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:

- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom products with any equipment that is not manufactured or approved by Icom.


## Precautions

-  **WARNING! NEVER** use or touch the cable with wet hands. This could cause an electric shock.
- **CAUTION: USE ONLY INDOORS! NEVER** expose the cables to rain, snow, or any liquids.
- **NEVER** let metal, wire, or other objects touch any internal part of the connectors.
- **NEVER** place any heavy object on the cable, or pinch it.
- **DO NOT** use harsh solvents such as benzine or alcohol when cleaning, as they will damage the cables.

## Disposal

 The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

## About CE

 Versions of the OPC-478UC-1, OPC-966U-1, OPC-2344-1, OPC-2338-1, OPC-2363-1, and OPC-2357-1 which have the “CE” symbol on the product, comply with the essential requirements of the 2014/30/ EU directive for Electromagnetic Compatibility and the 2001/95/EC directive for General Product Safety.

**Below statement is for UKCA purpose only**  
United Kingdom Authorised Importer: Icom (UK) Ltd.  
Address: Blacksole House, Altira Park, Herne Bay, Kent, CT6 6GZ, U.K.

System requirements

(As of August 2022)

- Operating System (OS)
  - Microsoft Windows 11 64 bit
  - Microsoft Windows 10 32 bit/64 bit
  - Microsoft Windows 8.1\* 32 bit/64 bit

\* Except for Microsoft Windows RT.

- Others
  - A USB 1.1 or 2.0 port

- ① An Internet connection is required for the USB driver installation.
- ① These instructions are based on using Windows 10.
- ① The displayed dialog boxes, indications, or operations may differ slightly from the following instructions, depending on your operating system, its service pack level, and/or system settings.

Operating notes

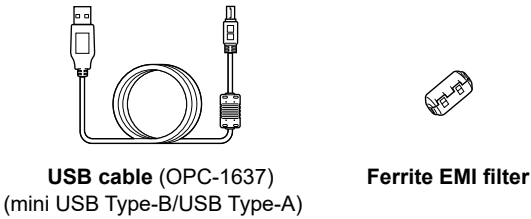
- DO NOT** extend the USB cable. Using a USB cable other than the supplied may cause an error.
- Ensure that your PC supports USB port operation by confirming the Universal Serial Bus controller is in the PC's Device Manager.
- Connect the cable directly to a PC's USB port or to a self-powered USB hub.
- Approximately 20 mA of current is required. Insufficient current capacity of the USB port can cause unstable programming operation and a data error.

**NOTE:** The USB drivers for earlier versions of programming cables or the data cable that do not have a "-1" in their model name (for example, OPC-478UC) are **NOT** compatible with USB drivers with a "-1" in their model name (for example, OPC-478UC-1.)

Specifications

- ① All stated specifications are subject to change without notice or obligation.
- Usable temperature range:
  - 10°C to +60°C (+14°F to +140°F)
- Cable length (approximate):
  - OPC-478UC-1 520 mm (20.5 inches)
  - OPC-2363-1 300 mm (11.8 inches)
  - Others 250 mm (9.8 inches)
  - OPC-1637 (USB cable) 1500 mm (4.9 feet)
- Weight (approximate):
  - OPC-478UC-1 37 g (1.3 oz)
  - OPC-966U-1 53 g (1.9 oz)
  - OPC-2344-1 33 g (1.2 oz)
  - OPC-2338-1 57 g (2.0 oz)
  - OPC-2357-1 65 g (2.3 oz)
  - OPC-2363-1 47 g (1.7 oz)
  - OPC-1637 (USB cable) 49 g (1.7 oz)

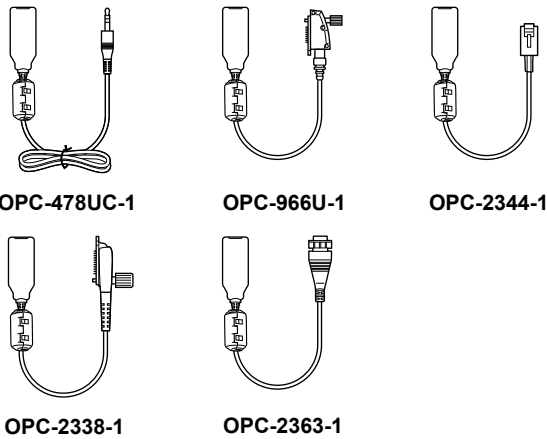
Supplied accessories



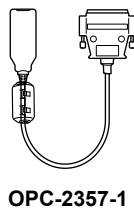
Supplied items

- ① One of the items shown below is supplied.

Programming cable

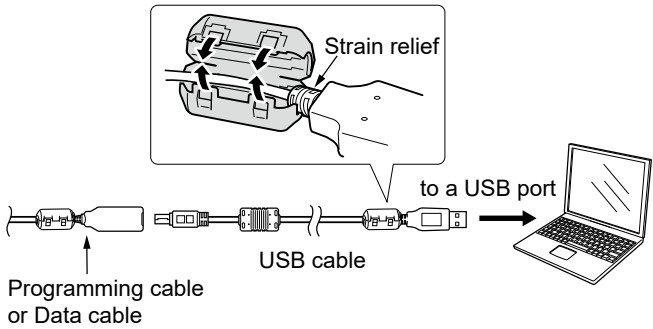


Data cable



Connecting the cable and USB driver installation

- Connect the PC to the Internet to download the USB driver.
  - ① Sign in as the administrator.
- Connect the programming cable or data cable to the OPC-1637 USB cable, and then connect the USB cable to a PC USB port, as illustrated below.
  - The PC automatically installs the USB driver and starts the USB-to-Serial COM Port installation.
  - ① Attach the Ferrite EMI filter to the strain relief of the OPC-1637 USB cable.



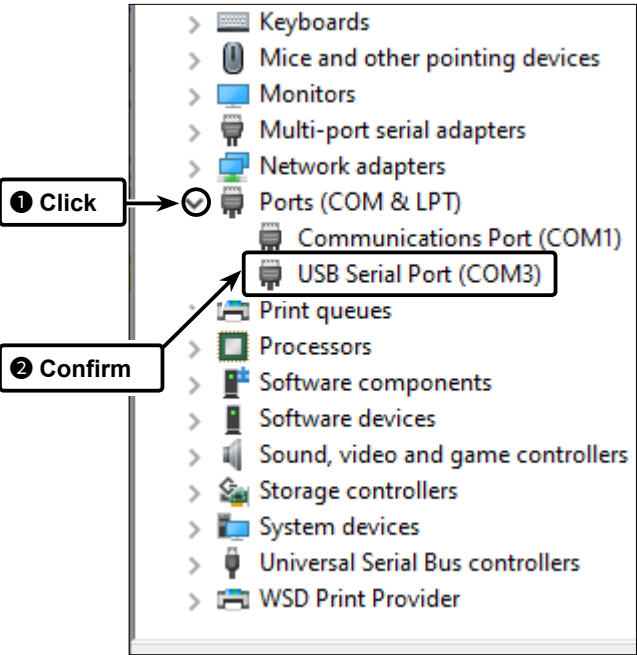
COM port confirmation

After the driver installation has completed, confirm the driver availability and the port number. The COM port number is required to set on the programming software.

- ① Sign in as the administrator.
- ① Confirm no other applications are running.

- Right-Click on [Start], and then click [Device Manager].
  - "Device Manager" is displayed.
- Click the ">" next to "Ports (COM&LPT)." Confirm "USB Serial Port (COM\*)" is displayed.
  - ① In this example, the COM port number is "3."

- ① Select the COM port number in the programming software.



**NOTE:**

- If the COM port is not displayed, double-click [Other devices].
- If the warning symbol "!" with "FT232R USB UART" is displayed, the driver may not be properly installed. In such case, manually install the USB driver. Refer to the next page for details.

icomINSTRUCTIONS

PROGRAMMING CABLE

OPC-478UD


Thank you for choosing this Icom product.  
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Important

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The programming cable is designed to connect an Icom transceiver or receiver and a PC for data programming using an Icom programming software.


Explicit definitions

WORD	DEFINITION
 <b>WARNING!</b>	Personal injury, fire hazard or electric shock may occur.
<b>CAUTION</b>	Equipment damage may occur.
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Precautions

-  **WARNING! NEVER** use or touch the cable with wet hands. This could cause an electric shock.
- **CAUTION: USE ONLY INDOORS! NEVER** expose the cables to rain, snow, or any liquids.
- **NEVER** let metal, wire, or other objects touch any internal part of the connectors.
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Disposal

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About CE

 Versions of the OPC-478UD which have the “CE” symbol on the product, comply with the essential requirements of the 2014/30/ EU directive for Electromagnetic Compatibility.

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## System requirements

(As of July 2023)

- Operating System (OS)
  - Microsoft Windows 11 64 bit
  - Microsoft Windows 10 32 bit/64 bit
  - ① Except for Windows on ARM.

- Others
  - A USB 1.1 or 2.0 port

- ① An Internet connection is required for the USB driver installation.
- ① These instructions are based on using Windows 10.
- ① The displayed dialog boxes, indications, or operations may differ slightly from the following instructions, depending on your operating system, its service pack level, and/or system settings.

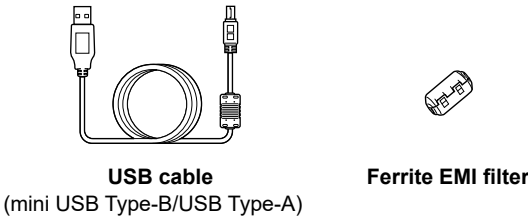
## Operating notes

- DO NOT** extend the USB cable. Using a USB cable other than the supplied may cause an error.
- Ensure that your PC supports USB port operation by confirming the Universal Serial Bus controller is in the PC's Device Manager.
- Connect the cable directly to a PC's USB port or to a self-powered USB hub.
- Approximately 20 mA of current is required. Insufficient current capacity of the USB port can cause unstable programming operation and a data error.

## Specifications

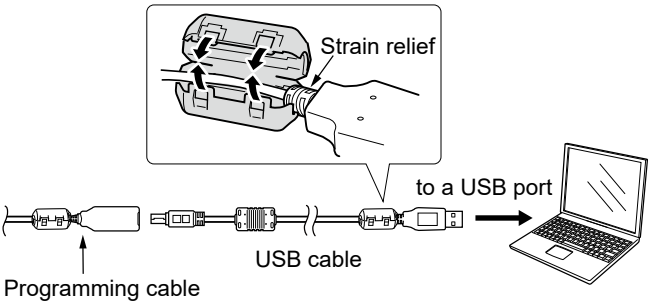
- ① All stated specifications are subject to change without notice or obligation.
- Usable temperature range:
  - 10°C to +60°C (+14°F to +140°F)
- Cable length (approximate):
  - OPC-478UD 52 cm (20.5 inches)
  - USB cable 1.5 m (4.9 feet)
- Weight (approximate):
  - OPC-478UD 37 g (1.3 oz)
  - USB cable 49 g (1.7 oz)

## Supplied accessories



## Connecting the cable and USB driver installation

- Connect the PC to the Internet to download the USB driver.
  - ① Sign in as the administrator.
- Connect the programming cable to the USB cable, and then connect the USB cable to a PC USB port, as illustrated below.
  - The PC automatically installs the USB driver and starts the USB-to-Serial COM Port installation.
  - ① Attach the Ferrite EMI filter to the strain relief of the USB cable.



## COM port confirmation

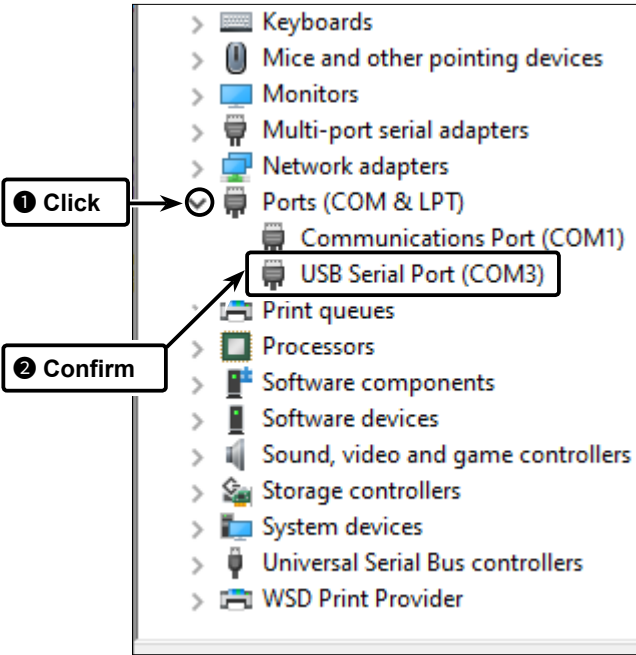
After the driver installation has completed, confirm the driver availability and the port number.

The COM port number is required to set on the programming software.

- ① Sign in as the administrator.
- ① Confirm no other applications are running.

- Right-Click on [Start], and then click [Device Manager].
  - "Device Manager" is displayed.
- Click the ">" next to "Ports (COM&LPT)." Confirm "USB Serial Port (COM\*)" is displayed.
  - ① In this example, the COM port number is "3."

- ① Select the COM port number in the programming software.



### NOTE:

- If the COM port is not displayed, double-click [Other devices].
- If the warning symbol "!" with "FT232R USB UART" is displayed, the driver may not be properly installed. In such case, manually install the USB driver. Refer to the next page for details.

## Manual installation of USB driver

If the automatic USB driver installation is not successful, download the driver from the Icom website and manually install it on the "Device Manager" screen.

- Go to the Icom website.  
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In the "Firmware / Software"\* menu, enter the model name and click the "Search" button to download the latest USB driver.  
\* The menu name may be changed without notice.
- Unzip the file downloaded from the Icom website.
- Right-click [FT232R USB UART] displayed under "Other devices" on the "Device Manager" screen, and then click [Update driver].
- "How do you want to search for drivers?" is displayed.  
Click [Browse my computer for drivers].
- "Browse for drivers on your computer" is displayed.  
Click [Browse...].
- Select the unzipped file in step 2, and then click [OK].
- Click [Next] to start the installation.
- After the installation has completed, "Windows has successfully updated your drivers" is displayed.  
Click [Close].
- Again, right-click [USB Serial Port], and then click [Update driver].
- Repeat steps 4 to 8, to install the "USB Serial Port."
  - ① Confirm the driver availability and the port number on the "Device Manager" screen.