YAMAHA

Original instructions

FOR SUPPORT SOFTWARE

USB cable setup

User's Manual

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Ver. 1.40

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1. USB cable specifications and part names

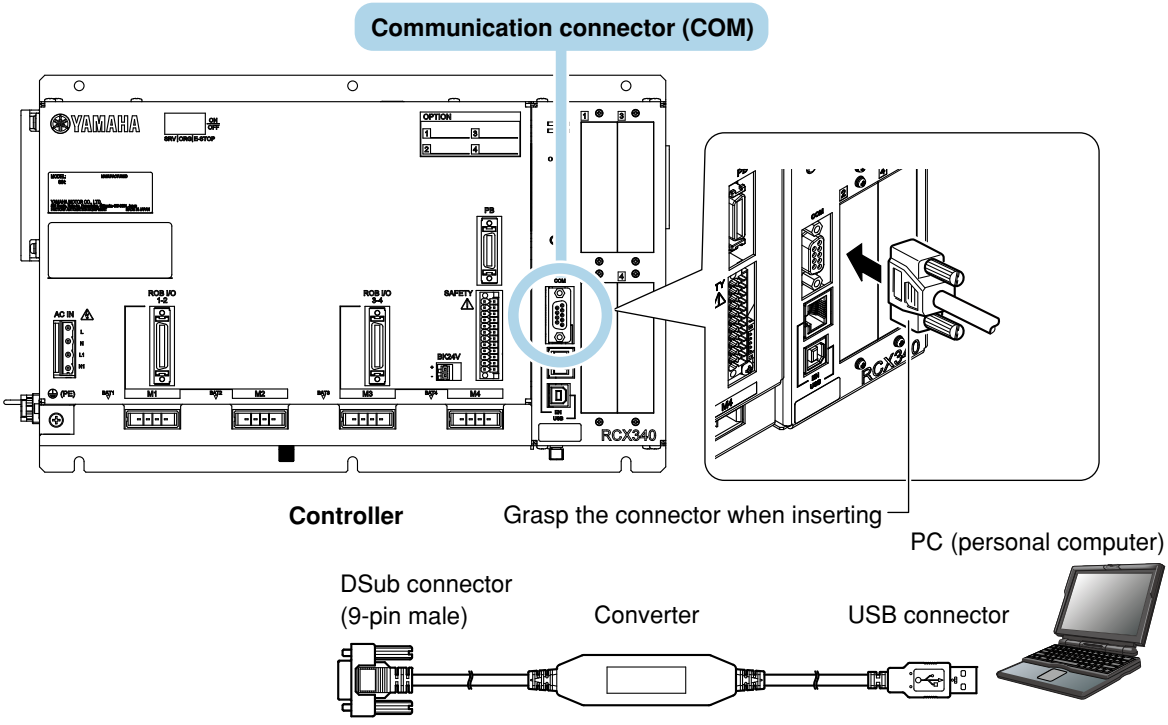
WARNING

- This USB cable is a dedicated cable solely for connecting the controller to the PC. Do not connect this cable to other equipment since it may cause breakdowns in the PC and other connected equipment.
- Make sure each connector is facing correctly and insert it straight inwards.
- Make sure the metal parts of the connector do not come in contact with the external power supply terminals, etc.
- Make sure there are no metallic objects such as wire making connect between the connector pins. These might cause heat, fire, or damage.
- Do not disassemble, modify or make a direct solder connection since this might cause heat, fire, or damage.
- Do not let water or moisture get on the unit. Do not touch the connector with moist hands since this might cause electrical shocks.
- Do not apply strong impacts to the unit since this might cause breakdowns.
- When inserting or removing the connector, grip the connector body. Do not pull on the cable since this might cause wire breakage or connection defects.
- If the cable becomes worn or damaged then promptly stop using it and ask your distributor for repair.
- Do not place heavy items on the cable, forcefully bend or pull on the cable since this might cause fires or breakdowns.
- Never connect to any equipment other than the specified model since this might damage the internal IC.
- If you notice smoke or a strange odor then remove the cable, stop using the equipment, and ask your distributor for repair.

1.1 KBG-M538F USB Serial Port (Dsub connector)

USB cable

Example: Controller is RCX340.



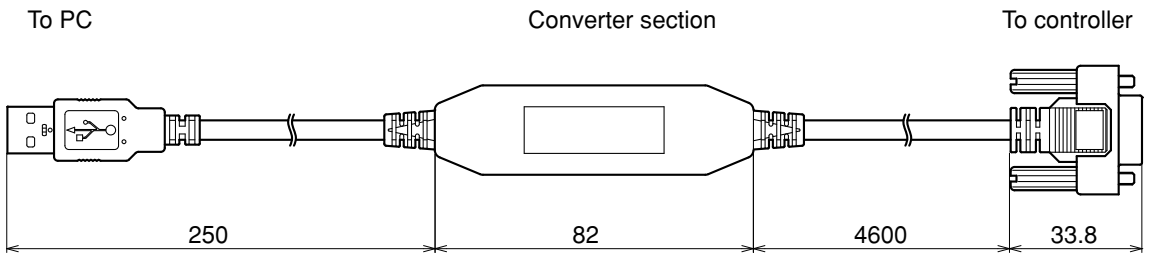
Specifications

Support OS *		Windows 2000 / XP / Vista (32bit/64bit) / 7 (32bit/64bit) / Windows 8 (32bit/64bit) / Windows 8.1 (32bit/64bit) / Windows 10 (32bit/64bit) / Windows 11 (32bit/64bit)
USB interface		USB specification Rev 2.0, Full Speed compliant
Connector	USB	USB Type A
	Serial	Dsub connector (9-pin male)
Power		Bus power (supplied from USB host controller or hub)
Voltage		5V DC
Current consumption (Max.)		50mA
Ambient operating temperature		0 to 40°C
Ambient storage temperature		-20 to 60°C
Ambient operating humidity		35 to 85% RH, no condensation
Ambient storage humidity		10 to 85% RH, no condensation
Cable length		Overall length 5m
Support controller		SR1 / LCC140 / RCX221 / RCX222 / RCX240 / RCX240S / RCX340 / RCX320

* These OSs (operating systems) are applicable to the USB cable driver software.

- Download and install the latest driver software from our website;
  https://global.yamaha-motor.com/business/robot/download/index.html#USBDriver
- For details about OS applicable to each support software, refer to the support software manual.

Dimensional outlines

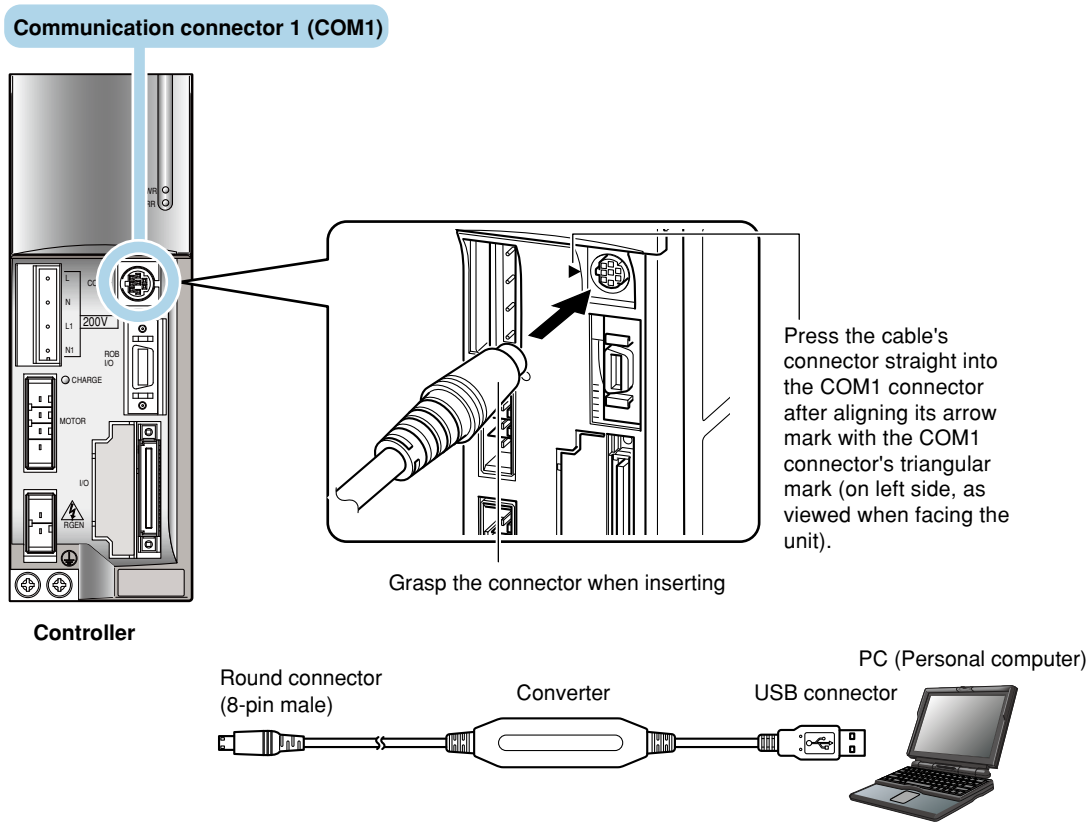


(Units: mm)

1.2 KCA-M538F USB Serial Port (Round type connector)

USB cable

Example: Controller is TS-X.



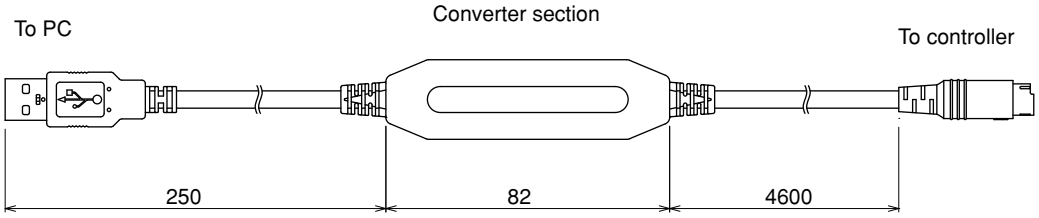
Specifications

Support OS *		Windows 2000 / XP / Vista (32bit/64bit) / 7 (32bit/64bit) / Windows 8 (32bit/64bit) / Windows 8.1 (32bit/64bit) / Windows 10 (32bit/64bit) / Windows 11 (32bit/64bit)
USB interface		USB specification Rev 2.0, Full Speed compliant
Connector	USB	USB Type A
	Serial	Dedicated round connector (8-pin male)
Power		Bus power (supplied from USB host controller or hub)
Voltage		5V DC
Current consumption (Max.)		50mA
Ambient operating temperature		0 to 40°C
Ambient storage temperature		-20 to 60°C
Ambient operating humidity		35 to 85% RH, no condensation
Ambient storage humidity		10 to 85% RH, no condensation
Cable length		Overall length 5m
Support controller		TS-X / TS-P / TS-S / TS-S2 / TS-SD

* These OSs (operating systems) are applicable to the USB cable driver software.

- https://global.yamaha-motor.com/business/robot/download/index.html#USBDriver
- For details about OS applicable to each support software, refer to the support software manual.

Dimensional outlines



(Units: mm)

2. Driver software setup

This section describes how to set up the USB cable for your PC.

CAUTION

To use the USB cable, always install the driver software that came with the USB cable. The driver software is dedicated for *Windows 2000 / Windows XP / Windows Vista / Windows 7 / Windows 8 / Windows 8.1 / Windows 10/ Windows 11. Installing the driver software in a PC running on other OS might cause serious problems with the USB driver or Windows OS.

See the relevant page in this manual according to Windows version you are using.

Windows 2000	►See "2.2 Windows 2000"
Windows XP	►See "2.3 Windows XP"
Windows Vista	►See "2.4 Windows Vista"
Windows 7	►See "2.5 Windows 7"
Windows 8 / Windows 8.1	►See "2.6 Windows 8 / Windows 8.1"
Windows 10	►See "2.7 Windows 10"
Windows 11	►See "2.8 Windows 11"

* Microsoft, Windows, Windows XP, Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10 and Windows 11 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

2.1 USB cable applicable support software

The USB cable is applicable to the support software shown below.

- •POPCOM+
- •TS-Manager
- •VIP+
- •RCX-Studio
- •RCX-Studio Pro
- •RCX-Studio 2020 Pro / RCX-Studio 2020 Basic

Download and install the latest driver software from our website;
https://global.yamaha-motor.com/business/robot/download/index.html#USBDriver

The driver software for the USB cable is contained in the support software installation disc. Additionally, you can also use the one that has been copied into the support software installation folder to install the driver software. However, the ones are not always the latest version.

NOTE

The following shows the default support software installation folders.
[Windows 2000 / XP / Vista (32-bit version) / 7 (32-bit version) / 8 (32-bit version) / 8.1 (32-bit version) / 10 (32-bit version) / 11 (32-bit version)]
C:¥Program Files¥Yamaha Motor¥<Support software name>

[Windows Vista (64-bit version) / 7 (64-bit version) / 8 (64-bit version) / 8.1 (64-bit version) / 10 (64-bit version) / 11 (64-bit version)]
C:¥Program Files(x86)¥Yamaha Motor¥<Support software name>

2.2 Windows 2000

Installing the driver

First install the USB cable driver software.

NOTE

When installing the driver software for the USB cable from the support software installation folder, start the work from Step 2 after Windows has started.

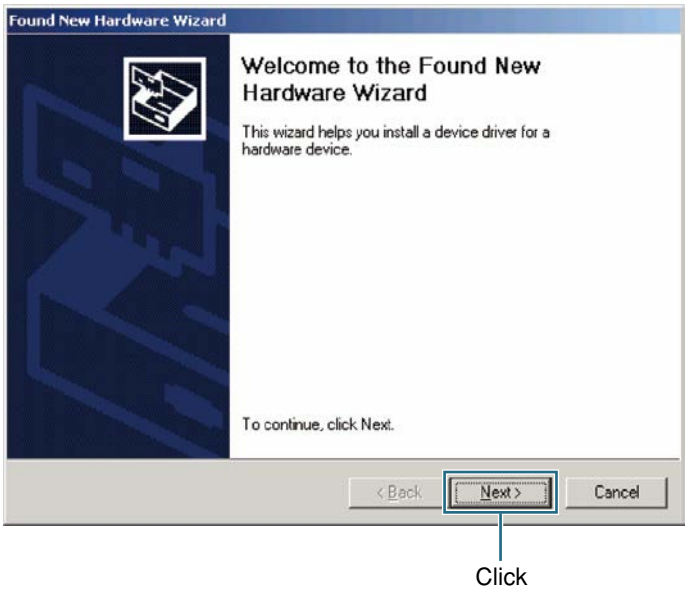
Step 1 Start Windows and insert the support software installation disc into the CD-ROM drive of your PC.

If the setup program appears, click the [Exit] button to end the program.

Step 2 Plug the USB cable into the USB port of your PC.

The "Found New Hardware Wizard" dialog box appears. Click the [Next] button to continue.

"Found New Hardware Wizard" start screen

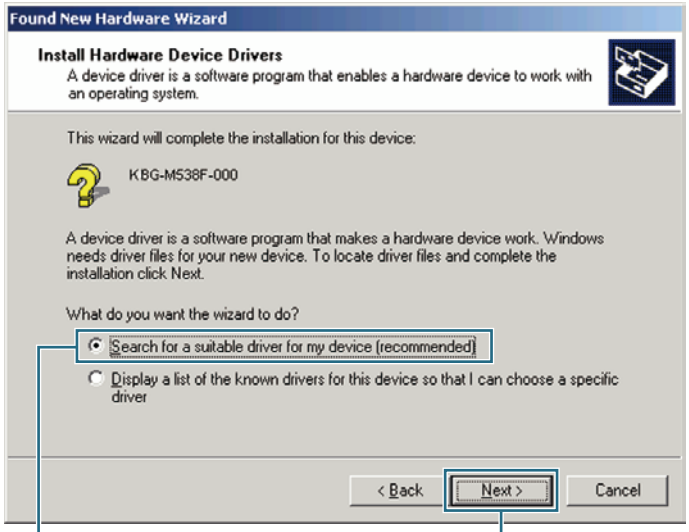


Step3 Select the method for installing the driver software.

When the "Install Hardware Device Drivers" dialog box appears, select "Search for a suitable driver for my device (recommended)" and click [Next] to continue.

"Install Hardware Device Drivers" dialog box

Example: For KBG-M538F USB Serial Port



NOTE

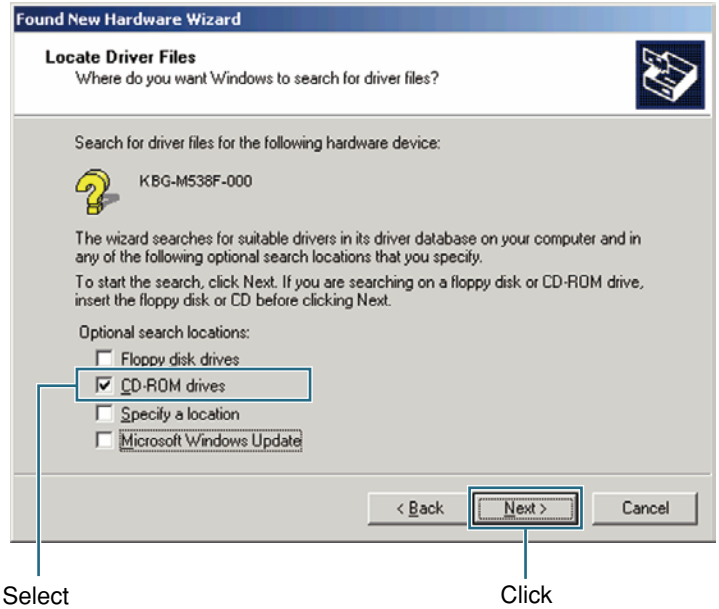
When plugging the KCA-M538F USB Serial Port into the USB port of your PC, "KCA-M538F-000" is shown.

Step4 Specify the location of the driver file.

When the "Locate Driver Files" dialog box appears, select "CD-ROM drives" and click [Next] to continue.

Search for driver file

Example: For KBG-M538F USB Serial Port



NOTE

- When plugging the KCA-M538F USB Serial Port into the USB port of your PC, "KCA-M538F-000" is shown.
- When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select [Specify a location] and click the [Next] button.
  Click the [Browse…] button in the "Found New Hardware Wizard" window, specify [Driver]-[WinXP-Vista-7-8.1] folder contained in the support software installation folder, and then click [OK].
  For details about support software installation folders, see "2.1 USB cable applicable support software".

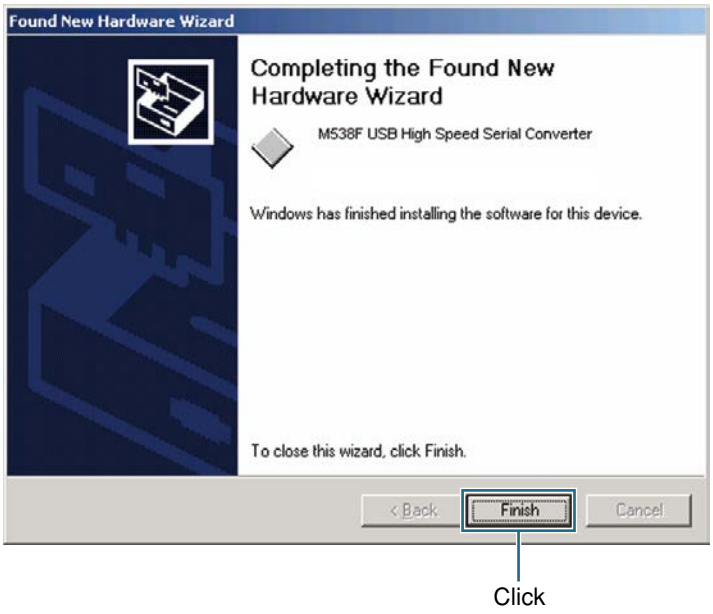
Step 5 Window searches for the driver file.

When the driver file is found, click [Next] to continue.

Step 6 Finish the driver installation.

When the dialog box appears indicating the driver software has been successfully installed, click the [Finish] button.

Dialog box indicating the driver has been installed



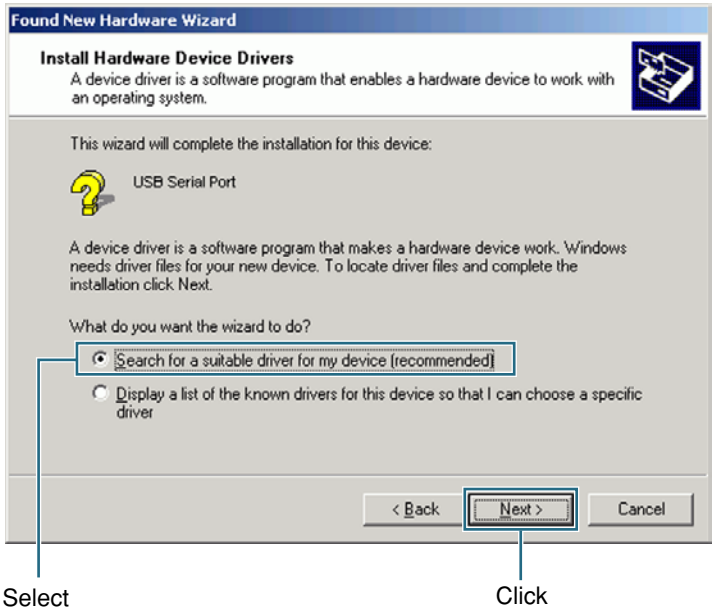
Step 7 Install the USB serial port.

The "Found New Hardware Wizard" dialog box appears again.
Click the [Next] button.

Step 8 Select the method for installing the driver software.

The "Install Hardware Device Drivers" dialog box appears again. Select "Search for a suitable driver for my device (recommended)" and click [Next] to continue.

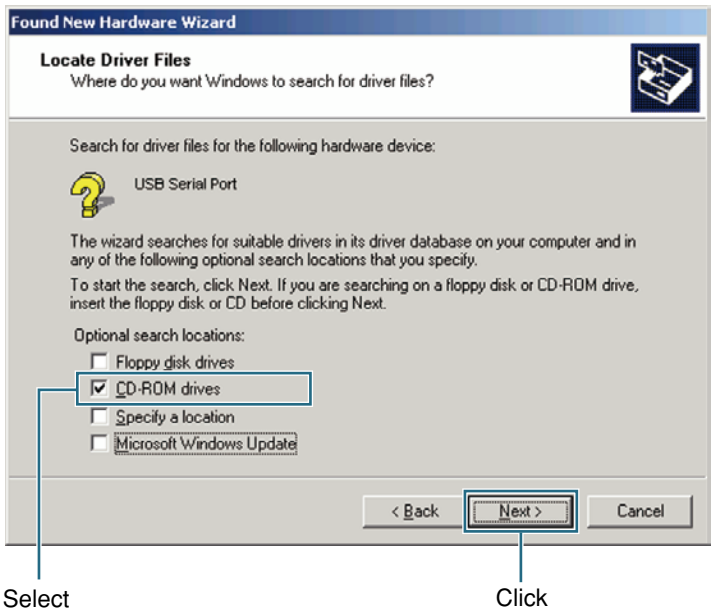
"Install Hardware Device Drivers" dialog box



Step 9 Specify the location of the driver file.

The "Locate Driver Files" dialog box appears again. Select "CD-ROM drives" and click [Next] to continue.

Search for driver file



NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select [Specify a location] and click the [Next] button.
Click the [Browse…] button in the "Found New Hardware Wizard" window, specify [Driver]-[WinXP-Vista-7-8.1] folder contained in the support software installation folder, and then click [OK].
For details about support software installation folders, see "2.1 USB cable applicable support software".

Step 10 Windows searches for the driver file.

When the driver file is found, click [Next] to continue.

Step 11 Finish the driver installation.

The "Completing the Found New Hardware Wizard" window appears. Remove the support software installation disc from the CD-ROM drive and click the [Finish] button.

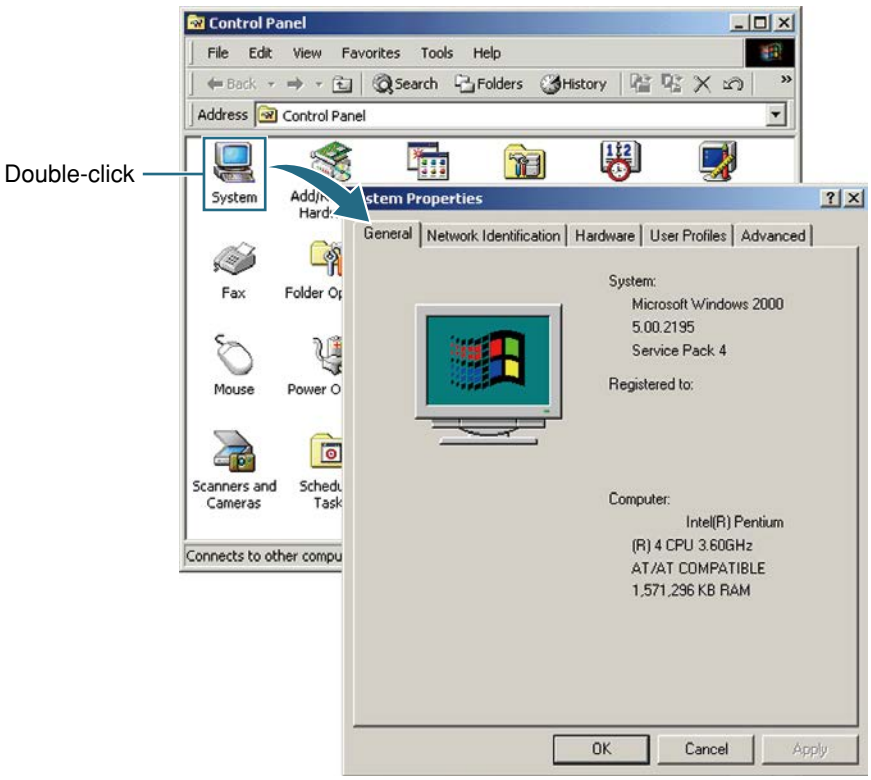
Checking the COM port

After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Start "System Properties".

From the Start menu, select "Settings" and click "Control Panel".
Double-click the "Systems" icon to open the "System Properties" screen.

"Control Panel" and "System Properties"



Step2 Check the COM port number for the USB serial port.

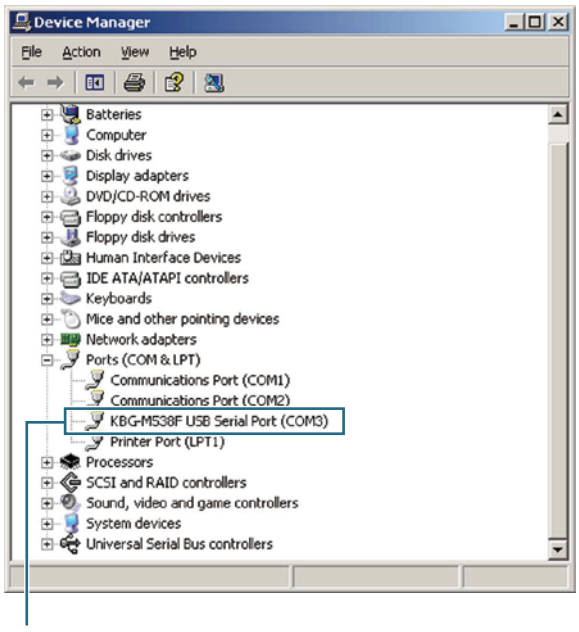
Select the [Hardware] tab and then click "Device Manager".
When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM □)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, "KCA-M538F USB Serial Port (COM □)" is displayed. Check the COM port number.

Example)

KBG-M538F USB Serial Port (COM3) → COM port number is 3.
KCA-M538F USB Serial Port (COM3) → COM port number is 3.

Checking the COM port number

Example: For KBG-M538F USB Serial Port



COM port number

Step3 Close the Device Manager.

Click the button to close the Device Manager.

2.3 Windows XP

Installing the driver

First install the USB cable driver software.

NOTE

When installing the driver software for the USB cable from the support software installation folder, start the work from Step 2 after Windows has started.

Step 1 Start Windows and insert the support software installation disc into the CD-ROM drive of your PC.

If the setup program appears, click the [Exit] button to end the program.

Step 2 Plug the USB cable into the USB port of your PC.

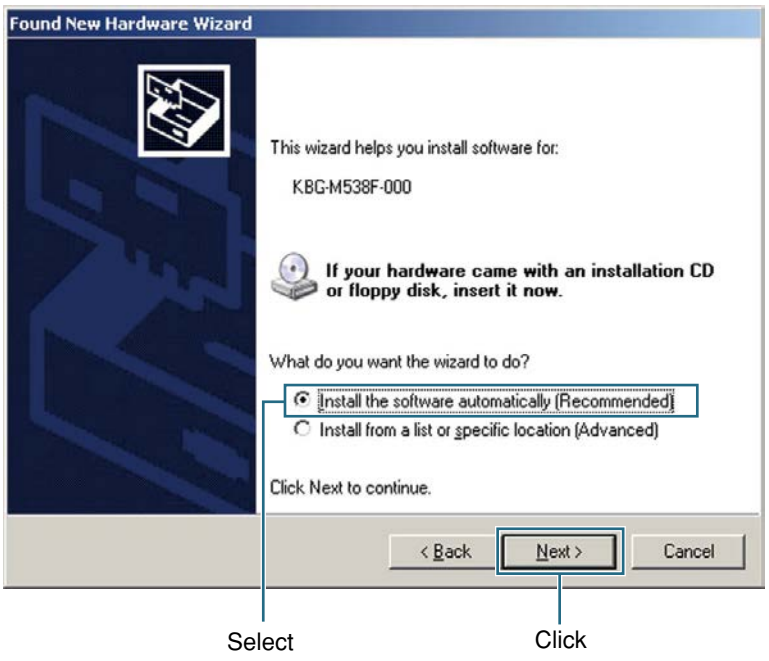
The "Found New Hardware Wizard" dialog box appears. Select "Install the software automatically [Recommended]" and click the [Next] button.

TIP

When installing the driver, another screen might appear asking whether to access the Window Update Web site. Select "No, not this time" when asked.

"Found New Hardware Wizard" dialog box

Example: For KBG-M538F USB Serial Port



- When plugging the KCA-M538F USB Serial Port into the USB port of your PC, "KCA-M538F-000" is shown.
- When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select [Install from a list or specific location (Advanced)] and click the [Next] button.
  In the window for search and installation options, select “Search for the best driver in these locations”, specify [Driver] - [WinXP-Vista-7-8.1] folder in the support software installation folder, and click [Next].
  For details about support software installation folders, see "2.1 USB cable applicable support software".

NOTE

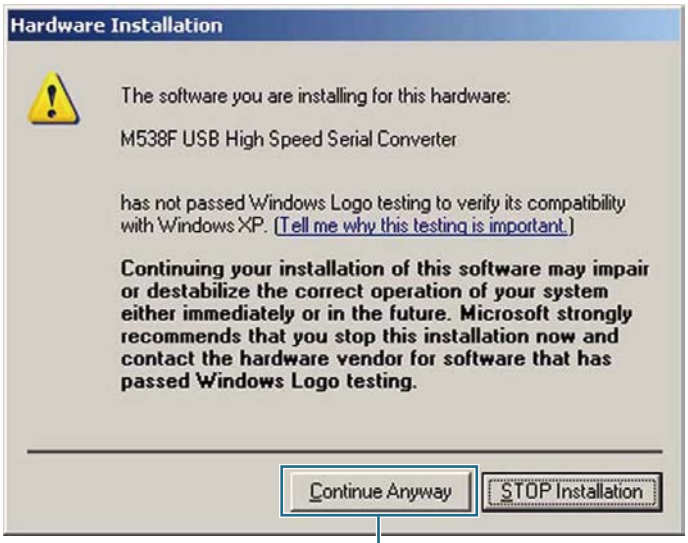
Step3 Install the driver software.

When the "Hardware Installation" dialog box appears, click [Continue Anyway] to continue the installation.

TIP

The message appears stating "The software you are installing for this hardware has not passed Windows Logo testing to verify its compatibility with…. Continuing your installation of this software may impair or destabilize the correct operation of your system….". But this will not affect the PC, so click [Continue Anyway].

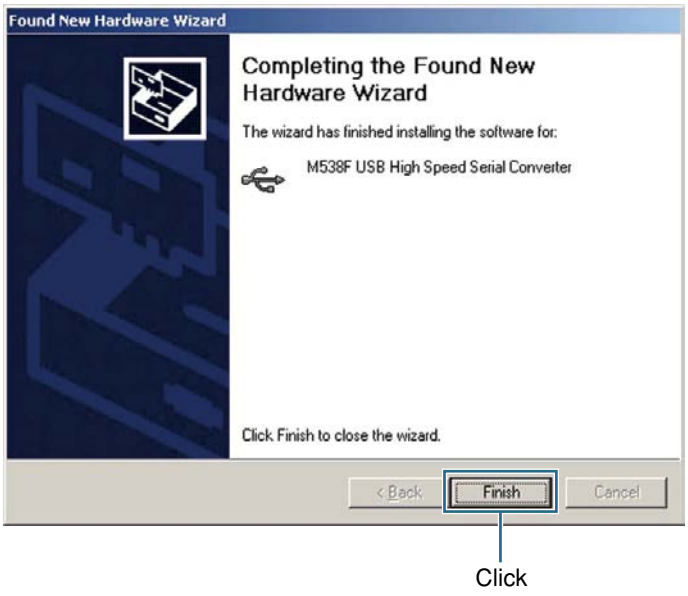
"Hardware Installation" dialog box



Step4 Finish the driver installation.

When the dialog box appears indicating the wizard has finished installing the software, click the [Finish] button.

Dialog box indicating the driver software has been installed



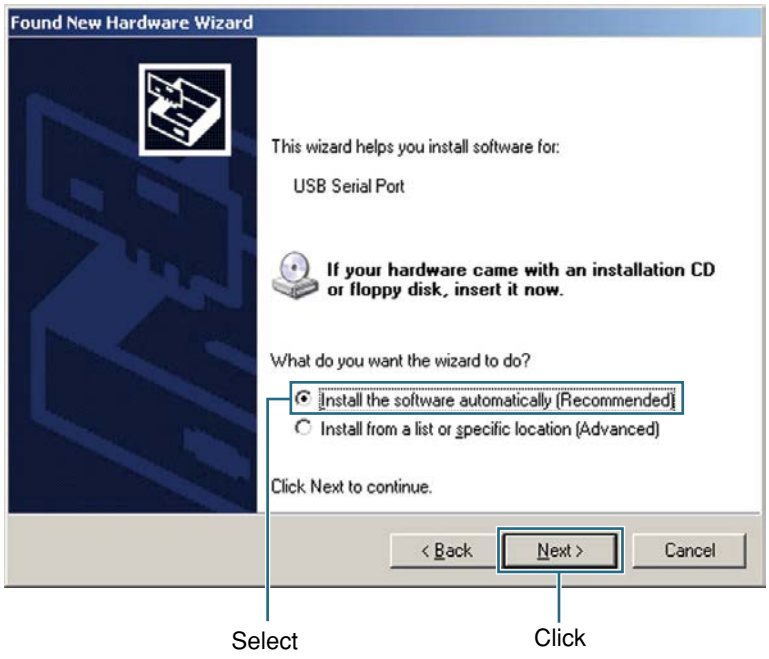
Step5 Install the USB serial port.

The "Found New Hardware Wizard" dialog box appears. Select "Install the software automatically [Recommended]" and click the [Next] button.

TIP

When installing the driver, another screen might appear asking whether to access the Window Update Web site. Select "No, not this time" when asked.

"Found New Hardware Wizard" dialog box



NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select [Install from a list or specific location (Advanced)] and click the [Next] button.
In the window for search and installation options, select “Search for the best driver in these locations”, specify [Driver] - [WinXP-Vista-7-8.1] folder in the support software installation folder, and click [Next].
For details about support software installation folders, see "2.1 USB cable applicable support software".

Step 6 Select the method for installing the driver software.

When the "Hardware Installation" dialog box appears, click [Continue Anyway] to continue the installation.

TIP

The message appears stating "The software you are installing for this hardware has not passed Windows Logo testing to verify its compatibility with…. Continuing your installation of this software may impair or destabilize the correct operation of your system….". But this will not affect the PC, so click [Continue Anyway].

Step 7 Finish the driver installation.

The "Completing the Found New Hardware Wizard" window appears. Remove the support software installation disc from the CD-ROM drive and click the [Finish] button.

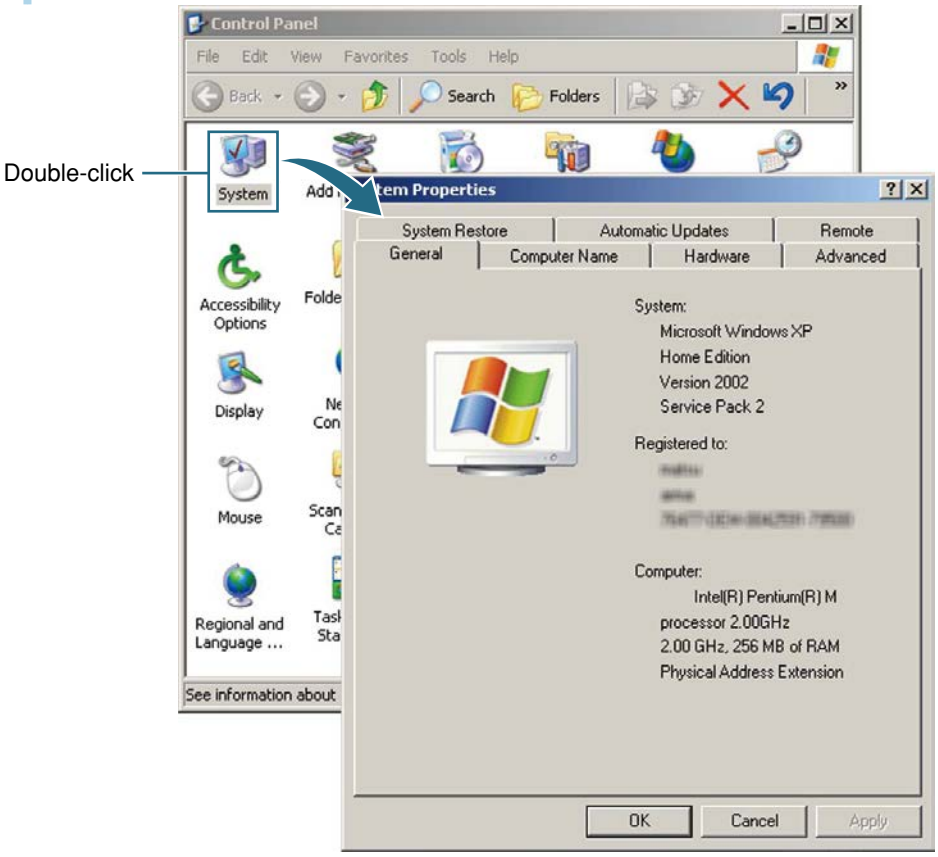
Checking the COM port

After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Start "System Properties".

From the Start menu, select and click "Control Panel".
Double-click the "Systems" icon to open the "System Properties" screen.

"Control Panel" and "System Properties"



Step2 Check the COM port number for the USB serial port.

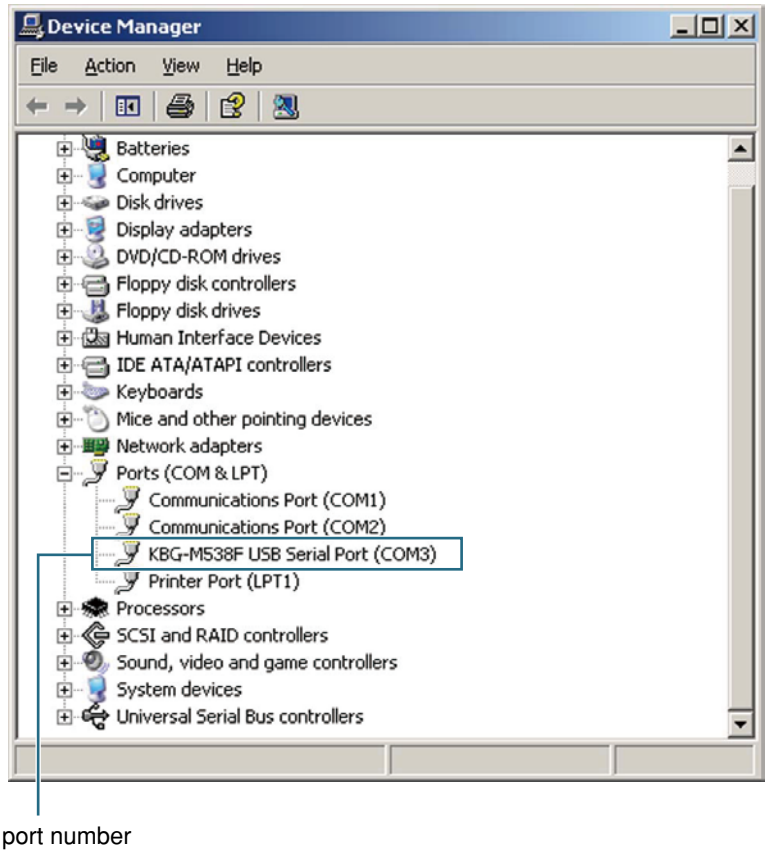
Select the [Hardware] tab and then click "Device Manager".
When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM □)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, "KCA-M538F USB Serial Port (COM □)" is displayed. Check the COM port number.

Example)

KBG-M538F USB Serial Port (COM3) → COM port number is 3.
KCA-M538F USB Serial Port (COM3) → COM port number is 3.

Checking the COM port number

Example: For KBG-M538F USB Serial Port



COM port number

Step3 Close the Device Manager.

Click the button to close the Device Manager.

2.4 Windows Vista

Installing the driver

First install the USB cable driver software.

NOTE

When installing the driver software for the USB cable from the support software installation folder, start the work from Step 2 after Windows has started.

Step 1 Start Windows and insert the support software installation disc into the CD-ROM drive of your PC.

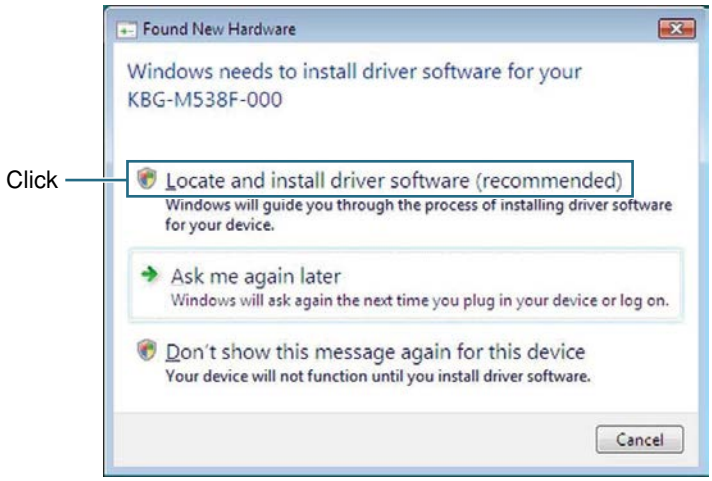
If the setup program appears, click the [Exit] button to end the program.

Step 2 Plug the USB cable into the USB port on your PC.

The "Found New Hardware" dialog box appears. Click "Locate and install driver software (recommended)".

"Found New Hardware Wizard" dialog box

Example: For KBG-M538F USB Serial Port



NOTE

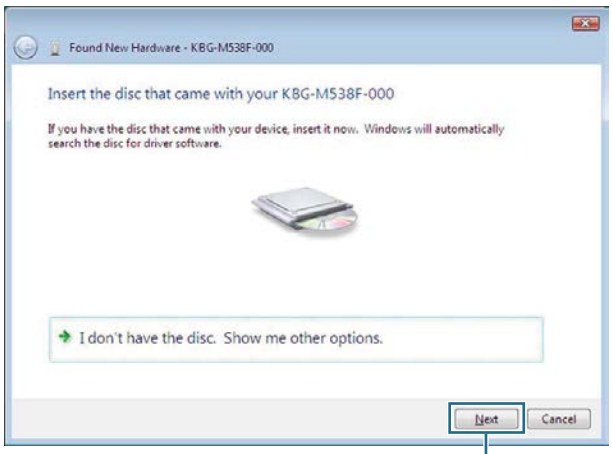
When plugging the KCA-M538F USB Serial Port into the USB port of your PC, "KCA-M538F-000" is shown.

Step3 Windows locates the hardware.

When the following dialog box appears, click [Next] to continue.

New hardware is found

Example: For KBG-M538F USB Serial Port



NOTE

- When plugging the KCA-M538F USB Serial Port into the USB port of your PC, "KCA-M538F-000" is shown.
- When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select [I don't have the disc, Show me other options.] and click the [Next] button.
  Click [Browse my computer for driver software (advanced)].
  Click the [Browse…] button and select the support software installation folder. Check on [Include subfolders], and then click the [Next] button.
  For details about support software installation folders, see "2.1 USB cable applicable support software".

Step4 Install the driver software.

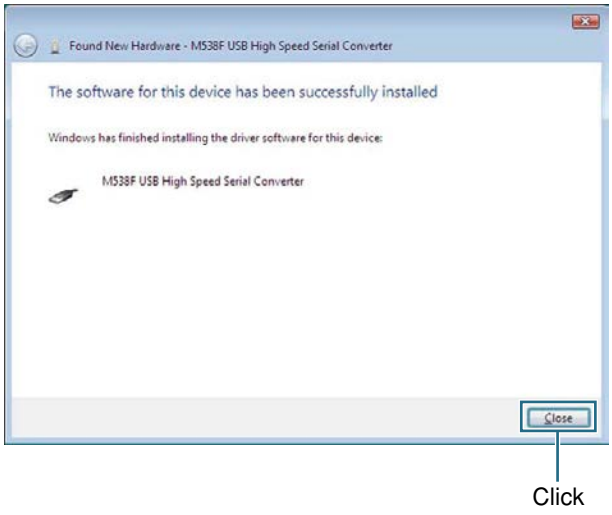
The "Window Security" dialog box appears. Click "Install this driver software" to install the driver software.

"Window Security" dialog

Step5 Finish the driver installation.

When the dialog box appears indicating the driver software has been successfully installed, click the [Close] button.

Dialog box indicating the driver software has been installed



Step 6 Install the USB serial port.

The "Found New Hardware" dialog box appears again. Click the [Next] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select [I don't have the disc, Show me other options.] and click the [Next] button.
Click [Browse my computer for driver software (advanced)].
Click the [Browse…] button and select the support software installation folder. Check on [Include subfolders], and then click the [Next] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

Step 7 Install the driver software.

The "Window Security" dialog box appears again. Click "Install this driver software" to continue.

"Window Security" dialog box

Step 8 Finish the driver installation.

The "The software for this driver has been successfully installed" window will appear.
Remove the support software installation disc from the CD-ROM drive and click the [Finish] button.

NOTE

When you have used the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, click the [Close] button.

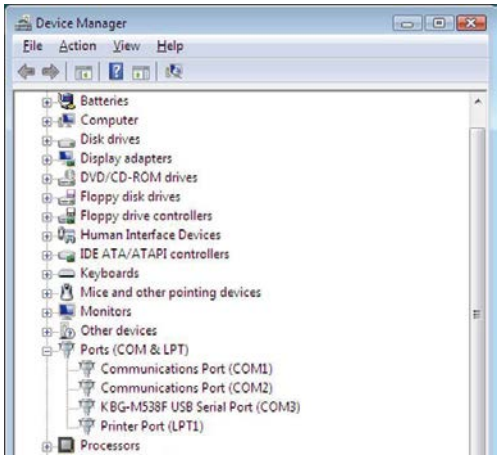
Checking the COM port

After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Start "System Properties" – "Device Manager.

Click on "Computer", select "System Properties", and click "Device Manager" to open it.

"Device Manager"

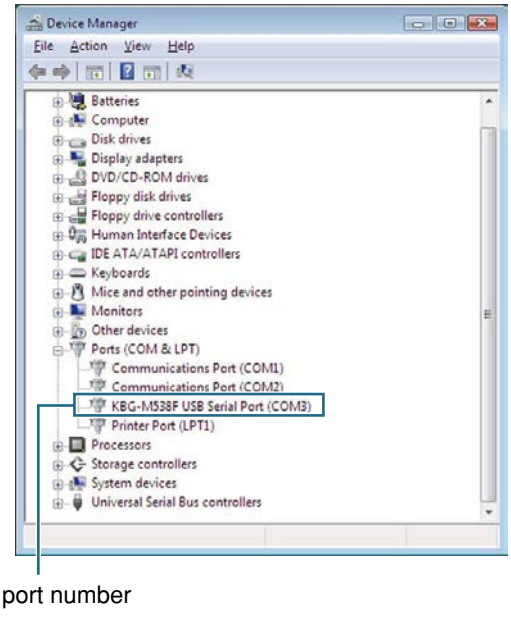


Step 2 Check the COM port number for the USB serial port.

When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM □)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, "KCA-M538F USB Serial Port (COM □)" is displayed. Check the COM port number.

Example)
KBG-M538F USB Serial Port (COM3) → COM port number is 3.
KCA-M538F USB Serial Port (COM3) → COM port number is 3.

Checking the COM port number



COM port number

Step 3 Close the Device Manager.

Click the button to close the Device Manager.

2.5 Windows 7

Installing the driver

First install the USB cable driver software.

NOTE

When installing the driver software for the USB cable from the support software installation folder, start the work from Step 2 after Windows has started.

Step 1 Start Windows and insert the support software installation disc into the CD-ROM drive of your PC.

If the setup program appears, click the [Exit] button to end the program.

Step 2 Plug the USB cable into the USB port on your PC.

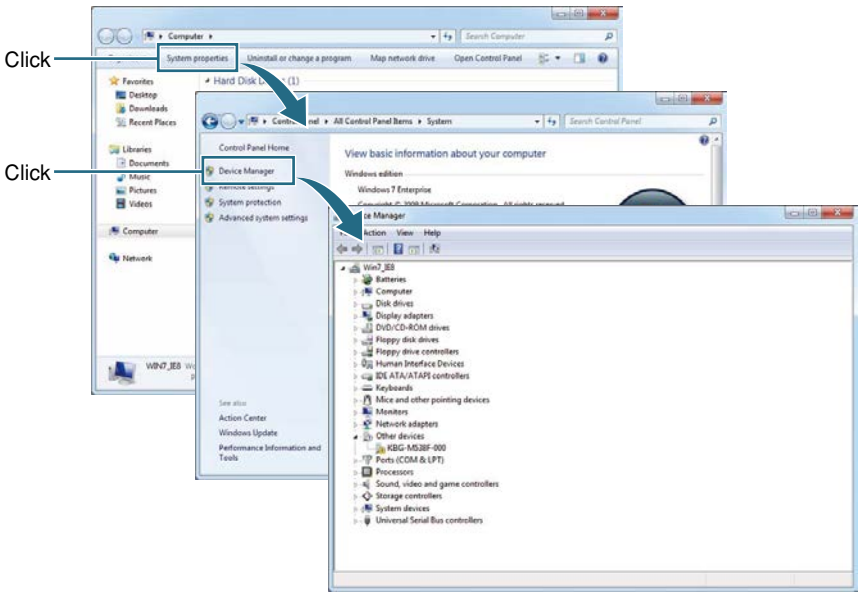
A message appears stating that the device driver software is being installed.
After a while, another message appears stating "Device driver software was not successfully installed".

Message stating "Device driver software was not successfully installed"

Step 3 Open Device Manager.

On the Start menu, click "Computer".
Click "System Properties".
Click "Device Manager".

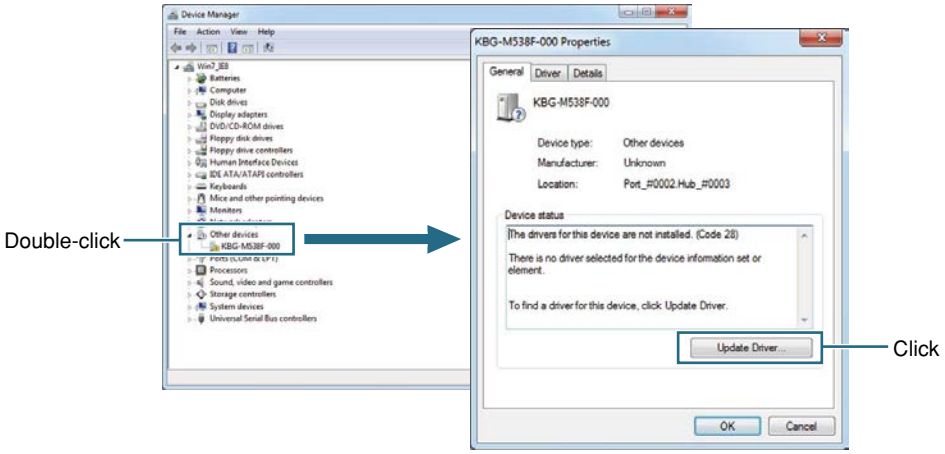
Displaying Device Manager



Step4 Install the driver.

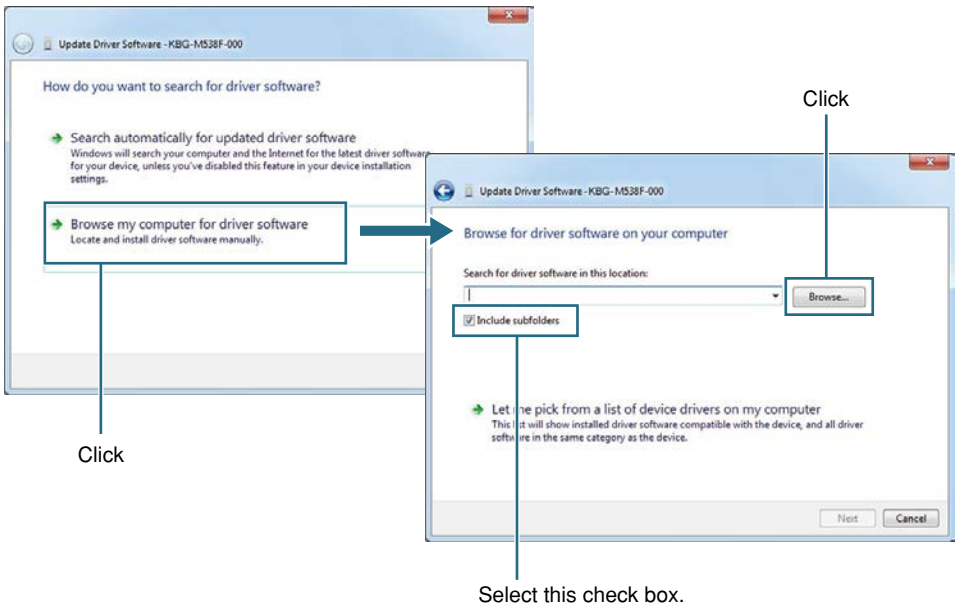
When the control side uses the Dsub connector, double-click "KBG-M538F-000" under "Other devices". When the controller side uses the round type dedicated connector, double-click "KCA-M538F-000".
Click the [Update Driver] button.

[Update Driver] button



Click "Browse my computer for driver software".
Select the "Includes subfolders" check box and click the [Browse] button.

"Update Driver Software" dialog box

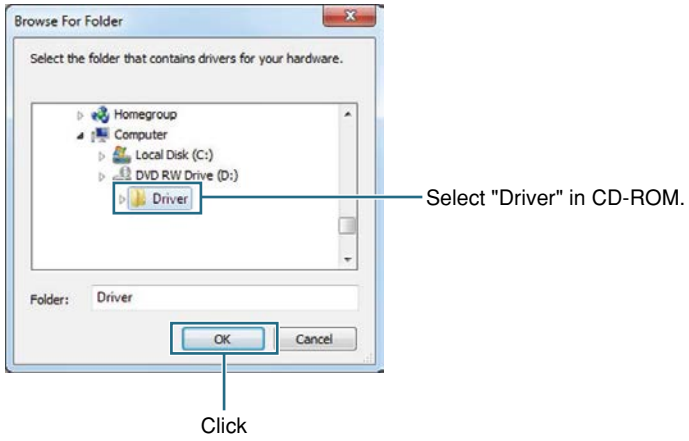


When the "Browse For Folder" dialog appears, select the "Driver" folder in the support software installation disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box



Click the [Next] button in the "Update Driver Software" dialog box.

The "Windows Security" dialog box appears.
Click "Install this driver software anyway".
The driver software will be installed.

Selecting "Install this driver software anyway"

Step 5 Finish installing the driver.

The message, "Windows has successfully updated your driver software", appears. Click the [Close] button to close the dialog box.
Close the "M538F-000 Properties" dialog box.

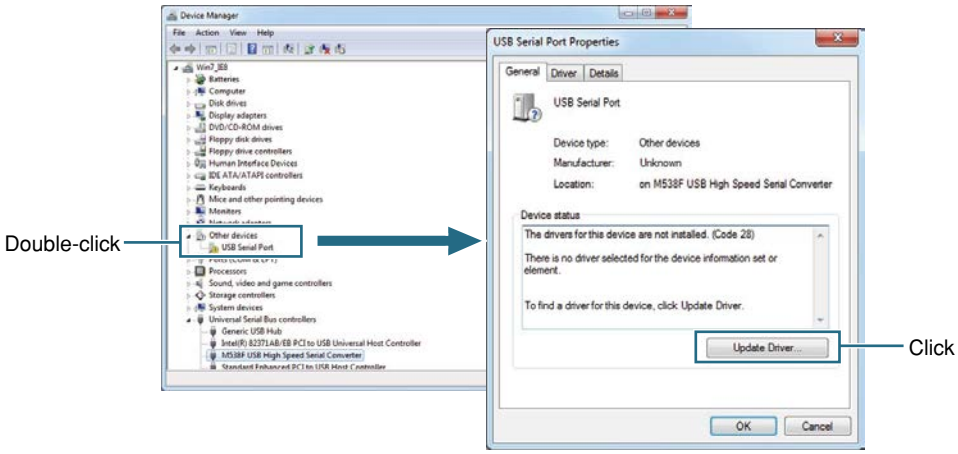
Step 6 Install the driver for the USB serial port.

Installation of the driver for the USB serial port automatically begins and a message appears stating that the device driver software is being installed.
After a while, another message appears stating "Device driver software was not successfully installed".

Step 7 Install the driver.

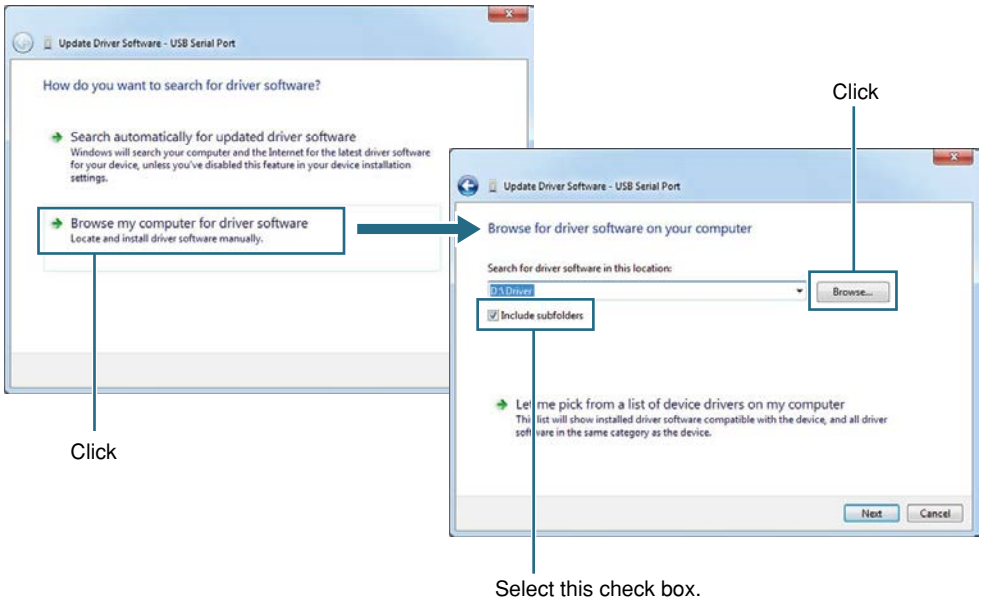
In Device Manager, double-click "USB Serial Port" under "Other devices" to open the "USB Serial Port Properties" dialog box.
Click the [Update Driver] button to open the "Update Driver Software" dialog box.

[Update Driver] button



Click "Browse my computer for driver software".
Select the "Includes subfolders" check box and click the [Browse] button.

"Update Driver Software" dialog box

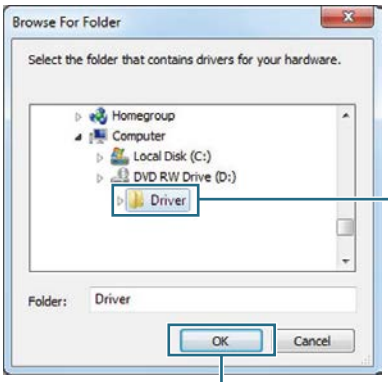


When the "Browse For Folder" dialog appears, select the "Driver" folder in the support software installation disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box



Select "Driver" in CD-ROM.

Click

Click the [Next] button in the "Update Driver Software" dialog box.

The "Windows Security" dialog box appears.
Click "Install this driver software anyway".
The driver software will be installed.

Selecting "Install this driver software anyway"

Click

Step 8 Finish installing the driver.

The message, "Windows has successfully updated your driver software", appears. Click the [Close] button to close the dialog box.
When the control side uses the Dsub connector, close "KBG-M538F USB Serial Port (COM ☐)". When the controller side uses the round type dedicated connector, close "KCA-M538F USB Serial Port (COM ☐)".
Close the windows that are currently open, such as "Device Manager" window.
When you have installed the driver software for the USB cable from the support software installation disc, remove the support software installation disc from the CD-ROM drive.

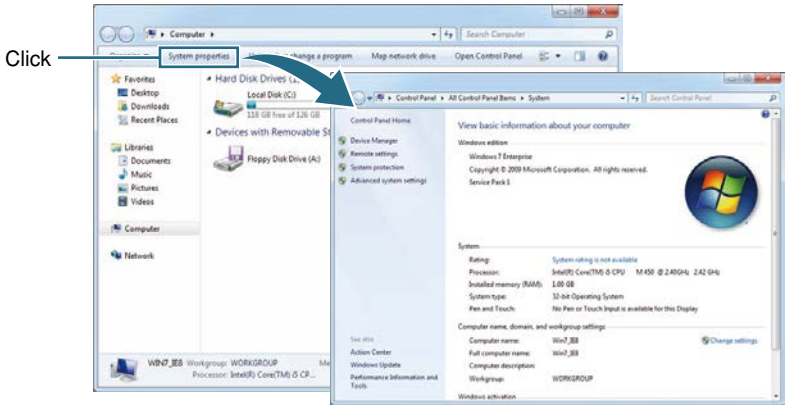
Checking the COM port

After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Start "System Properties".

1. From the Start menu, select and click "Computer".
2. Click "System Properties".

System Properties



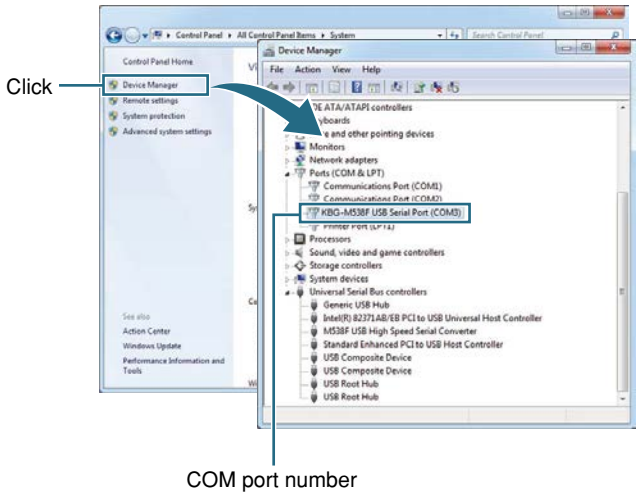
Step 2 Check the COM port number for the USB serial port.

1. Click "Device Manager".
2. When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM ☐)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, "KCA-M538F USB Serial Port (COM ☐)" is displayed. Check the COM port number.

   Example)
   KBG-M538F USB Serial Port (COM3) ► COM port number is 3.
   KCA-M538F USB Serial Port (COM3) ► COM port number is 3.

Checking the COM port number

xample: For KBG-M538F USB Serial Port



Step 3 Close the Device Manager.

Click the button to close the Device Manager.

2.6 Windows 8 / Windows 8.1

Installing the driver

First, install the driver for the USB cable.
When using Windows 8/Windows 8.1, it is necessary to disable the driver signature enforcement.
The following describes how to install the driver by using operations with Windows 8.1 as an example.

Step 1 Start Windows and click [Settings] on the charm bar.

Move the mouse cursor to the upper right or lower right portion of the screen and click [Settings] on the charm bar.

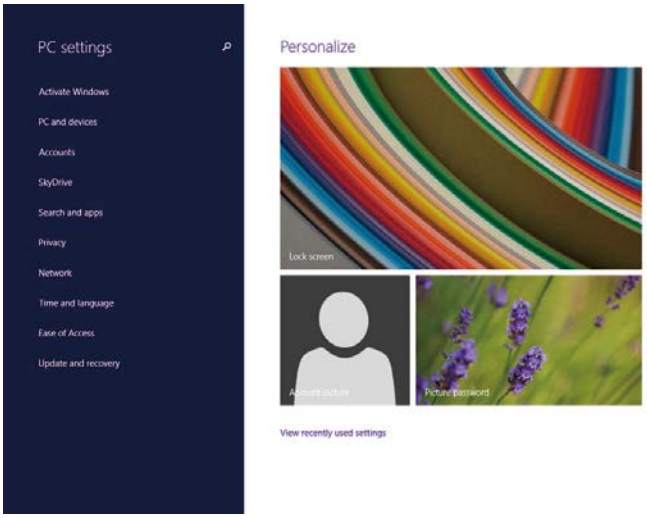
Charm bar

Step 2 Click [Change PC settings].

When clicking [Change PC settings] on the charm bar, the screen will change to the "PC settings" screen.

[Change PC settings] button

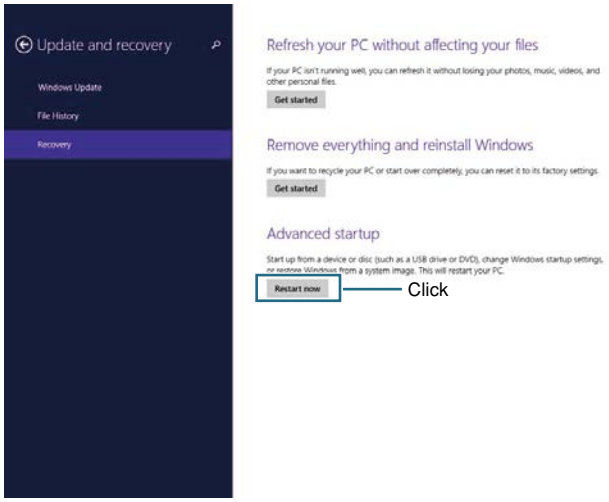
"PC settings"



Step3 Click [Restart now] to restart the computer.

Select [Update and recovery] in "PC settings", click [Recovery], and then click [Restart now] in the "Advanced startup" area to restart the computer.

[Restart now] button



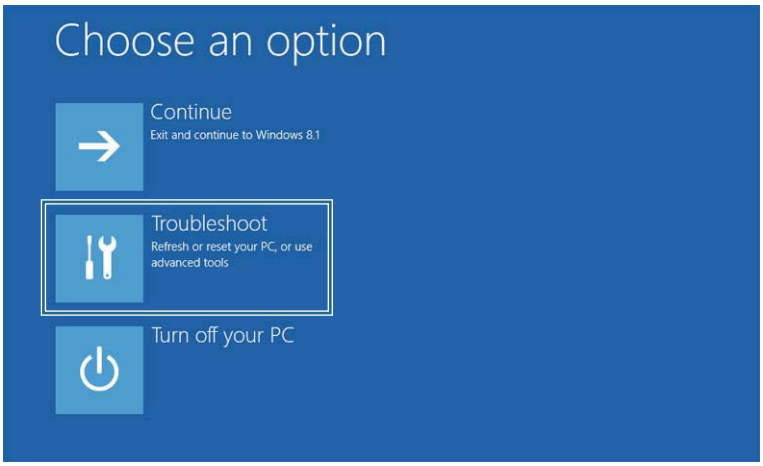
TIP

For Windows 8, the [Restart now] button is provided in the "Advanced startup" area that appears by clicking [PC settings] - [General].

Step 4 Click [Troubleshoot].

When the computer restarts, the "Choose an option" screen will appear. Click [Troubleshoot] on the "Choose an option" screen.

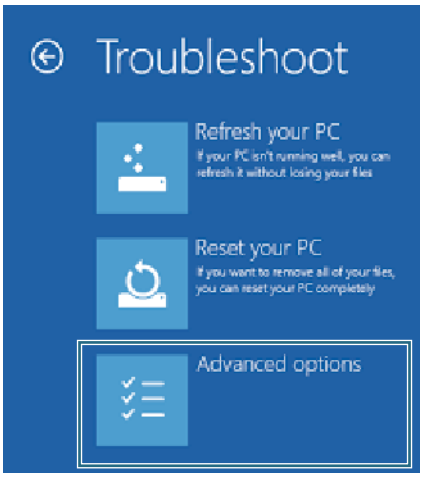
"Choose an option" screen



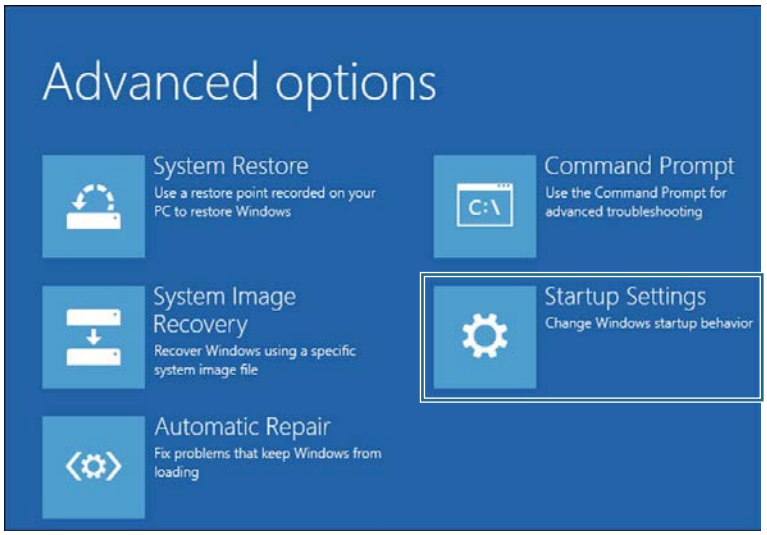
Step 5 Click [Startup Settings] on the "Advanced options" screen.

Click [Advanced options] on the "Troubleshoot" screen, and then click [Startup Settings].

"Troubleshoot" screen



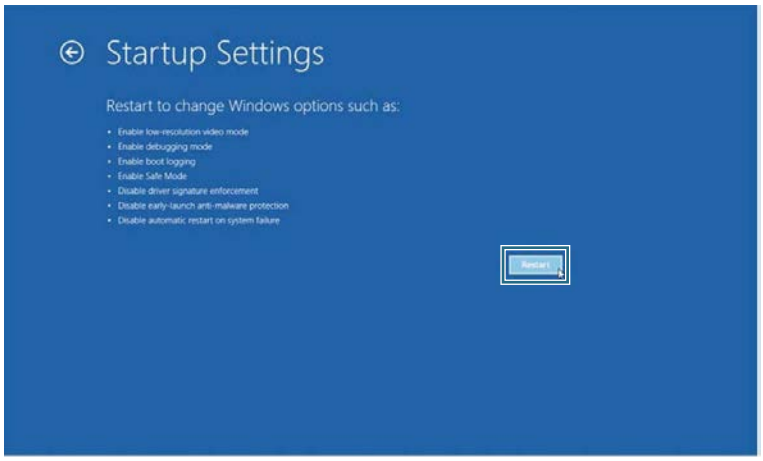
"Advanced options" screen



Step 6 Click [Restart].

Click [Restart] on the "Startup Settings" screen to restart the computer.

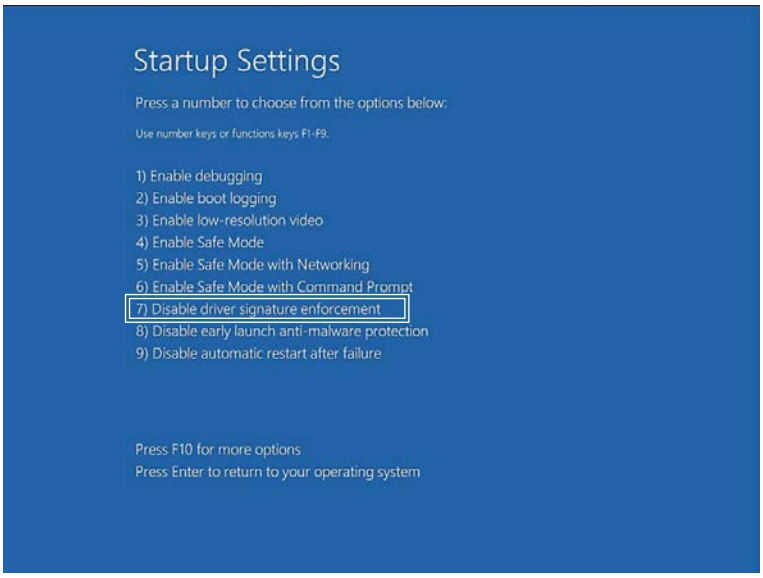
"Startup Settings" screen



Step 7 Disable the driver signature enforcement and start Windows.

When the computer restarts, the "Startup Settings" screen will appear. Press the [7] key on the keyboard to disable the driver signature enforcement, and then restart Windows.

"Startup Settings" screen (after restarting)



Step 8 Insert the CD-ROM supplied with the USB cable into the CD-ROM drive.

When the setup program appears, click the [Exit] button to exit this program.

NOTE

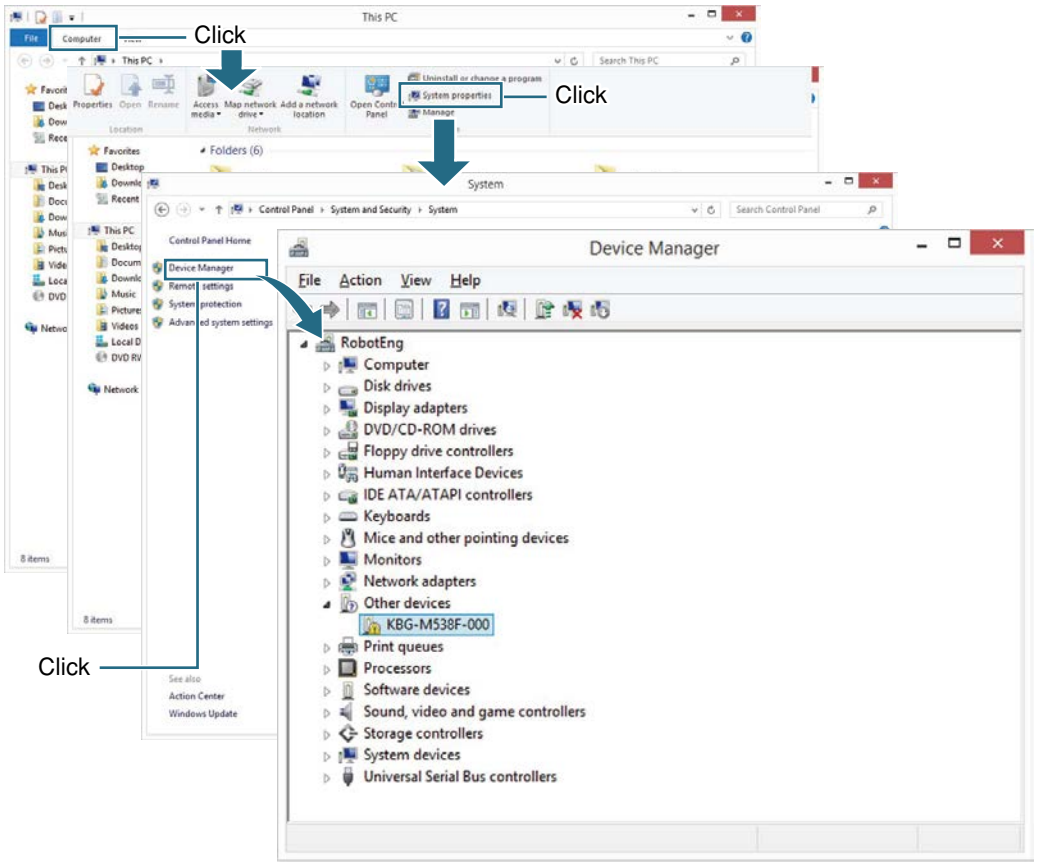
When installing the driver from the support software installation folder, it is not necessary to insert the support software installation disc.

Step 9 Plug the USB cable into the USB port of your PC.

Step 10 Display the "Device Manager" window.

1. Double-click [PC] on the desktop or Start menu.
2. Click [Computer] on the menu.
3. Click [System properties].
4. Click [Device Manager].

"Device Manager" window



TIP

When using Windows 8, [PC] is presented as [Computer].

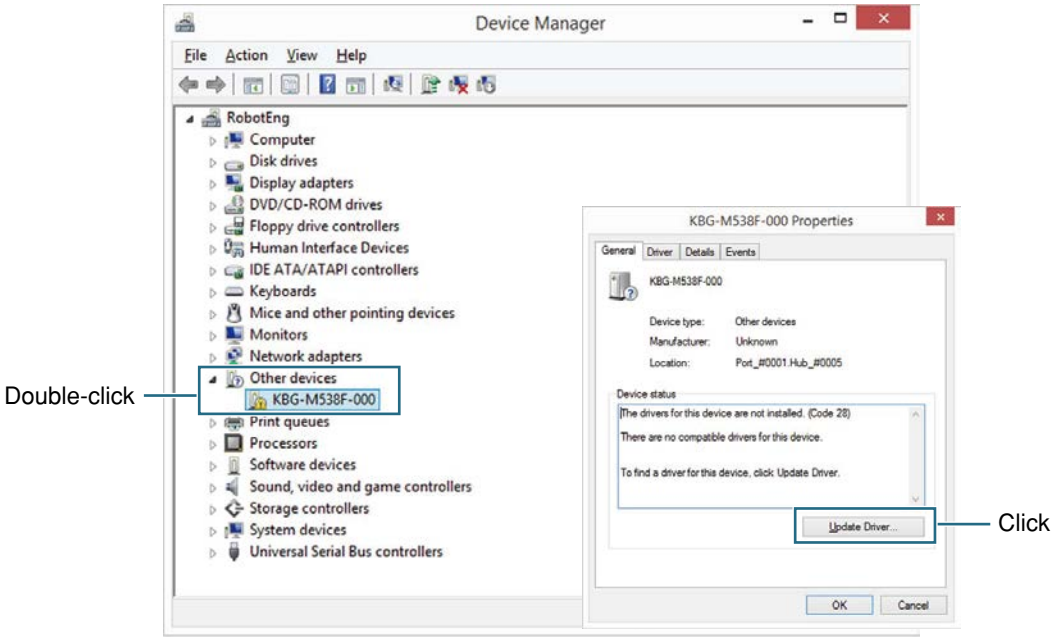
Step 11 Install the driver.

When the control side uses the Dsub connector, double-click "KBG-M538F-000" under [Other devices]. When the controller side uses the round type connector, double-click "KCA-M538F-000".

Click the [Update Driver] button.

[Update Driver] button

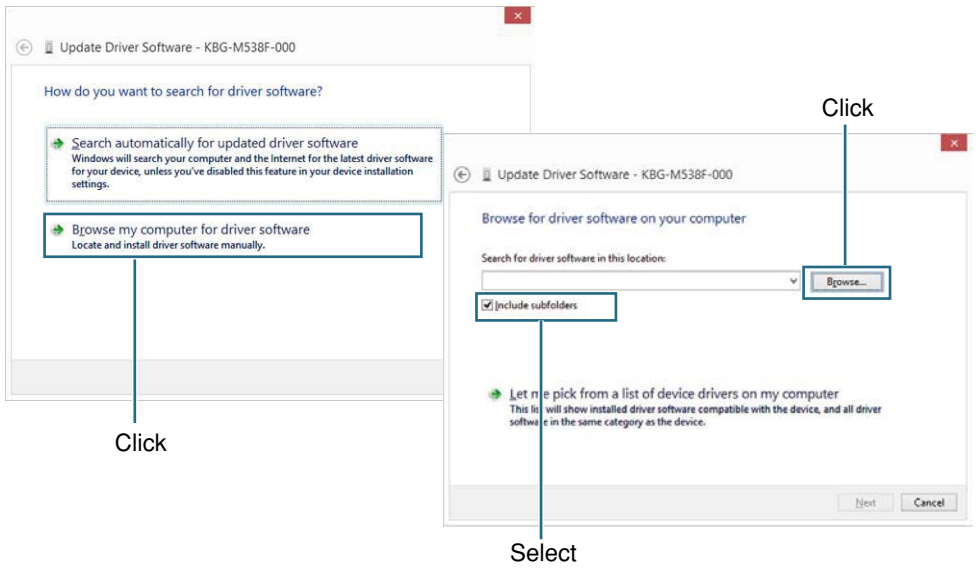
Example: For KBG-M538F USB Serial Port



Click "Browse my computer for driver software".

Select the "Includes subfolders" check box and click the [Browse...] button.

"Update Driver Software" window

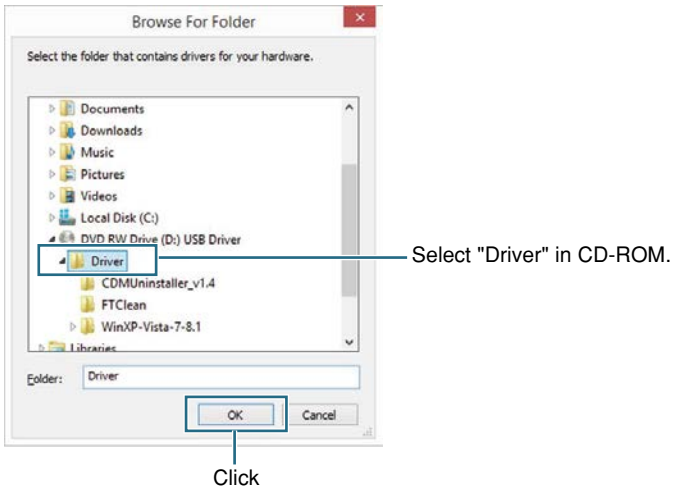


When the "Browse For Folder" dialog appears, select the "Driver" folder in the support software installation disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box



When clicking [Next] in the "Update Driver Software" window, the "Windows Security" window will appear.
Click "Install this driver software anyway".

Selecting "Install this driver software anyway"

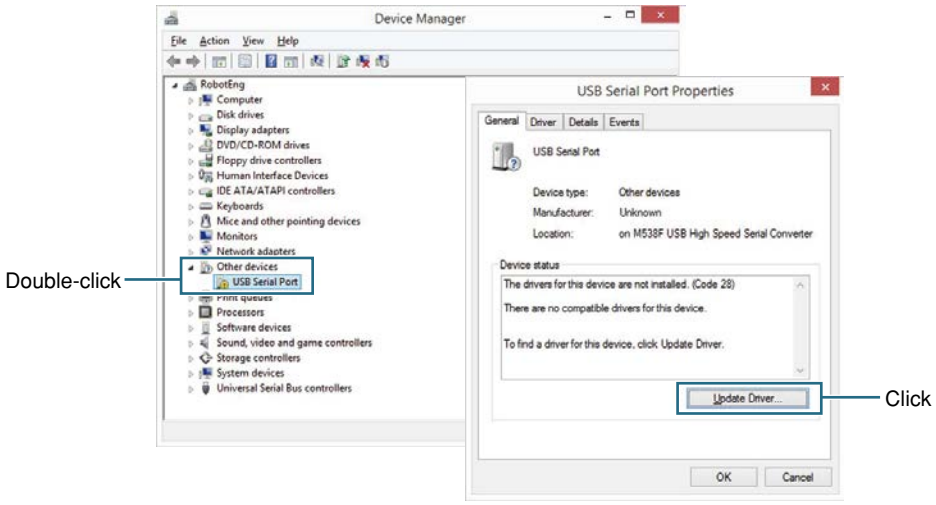
Step 12 Finish installing the driver.

The message, "Windows has successfully updated your driver software", appears. Click the [Close] button to close the dialog box.
Close the "M538F USB High Speed Serial Converter Properties" dialog box.

Step 13 Install the driver for the USB serial port.

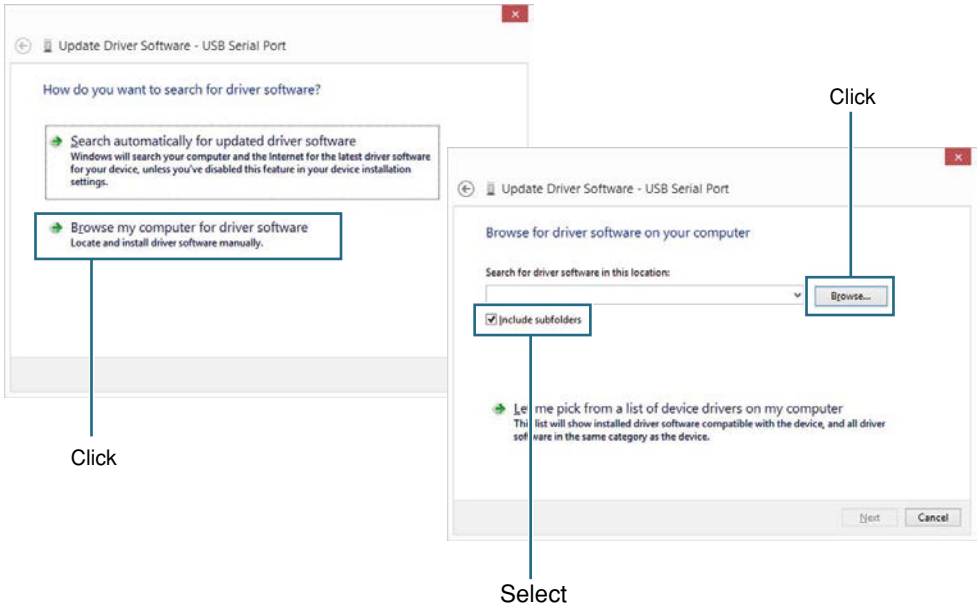
Double-click "USB Serial Port" under [Other devices] in the "Device Manager" window, and then click the [Update Driver...] button.

[Update Driver] button



Click "Browse my computer for driver software".
Select the "Includes subfolders" check box and click the [Browse] button.

"Update Driver Software" dialog box

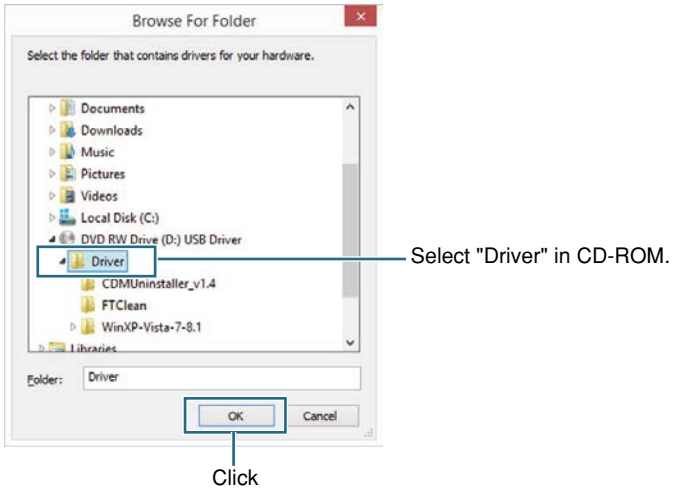


When the "Browse For Folder" dialog appears, select the "Driver" folder in the support software installation disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box



When clicking [Next] in the "Update Driver Software" window, the "Windows Security" window will appear.
Click "Install this driver software anyway".

Selecting "Install this driver software anyway"

Step 14 Finish installing the driver.

The message, "Windows has successfully updated your driver software", appears. Click the [Close] button to close the dialog box.
When the control side uses the Dsub connector, close "KBG-M538F USB Serial Port (COM ☐) Properties". When the controller side uses the round type connector, close "KCA-M538F USB Serial Port (COM ☐) Properties".
Close the windows that are currently open, such as "Device Manager" window.
When you have installed the driver software for the USB cable from the support software installation disc, eject the support software installation disc from the CD-ROM drive.

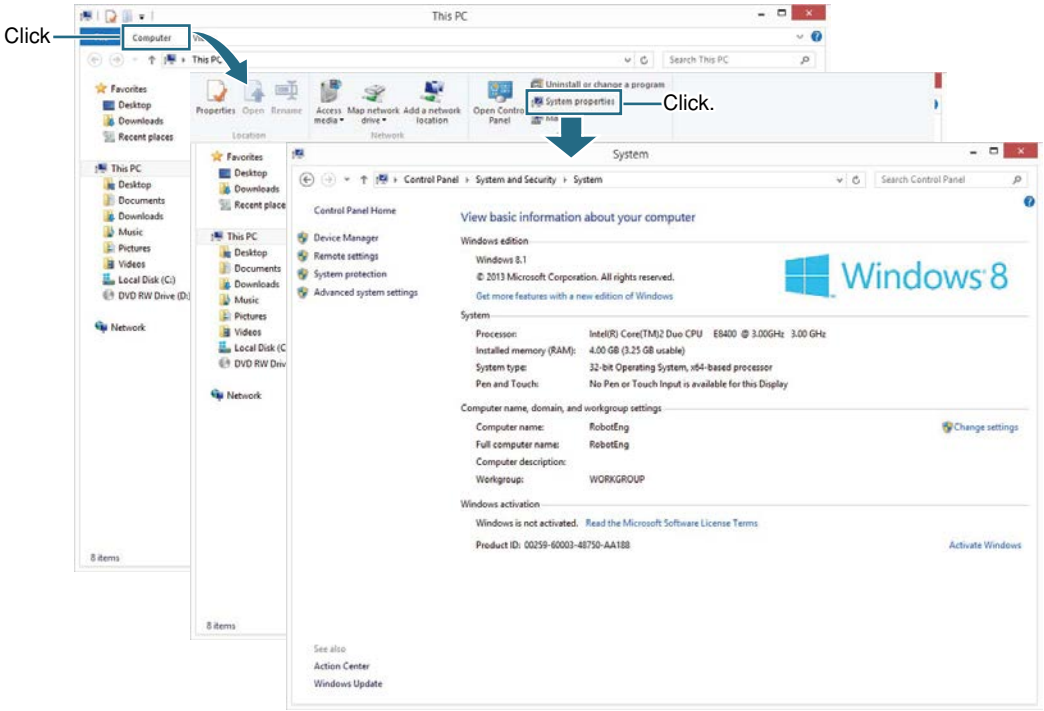
Checking the COM port

After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Start "System Properties".

1. Double-click [PC] on the desktop or Start menu.
2. Click [Computer] on the menu.
3. Click [System Properties].

System Properties



TIP

When using Windows 8, [PC] is presented as [Computer].

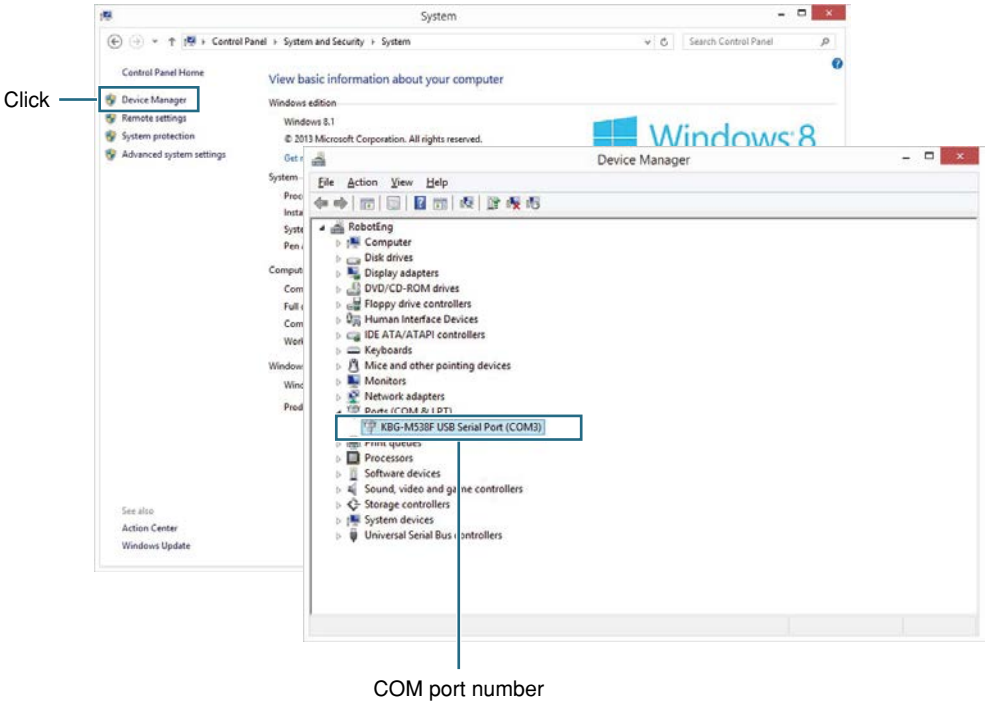
Step2 Check the COM port number for the USB serial port.

1. Click [Device Manager].
2. When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM □)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type connector, "KCA-M538F USB Serial Port (COM □)" is displayed. Check the COM port number.

   Example)
   KBG-M538F USB Serial Port (COM3) ► COM port number is 3.
   KCA-M538F USB Serial Port (COM3) ► COM port number is 3.

Checking the COM port number

Example: For KBG-M538F USB Serial Port



Step3 Close the "Device Manager" window.

Click the button to close the "Device Manager" window.

2.7 Windows 10

Installing the driver

If the Windows10 (Version 1709 or later) is connected to the Internet, the USB driver is automatically installed when the cable is connected to the USB port.
If it is not automatically installed due to network settings, etc., install it manually using the following methods.

Step 1 Download the latest version from our website.

https://global.yamaha-motor.com/business/robot/download/index.html#USBDriver

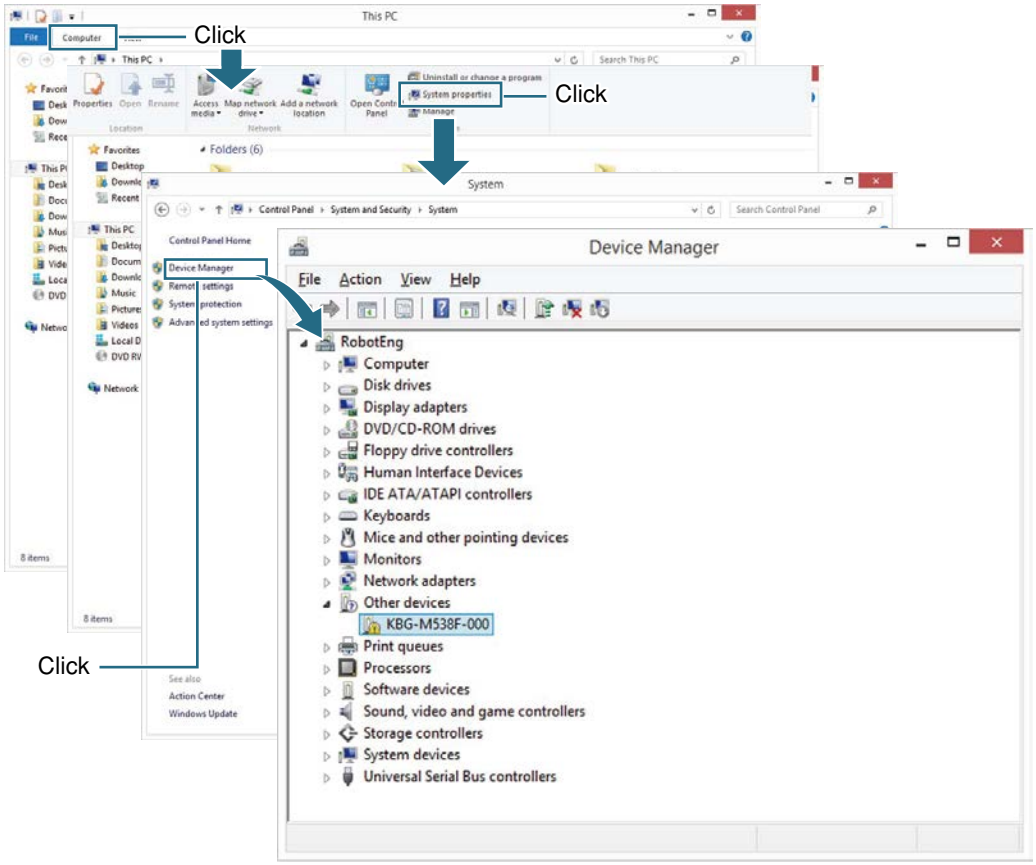
After downloading, please decompress the data to any location.

Step 2 Plug the USB cable into the USB port of your PC.

Step 3 Display the "Device Manager" window.

1. Double-click [PC] on the desktop or Start menu.
2. Click [Computer] on the menu.
3. Click [System properties].
4. Click [Device Manager].

"Device Manager" window



TIP

When using Windows 10, [PC] is presented as [Computer].

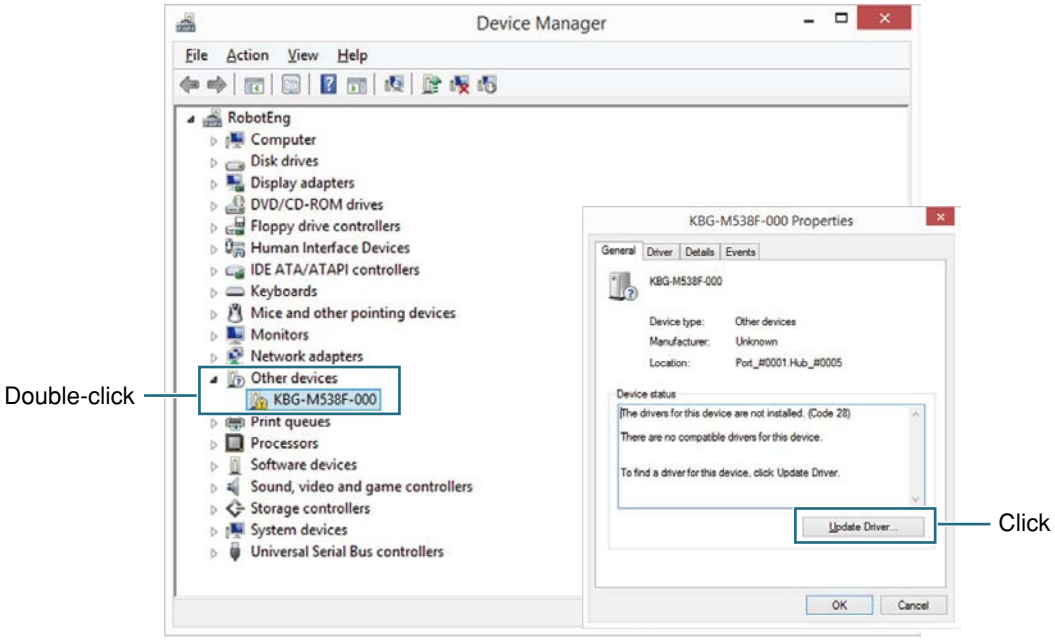
Step4 Install the driver.

When the control side uses the Dsub connector, double-click "KBG-M538F-000" under [Other devices]. When the controller side uses the round type connector, double-click "KCA-M538F-000".

Click the [Update Driver] button.

[Update Driver] button

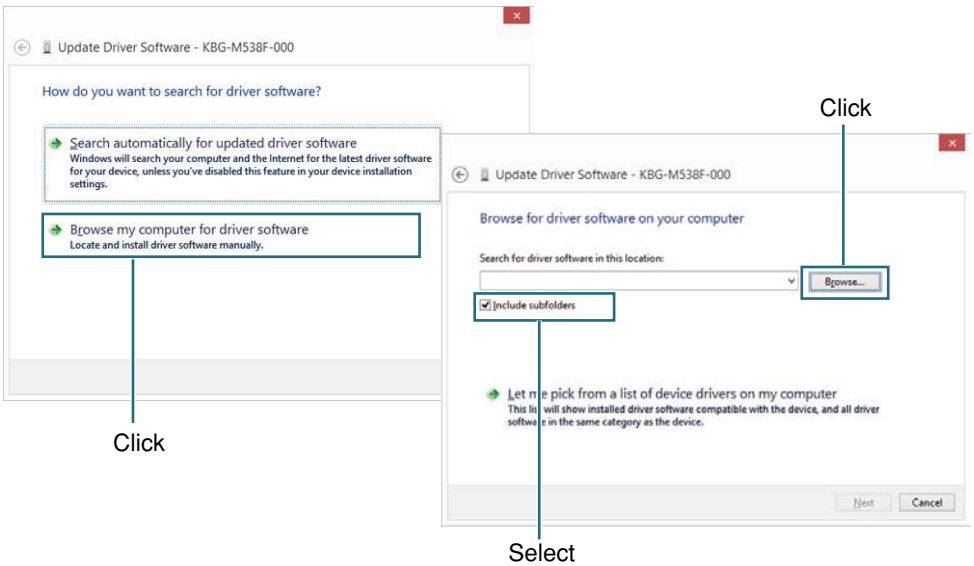
Example: For KBG-M538F USB Serial Port



Click "Browse my computer for driver software".

Select the "Includes subfolders" check box and click the [Browse...] button.

"Update Driver Software" window

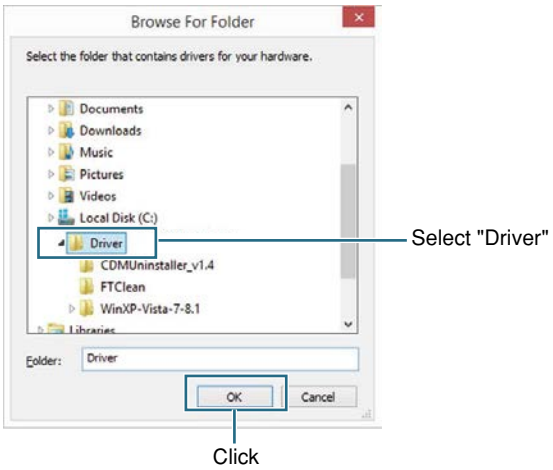


When the "Browse For Folder" dialog appears, select the "Driver" folder in the decompressed disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box



Click [Next] in the "Update Driver Software" window.

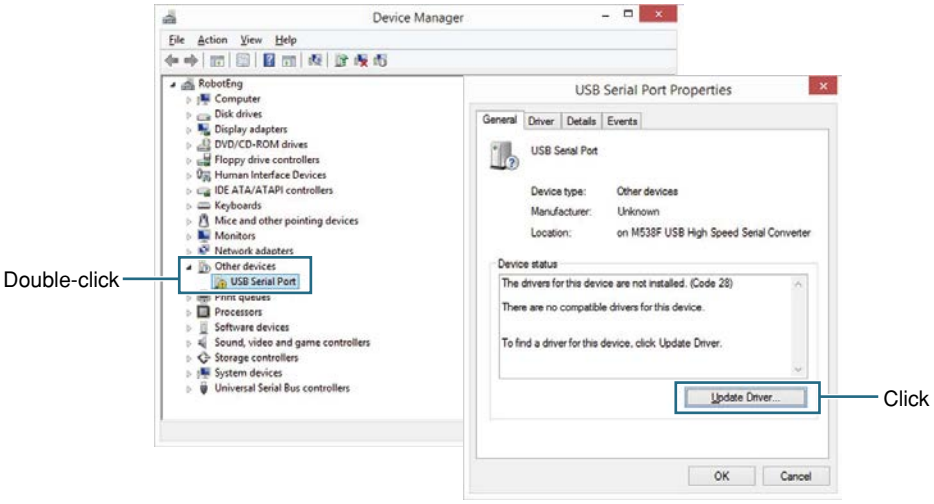
Step 5 Finish installing the driver.

The message, "Windows has successfully updated your driver software", appears. Click the [Close] button to close the dialog box.
Close the "M538F USB High Speed Serial Converter Properties" dialog box.

Step 6 Install the driver for the USB serial port.

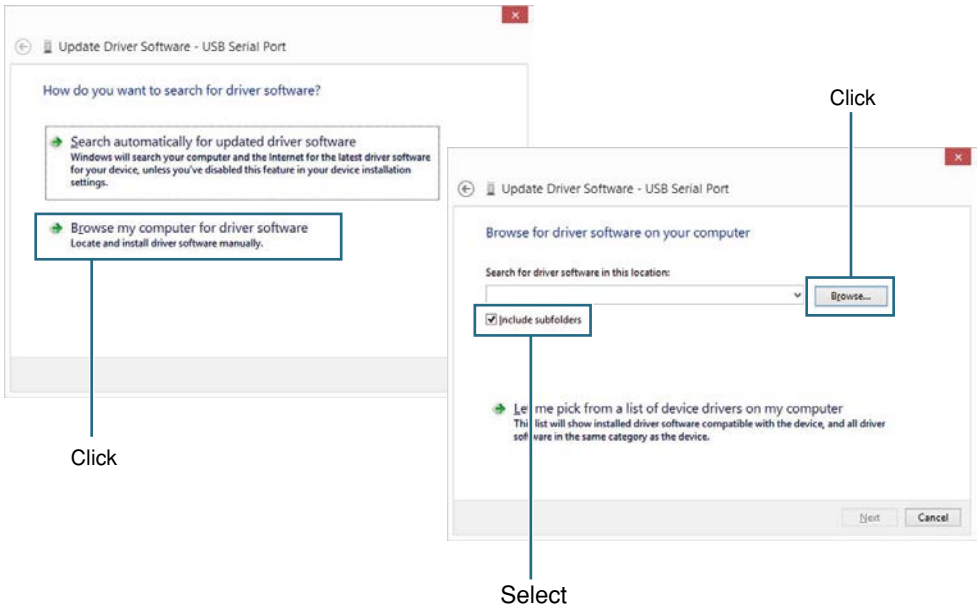
Double-click "USB Serial Port" under [Other devices] in the "Device Manager" window, and then click the [Update Driver...] button.

[Update Driver] button



Click "Browse my computer for driver software".
Select the "Includes subfolders" check box and click the [Browse] button.

"Update Driver Software" dialog box

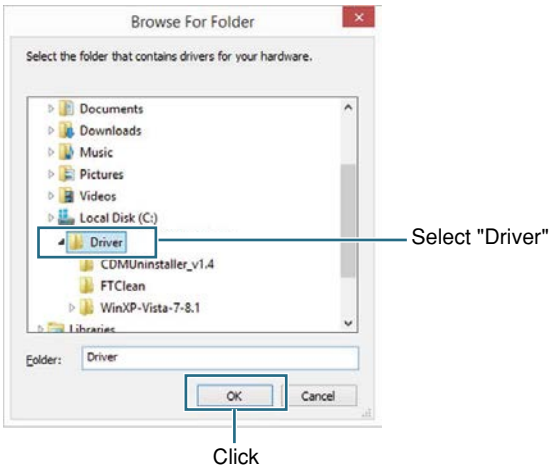


When the "Browse For Folder" dialog appears, select the "Driver" folder in the support software installation disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see"2.1 USB cable applicable support software".

"Browse For Folder" dialog box



Click [Next] in the "Update Driver Software" window.

Step 7 Finish installing the driver.

The message, "Windows has successfully updated your driver software", appears. Click the [Close] button to close the dialog box.
When the control side uses the Dsub connector, close "KBG-M538F USB Serial Port (COM ☐) Properties". When the controller side uses the round type connector, close "KCA-M538F USB Serial Port (COM ☐) Properties".
Close the windows that are currently open, such as "Device Manager" window.
When you have installed the driver software for the USB cable from the support software installation disc, eject the support software installation disc from the CD-ROM drive.

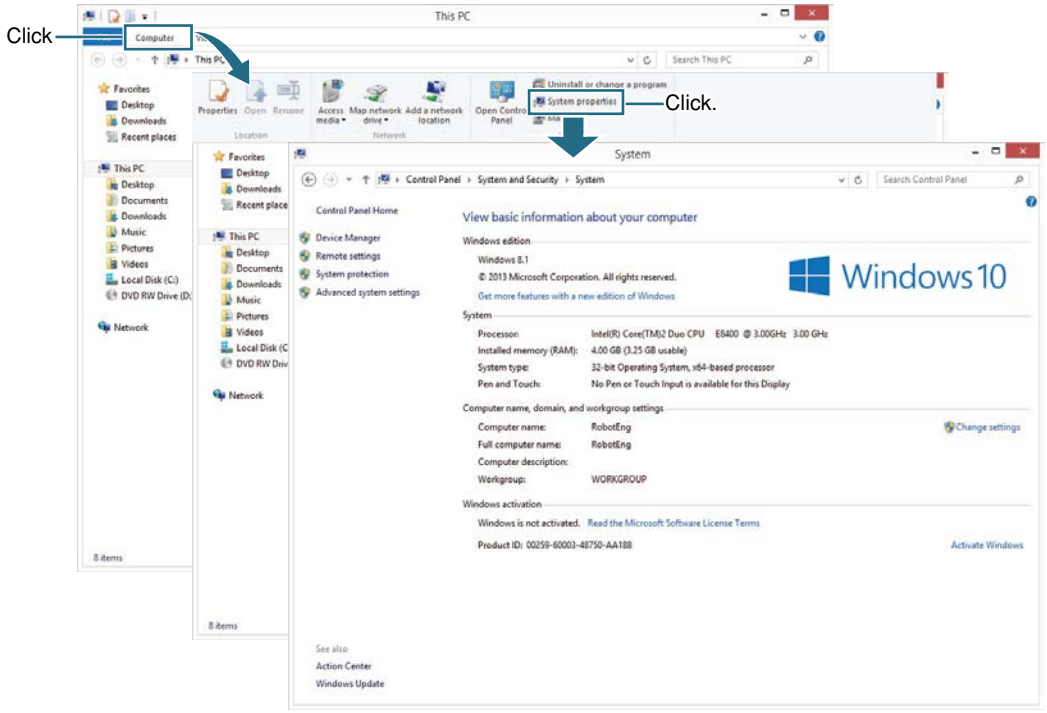
Checking the COM port

After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Start "System Properties".

1. Double-click [PC] on the desktop or Start menu.
2. Click [Computer] on the menu.
3. Click [System Properties].

System Properties



TIP

When using Windows 10, [PC] is presented as [Computer].

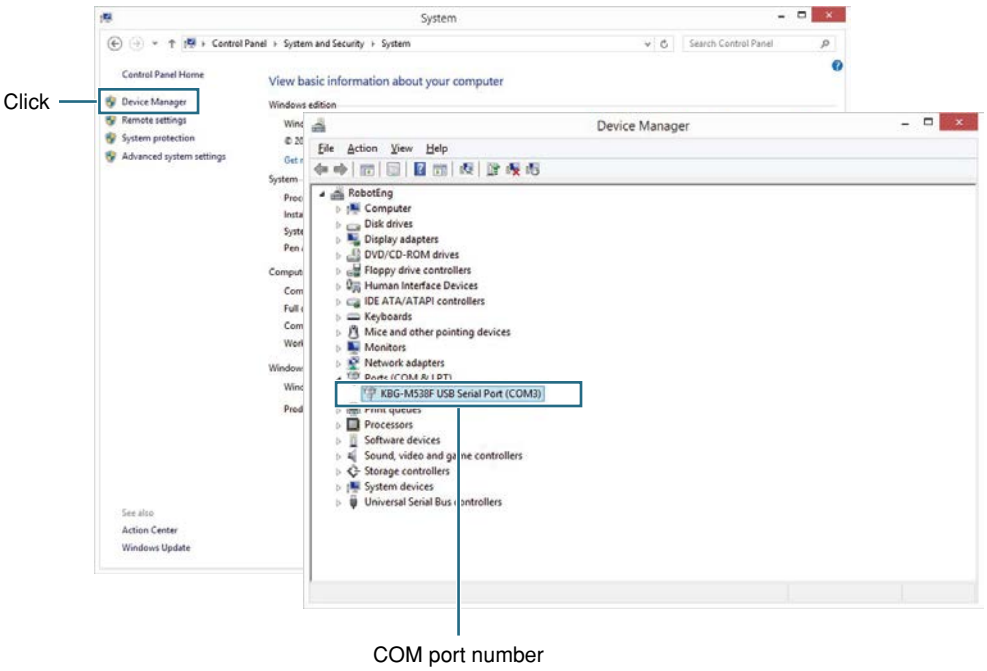
Step2 Check the COM port number for the USB serial port.

1. Click [Device Manager].
2. When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM ☐)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type connector, "KCA-M538F USB Serial Port (COM ☐)" is displayed. Check the COM port number.

   Example)
   KBG-M538F USB Serial Port (COM3) → COM port number is 3.
   KCA-M538F USB Serial Port (COM3) → COM port number is 3.

Checking the COM port number

Example: For KBG-M538F USB Serial Port



Step3 Close the "Device Manager" window.

Click the button to close the "Device Manager" window.

2.8 Windows 11

Installing the driver

If the Windows11 is connected to the Internet, the USB driver is automatically installed when the cable is connected to the USB port.
If it is not automatically installed due to network settings, etc., install it manually using the following methods.

Step 1 Download the latest version from our website.

https://global.yamaha-motor.com/business/robot/download/index.html#USBDriver

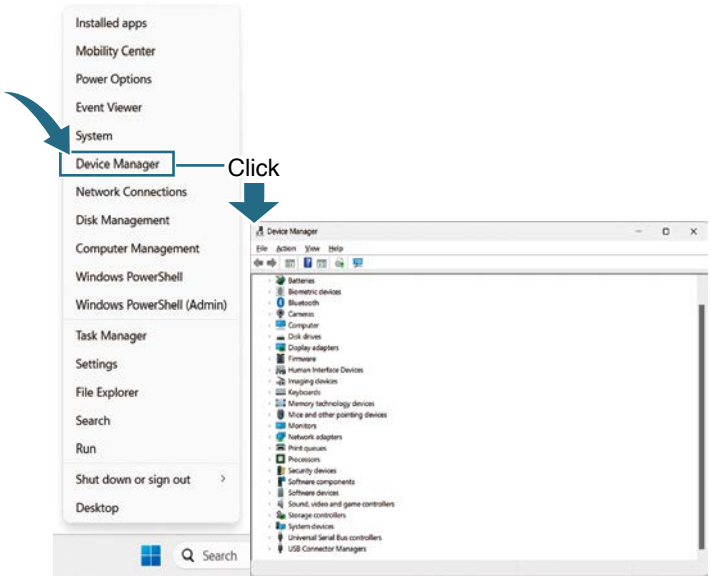
After downloading, please decompress the data to any location.

Step 2 Plug the USB cable into the USB port of your PC.

Step 3 Display the "Device Manager" window.

Right-click "Start" and click "Device Manager" from the list that appears.

"Device Manager" window



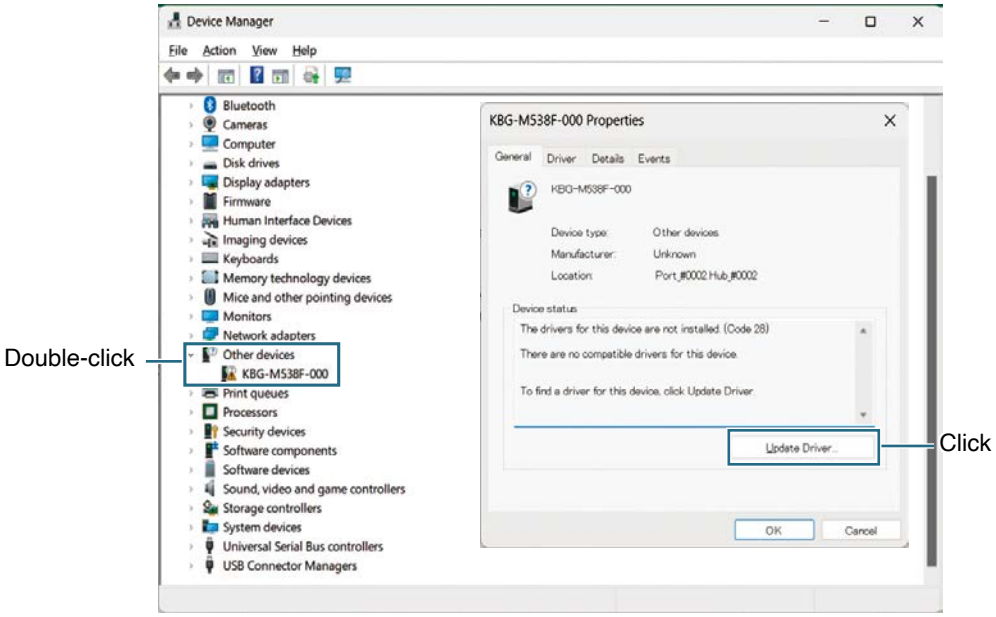
Step4 Install the driver.

When the control side uses the Dsub connector, double-click "KBG-M538F-000" under [Other devices]. When the controller side uses the round type connector, double-click "KCA-M538F-000".

Click the [Update Driver] button.

[Update Driver] button

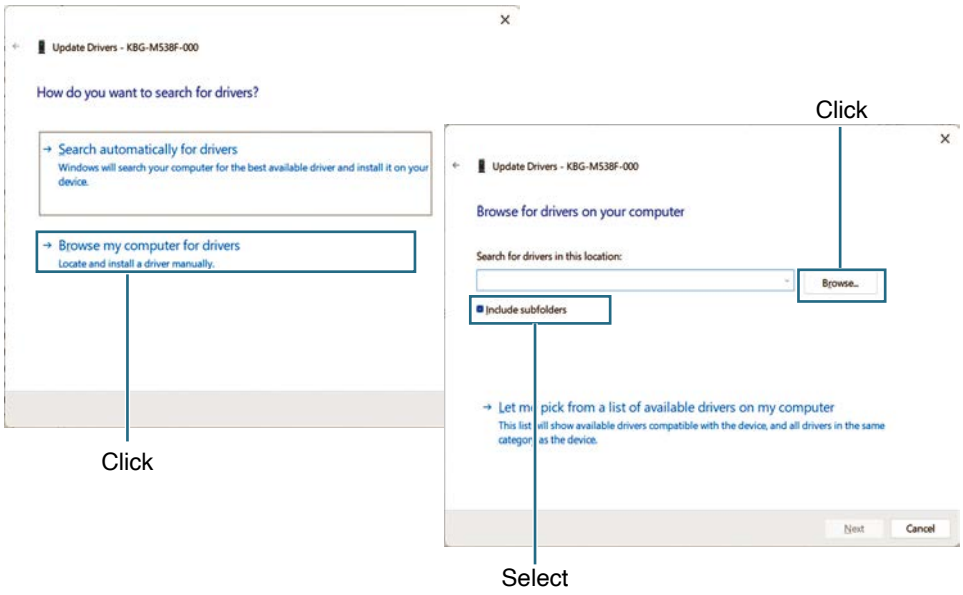
Example: For KBG-M538F USB Serial Port



Click "Browse my computer for drivers".

Select the "Includes subfolders" check box and click the [Browse...] button.

"Update Drivers" window

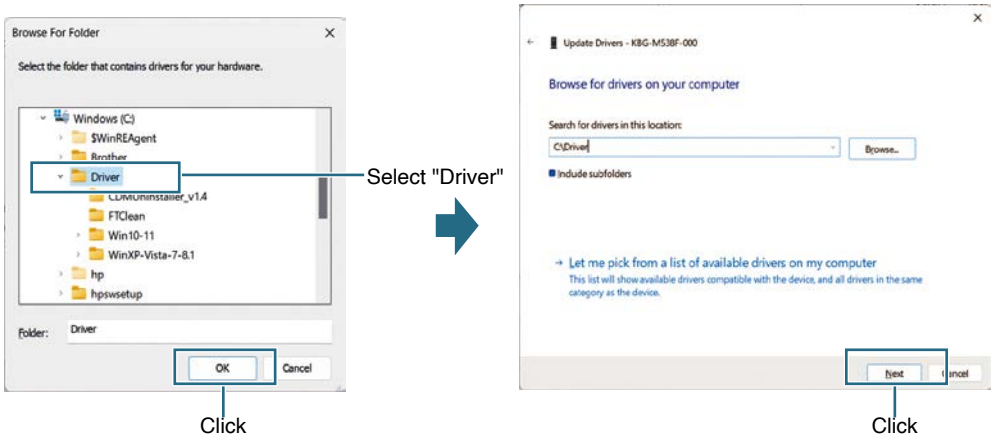


When the "Browse For Folder" dialog appears, select the "Driver" folder in the decompressed disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box

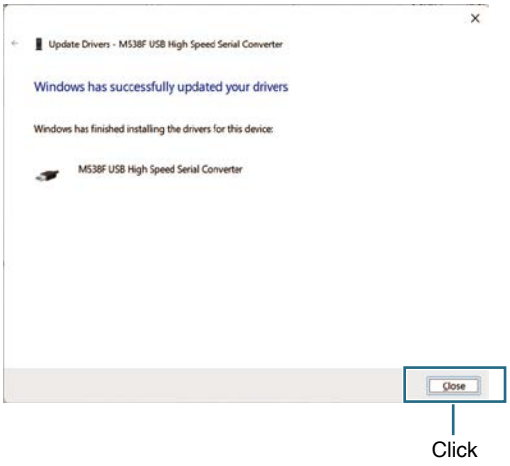


Click [Next] in the "Update Drivers" window.

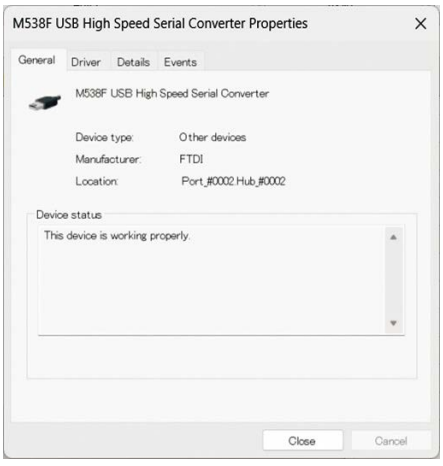
Step5 Finish installing the driver.

The message, "Windows has successfully updated your drivers", appears. Click the [Close] button to close the dialog box.
Close the "M538F USB High Speed Serial Converter Properties" dialog box.

Update Drivers



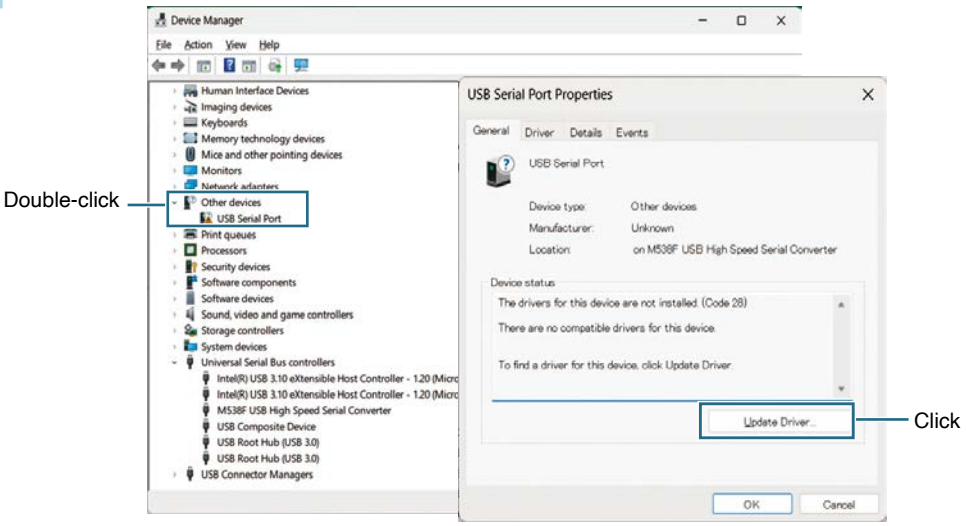
Drivers Properties



Step 6 Install the driver for the USB serial port.

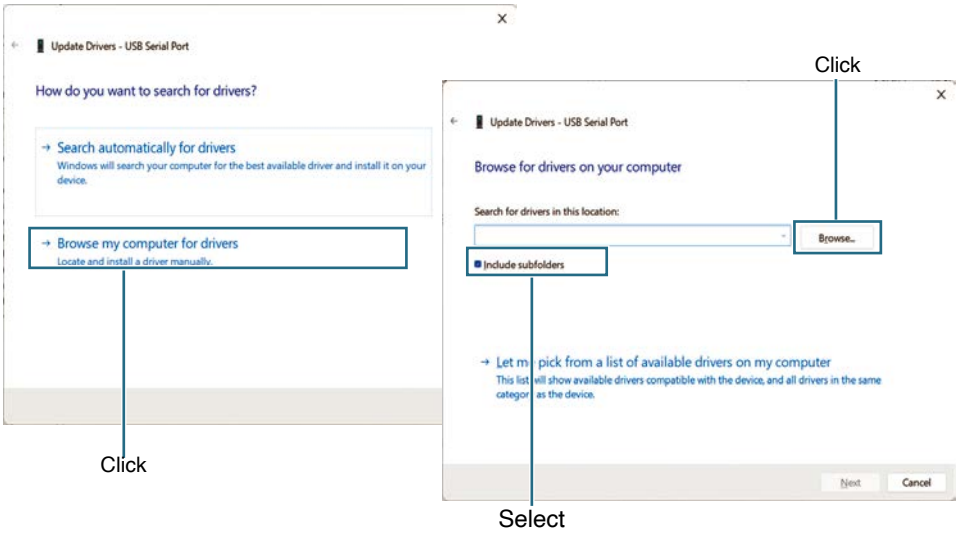
Double-click "USB Serial Port" under [Other devices] in the "Device Manager" window, and then click the [Update Driver...] button.

[Update Driver] button



Click "Browse my computer for drivers".
Select the "Includes subfolders" check box and click the [Browse] button.

"Update Drivers" dialog box

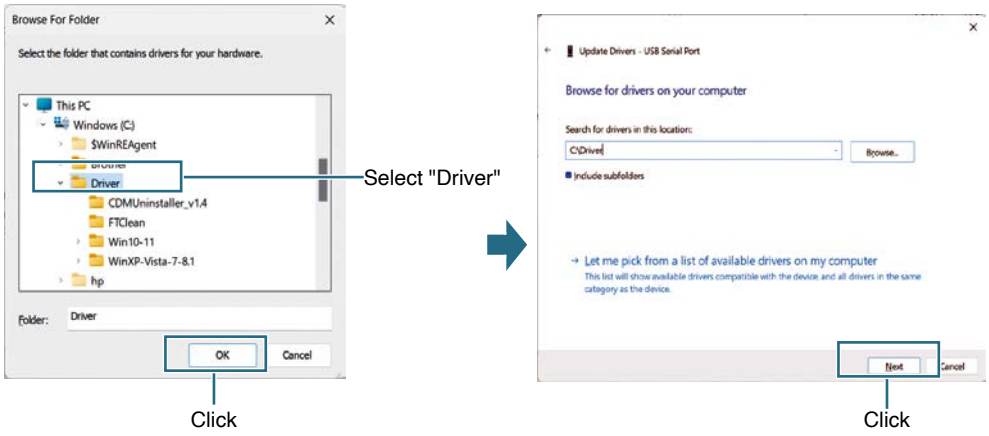


When the "Browse For Folder" dialog appears, select the "Driver" folder in the support software installation disc and click the [OK] button.

NOTE

When you use the driver software for the USB cable that has been copied into the support software installation folder to install the driver software, select the support software installation folder and click the [OK] button.
For details about support software installation folders, see "2.1 USB cable applicable support software".

"Browse For Folder" dialog box

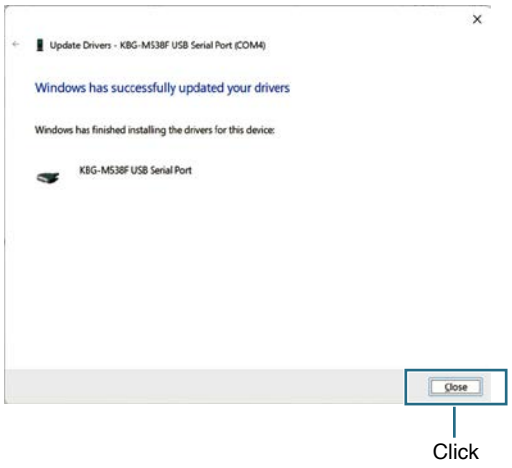


Click [Next] in the "Update Drivers" window.

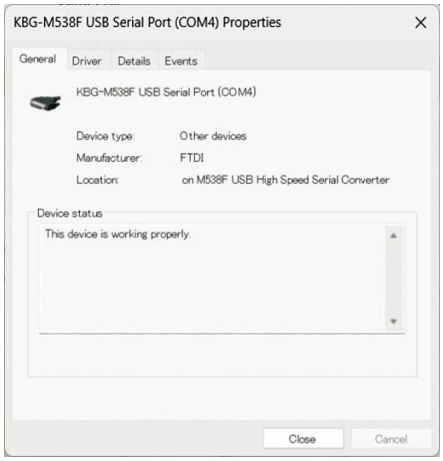
Step 7 Finish installing the driver.

The message, "Windows has successfully updated your drivers", appears. Click the [Close] button to close the dialog box.
When the control side uses the Dsub connector, close "KBG-M538F USB Serial Port (COM ☐) Properties". When the controller side uses the round type connector, close "KCA-M538F USB Serial Port (COM ☐) Properties".
Close the windows that are currently open, such as "Device Manager" window.
When you have installed the driver software for the USB cable from the support software installation disc, eject the support software installation disc from the CD-ROM drive.

Update Drivers



Drivers Properties



Checking the COM port

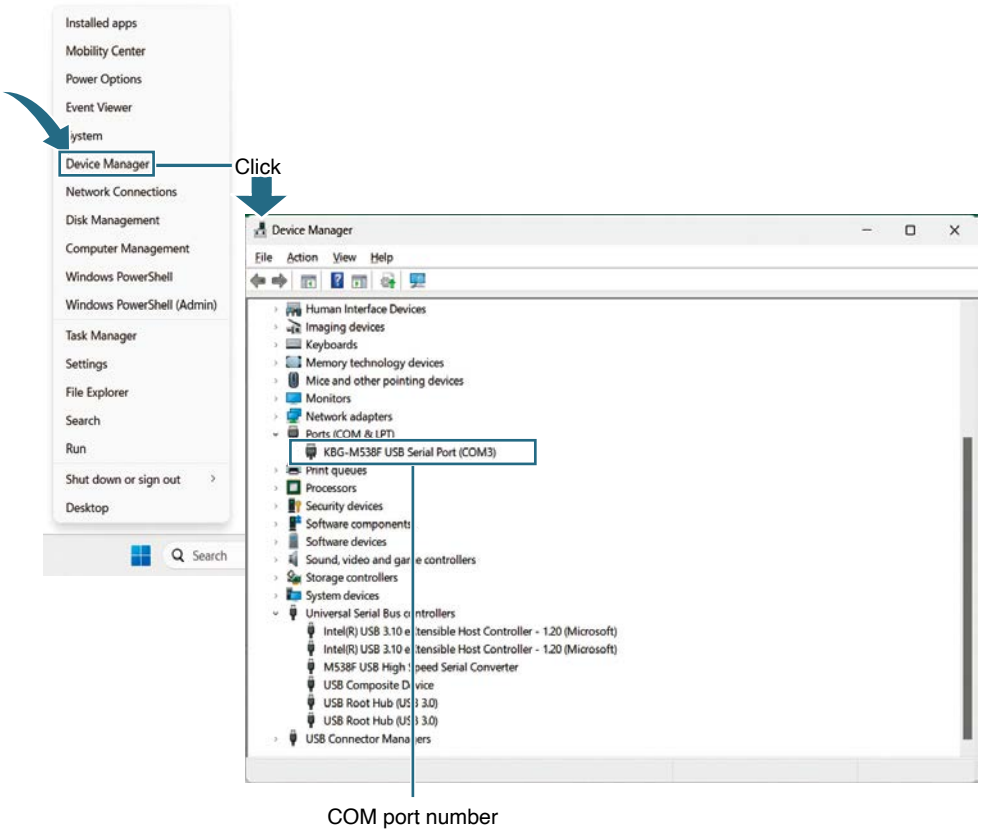
After installing the driver software, check the COM port number assigned to the USB serial port.

Step 1 Check the COM port number for the USB serial port.

1. Right-click "Start" and click "Device Manager" from the list that appears.
2. When the control side uses the Dsub connector, "KBG-M538F USB Serial Port (COM ☐)" is displayed under "Ports (COM & LPT)". When the controller side uses the round type connector, "KCA-M538F USB Serial Port (COM ☐)" is displayed. Check the COM port number.

   Example)
   KBG-M538F USB Serial Port (COM3) → COM port number is 3.
   KCA-M538F USB Serial Port (COM3) → COM port number is 3.

System Properties



Step 2 Close the "Device Manager" window.

Click the button to close the "Device Manager" window.

3. Uninstalling the driver software

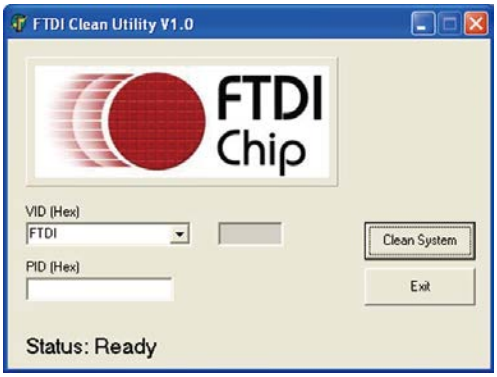
3.1 Windows 2000/XP

When the driver software installation failed or was interrupted, it should be uninstalled. After uninstalling the driver software, reinstall it from the beginning.

Step 1 Start the FTDI Clean Utility.

Start Windows and insert the support software installation disc into the CD-ROM drive of your PC.
Open "My Computer" – "CD-ROM" – "FTClean". Then double-click "FTClean.exe" in the "FTClean" folder. The "FTDI Clean Utility" will start.

FTDI Clean Utility



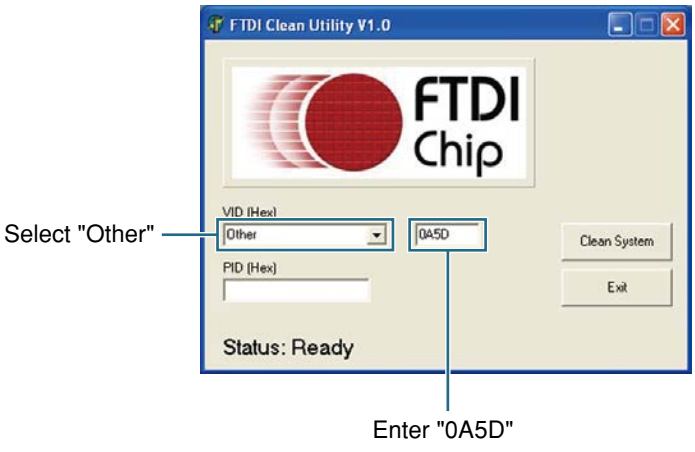
TIP

The setup program might appear after inserting the CD-ROM. In this case, click the [Exit] button to end the program.

Step 2 Execute uninstallation.

1. From the "VID (Hex)" drop-down list, select "Other".
2. Enter "0A5D" from the keyboard and click the [Clean System] button.

Select "Other" and enter "0A5D"



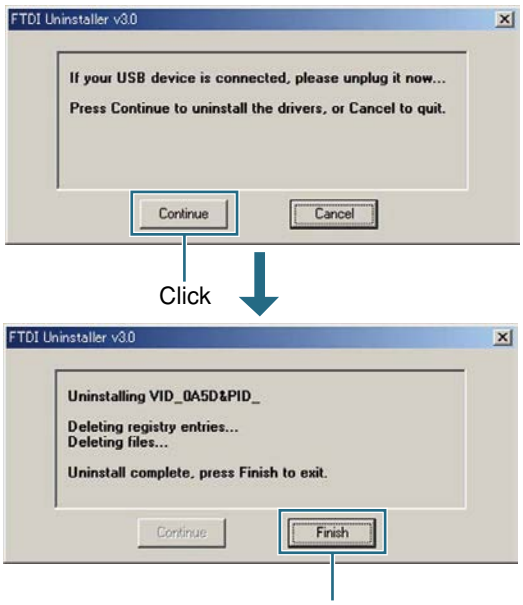
Step3 Check that the USB cable is disconnected.

When "Information" appears, check that the USB cable is removed from the PC and click the [OK] button.

Step4 Check for uninstallation.

When the confirmation dialog box appears, click the [Yes] button.
Another confirmation dialog box then appears. Click the [No] button.
If the following dialog box appears during uninstallation, click the [Continue] button.
When uninstallation is complete, the right-hand button changes to the [Finish] button, so click it.

Confirmation dialog box

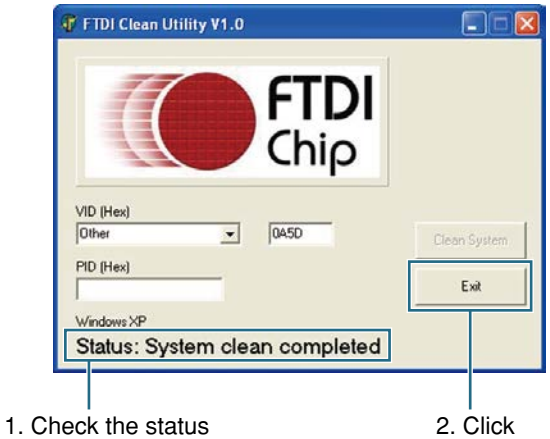


When uninstallation is complete this button changes to [Finish], so click it.

Step5 Exit the uninstallation utility.

When uninstallation is complete, the "FTDI Clean Utility" dialog box appears again.
Check that the message "Status: System clean completed" is displayed and then click the [Exit] button.

FTDI Clean Utility



1. Check the status
2. Click

3.2 Windows Vista

When the driver software installation failed or was interrupted, it should be uninstalled. After uninstalling the driver software, reinstall it from the beginning.

Step 1 Display the Device Manager.

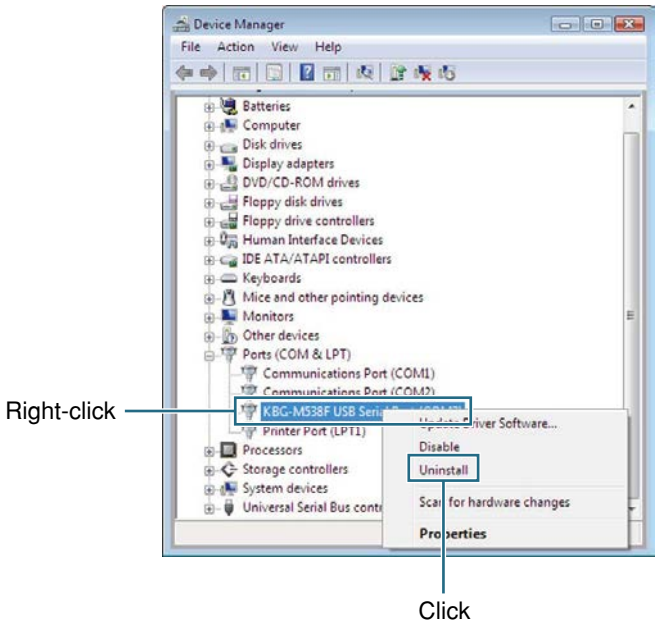
Plug this product (USB cable) into the USB port.
Click on "Computer", select "System Properties", and click "Device Manager" to open it.

Step 2 Remove the serial port.

When the control side uses the Dsub connector, right-click "KBG-M538F USB Serial Port (COM □)" under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, right-click "KCA-M538F USB Serial Port (COM □)".
Select "Uninstall" from the right-click menu.

Removing USB serial port

Example: For KBG-M538F USB Serial Port



Step3 Uninstall the driver software.

When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].

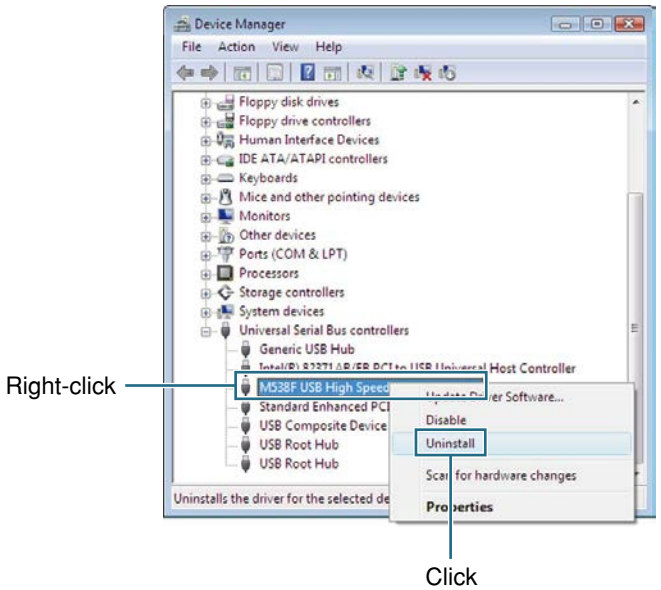
"Confirm Device Uninstall" dialog box

Example: For KBG-M538F USB Serial Port

Step4 Delete the "Universal Serial Bus controller".

Right-click on "M538F USB High Speed Serial Converter" displayed under the "Universal Serial Bus controllers" group, and select "Uninstall" from the right-click menu.

Deleting the "Universal Serial Bus controller"



Step 5 Uninstall the driver software.

When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].
After uninstalling, click the button close the Device Manger.

"Confirm Device Uninstall" dialog box

3.3 Windows 7

When the driver software installation failed or was interrupted, it should be uninstalled. After uninstalling the driver software, reinstall it from the beginning.

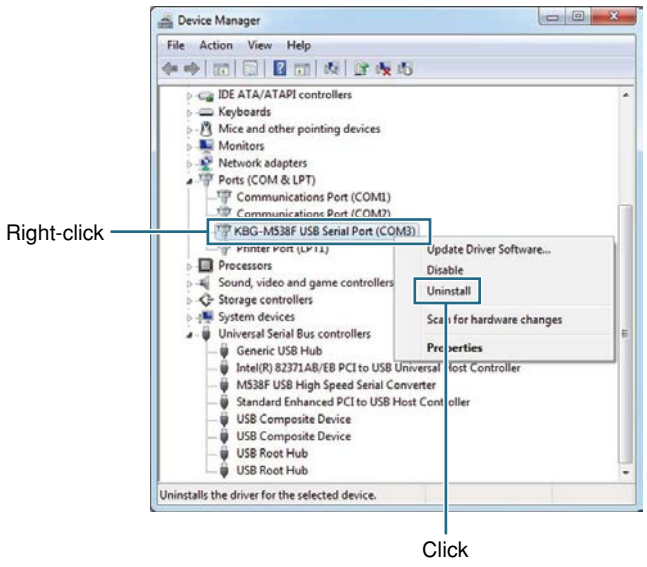
Step1 Display the Device Manager.

Plug this product (USB cable) into the USB port.
Click on "Computer", select "System Properties", and click "Device Manager" to open it.

Step2 Remove the serial port.

When the control side uses the Dsub connector, right-click "KBG-M538F USB Serial Port (COM □)" under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, right-click "KCA-M538F USB Serial Port (COM □)".
Select "Uninstall" from the right-click menu.

Removing USB serial port



Step3 Uninstall the driver software.

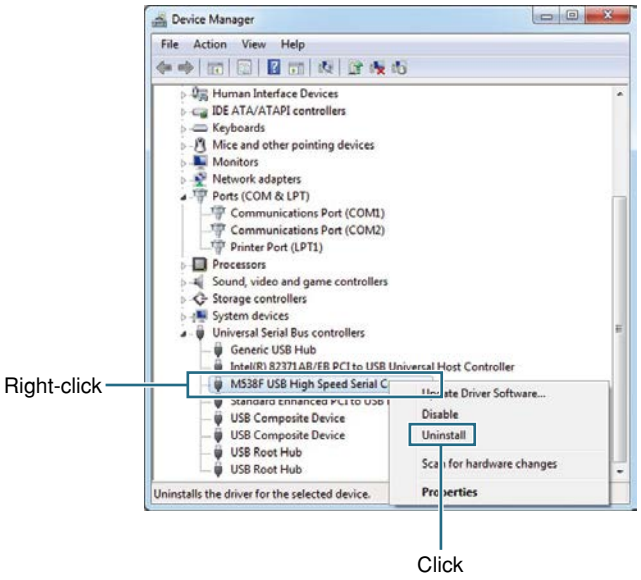
When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].

"Confirm Device Uninstall" dialog box

Step4 Delete the "Universal Serial Bus controller".

Right-click on "M538F USB High Speed Serial Converter" displayed under the "Universal Serial Bus controllers" group, and select "Uninstall" from the right-click menu.

Deleting the "Universal Serial Bus controller"



Step5 Uninstall the driver software.

When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].
After uninstalling, click the button to close the Device Manager.

"Confirm Device Uninstall" dialog box

3.4 Windows 8/Windows 8.1

If it is interrupted or failed to install the driver software, uninstall it.
After the driver software has been uninstalled, install the driver software again.
The following describes how to uninstall the driver by using operations with Windows 8.1 as an example.

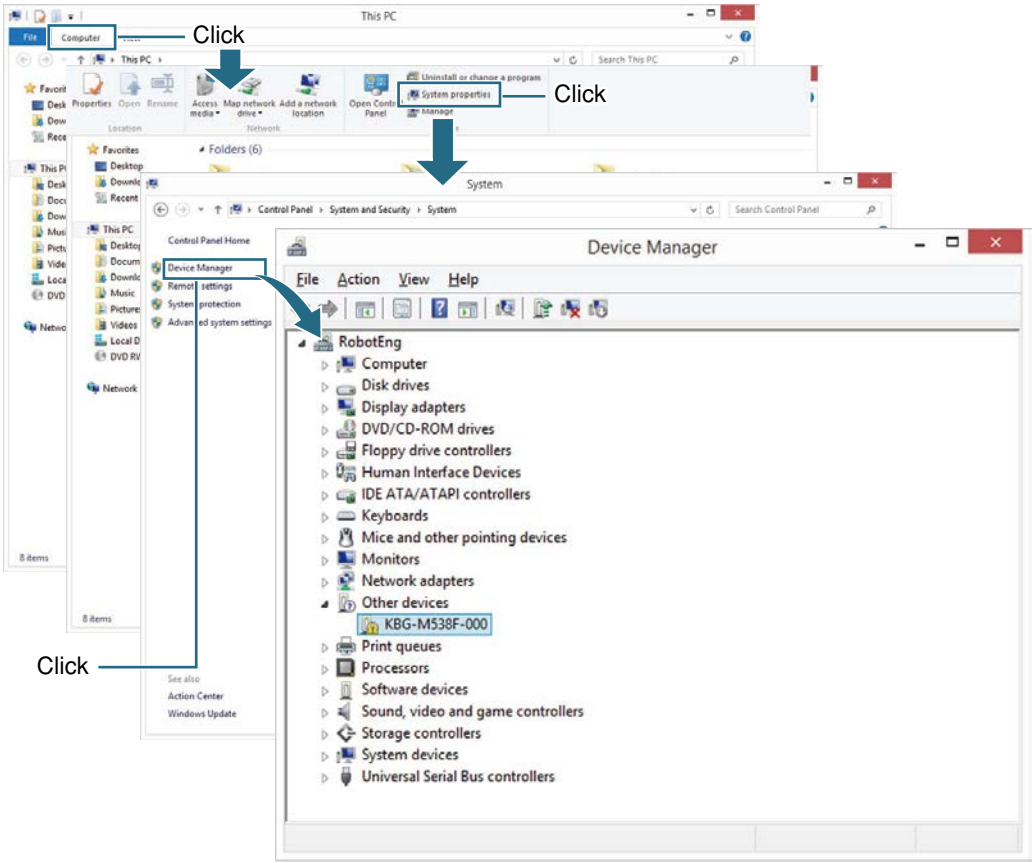
Step 1 Display the "Device Manager" window.

Plug this product into the USB port of your PC.

Double-click [PC] on the desktop or Start menu.

Click [Computer] - [System properties] from the menu, and start "Device Manager".

"Device Manager" window



TIP

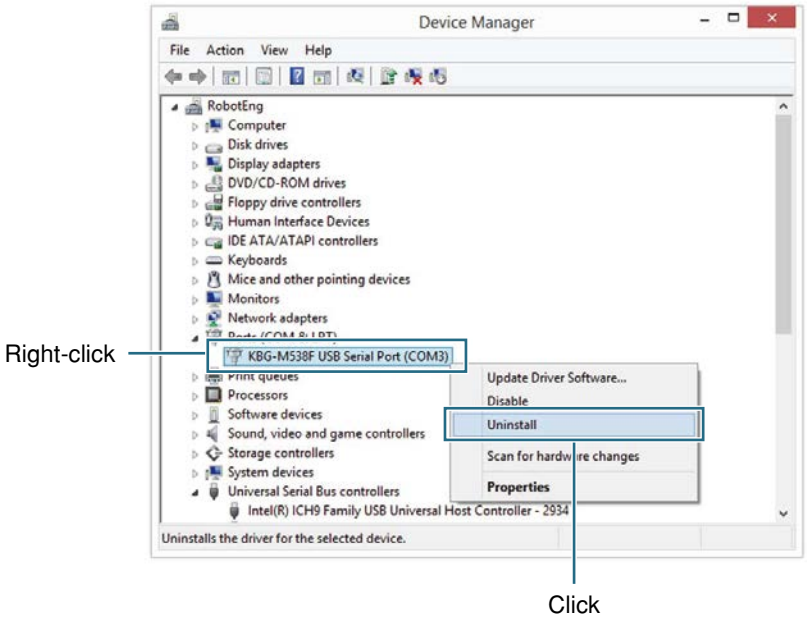
When using Windows 8, [PC] is presented as [Computer].

Step2 Delete the USB serial port.

When the control side uses the Dsub connector, right-click "KBG-M538F USB Serial Port (COM ☐)" under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, right-click "KCA-M538F USB Serial Port (COM ☐)".
Select "Uninstall" from the right-click menu.

Deleting USB serial port

Example: For KBG-M538F USB Serial Port



Step3 Uninstall the driver software.

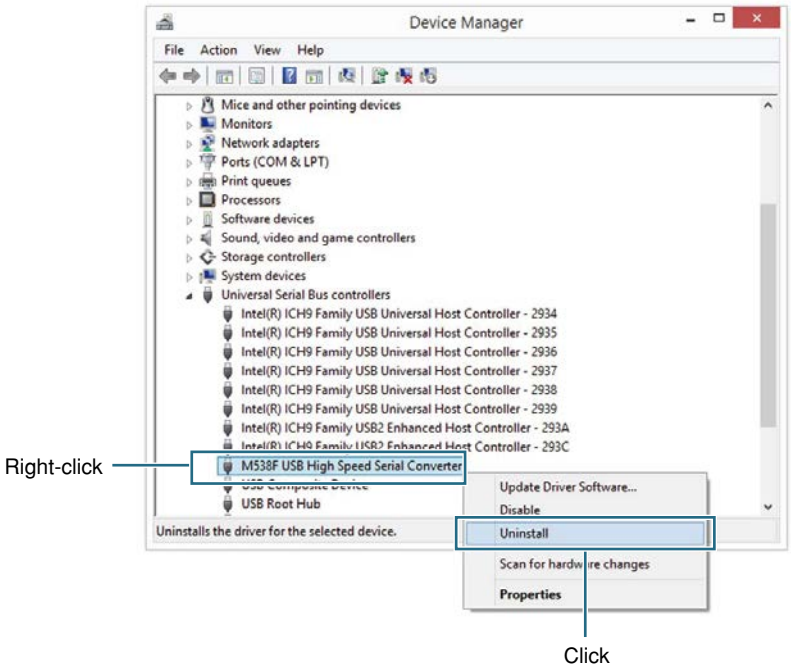
When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].

"Confirm Device Uninstall" dialog box

Step4 Delete the "Universal Serial Bus controller".

Right-click on "M538F USB High Speed Serial Converter" displayed under the "Universal Serial Bus controllers" group, and select "Uninstall" from the right-click menu.

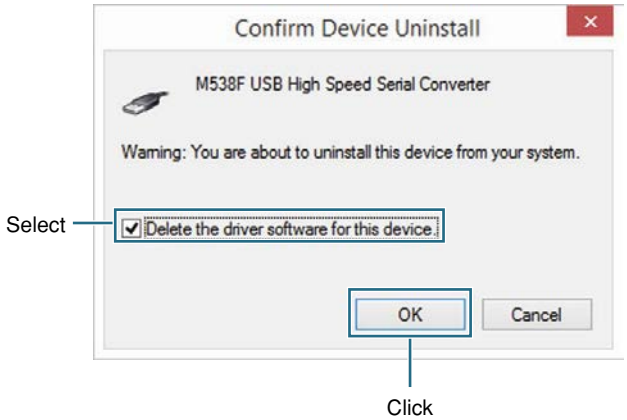
Deleting the "Universal Serial Bus controller"



Step5 Uninstall the driver software.

When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].
After uninstalling, click the button to close the Device Manager.

"Confirm Device Uninstall" dialog box



3.5 Windows 10

If it is interrupted or failed to install the driver software, uninstall it.
After the driver software has been uninstalled, install the driver software again.

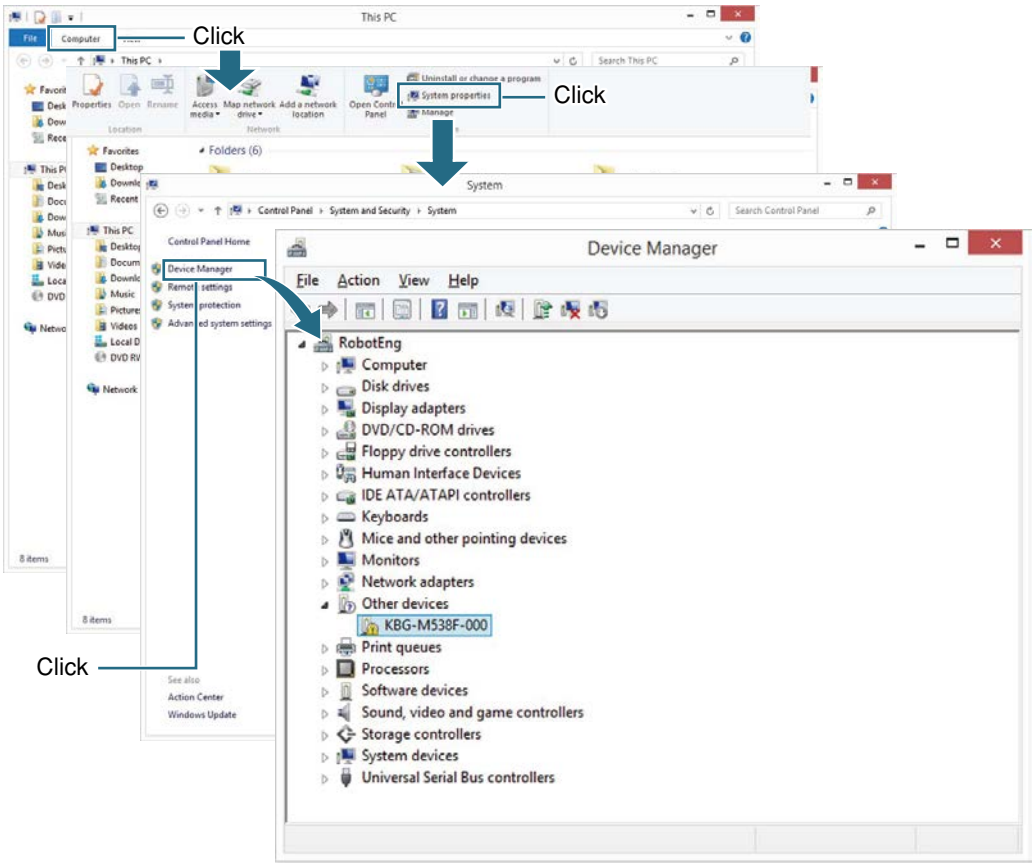
Step 1 Display the "Device Manager" window.

Plug this product into the USB port of your PC.

Double-click [PC] on the desktop or Start menu.

Click [Computer] - [System properties] from the menu, and start "Device Manager".

"Device Manager" window



TIP

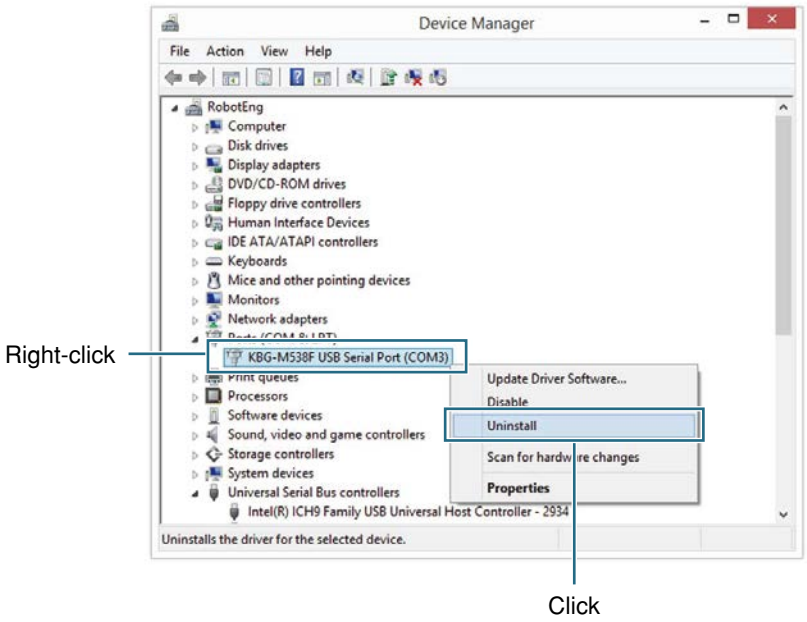
When using Windows 10, [PC] is presented as [Computer].

Step2 Delete the USB serial port.

When the control side uses the Dsub connector, right-click "KBG-M538F USB Serial Port (COM ☐)" under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, right-click "KCA-M538F USB Serial Port (COM ☐)".
Select "Uninstall" from the right-click menu.

Deleting USB serial port

Example: For KBG-M538F USB Serial Port



Step3 Uninstall the driver software.

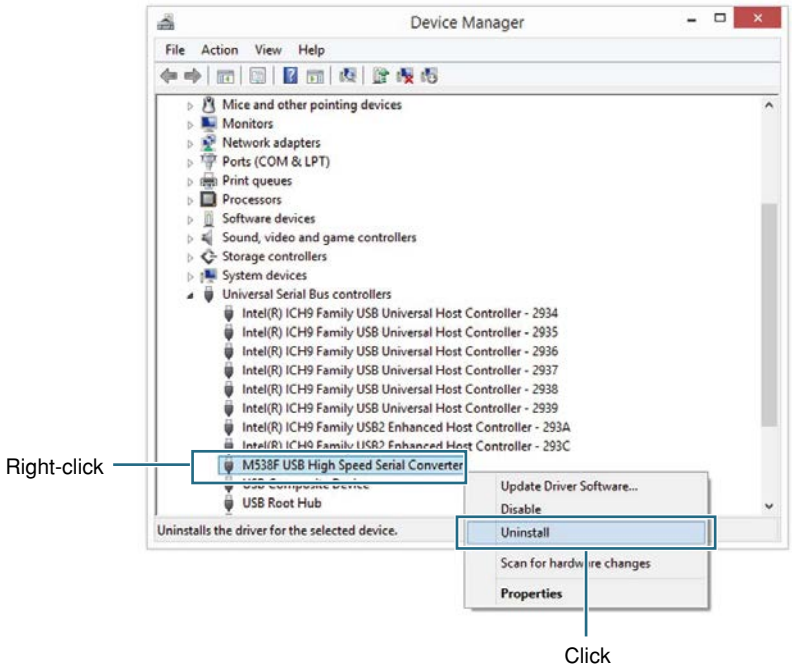
When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].

"Confirm Device Uninstall" dialog box

Step4 Delete the "Universal Serial Bus controller".

Right-click on "M538F USB High Speed Serial Converter" displayed under the "Universal Serial Bus controllers" group, and select "Uninstall" from the right-click menu.

Deleting the "Universal Serial Bus controller"



Step5 Uninstall the driver software.

When the "Confirm Device Uninstall" dialog box appears, select the "Delete the driver software for this device" check box and click [OK].
After uninstalling, click the button to close the Device Manager.

"Confirm Device Uninstall" dialog box

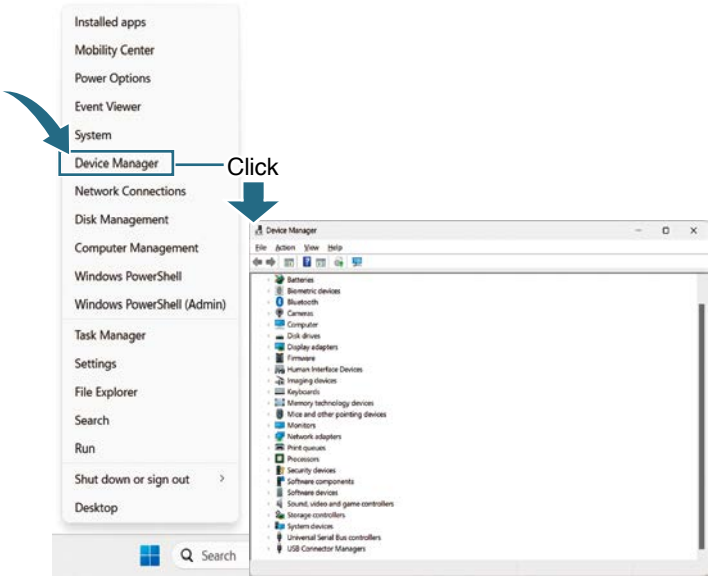
3.6 Windows 11

If it is interrupted or failed to install the driver software, uninstall it.
After the driver software has been uninstalled, install the driver software again.

Step 1 Display the "Device Manager" window.

Right-click "Start" and click "Device Manager" from the list that appears.

"Device Manager" window

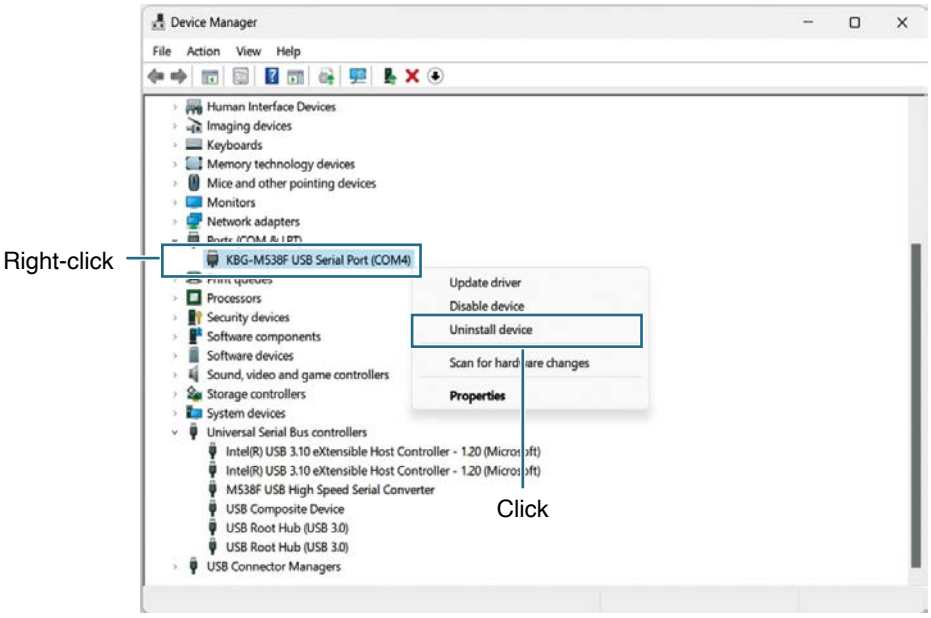


Step2 Delete the USB serial port.

When the control side uses the Dsub connector, right-click "KBG-M538F USB Serial Port (COM ☐)" under "Ports (COM & LPT)". When the controller side uses the round type dedicated connector, right-click "KCA-M538F USB Serial Port (COM ☐)".
Select "Uninstall devices" from the right-click menu.

Deleting USB serial port

Example: For KBG-M538F USB Serial Port



Step3 Uninstall the driver software.

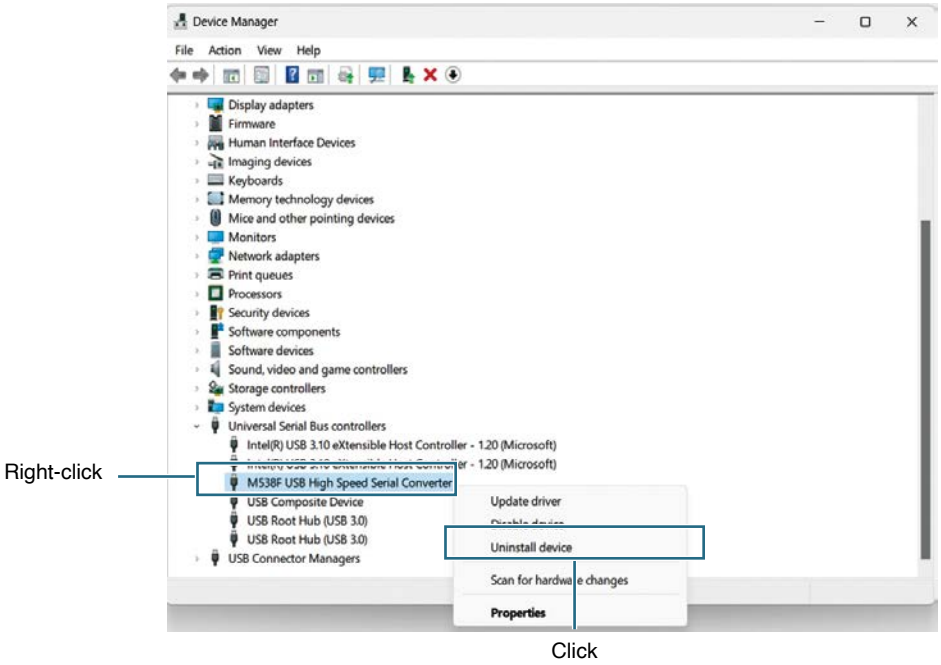
When the "Uninstall Device" dialog box appears, select the "Attempt to remove the driver for this device." check box and click [Uninstall].

"Confirm Device Uninstall" dialog box

Step4 Delete the "Universal Serial Bus controller".

Right-click on "M538F USB High Speed Serial Converter" displayed under the "Universal Serial Bus controllers" group, and select "Uninstall device" from the right-click menu.

Deleting the "Universal Serial Bus controller"



Step5 Uninstall the driver software.

When the "Uninstall Device" dialog box appears, select the "Attempt to remove the driver for this device." check box and click [Uninstall].
After uninstalling, click the button to close the Device Manager.

"Confirm Device Uninstall" dialog box

Revision record

Manual version	Issue date	Description
Ver. 1.00	Oct. 2014	First edition
Ver. 1.10	Aug. 2015	Sections "Windows 8/Windows 8.1" were added. Clerical error corrections, etc.
Ver. 1.11	Feb. 2017	IM Operations' contact information was changed.
Ver. 1.20	Oct. 2017	Section "Windows 10" was added
Ver. 1.21	Mar. 2018	Information for downloading the latest driver software was added.
Ver. 1.22	May 2019	Clerical error corrections.
Ver. 1.30	Dec.2019	RCX320 was added to compatible controllers, Windows 10 driver software setup method was changed.
Ver. 1.40	June 2023	Section "Windows 11" was added

User's Manual

FOR SUPPORT SOFTWARE

USB cable setup

June 2023
Ver. 1.40

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