

PROGRAMMABLE CONTROLLERS
MELSEC-F

FX-30P F/W UPDATE TOOL

OPERATION MANUAL

Industrial automation

Elincom Group

 European Union: www.elinco.eu



 Russia: www.elinc.ru



FX

Safety Precautions

(Read these precautions before use.)

BEFORE installation, operation, maintenance or inspection of this product, thoroughly read through and understand this manual and all of the associated manuals. Also, take care to handle the module properly and safely.

This manual classifies the safety precautions into two categories:  **WARNING** and  **CAUTION**.


 WARNING	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
 CAUTION	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Depending on the circumstances, procedures indicated by  **CAUTION** may also cause severe injury.


It is important to follow all precautions for personal safety.

Store this manual in a safe place so that it can be taken out and read whenever necessary. Always forward it to the end user.

1. DESIGN PRECAUTIONS

 CAUTION	Reference
<ul style="list-style-type: none">• Install module so that excessive force will not be applied to the communication cables. Failure to do so may result in wire damage/breakage or PLC failure.• Do not transfer other files than specified data files to FX-30P. Otherwise the firmware of the FX-30P may be broken.	5

2. INSTALLATION PRECAUTIONS

 CAUTION	Reference
<ul style="list-style-type: none">• Do not touch the conductive parts of the product directly. Doing so may cause device failures or malfunctions.• Connect cables securely to their designated connectors. Loose connections may cause malfunctions.• Do not connect a PLC and a personal computer at the same time to the FX-30P. Failure to do so may cause equipment failures or malfunctions.	5

MEMO

FX-30P F/W Update Tool

Operation Manual

Manual number	JY997D36201
Manual revision	F
Date	4/2015

Foreword

This manual contains text, diagrams and explanations which will guide the reader in the operation of the firmware update tool of the FX-30P. It should be read and understood before attempting to install or use the unit. Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

Outline Precautions

- This manual provides information for the use of the FX-30P F/W UPDATE TOOL.
The manual has been written to be used by trained and competent personnel. The definition of such a person or persons is as follows;
 - 1) Any engineer who is responsible for the planning, design and construction of automatic equipment using the product associated with this manual should be of a competent nature, trained and qualified to the local and national standards required to fulfill that role. These engineers should be fully aware of all aspects of safety with aspects regarding to automated equipment.
 - 2) Any commissioning or maintenance engineer must be of a competent nature, trained and qualified to the local and national standards required to fulfill the job. These engineers should also be trained in the use and maintenance of the completed product. This includes being familiar with all associated manuals and documentation for the product. All maintenance should be carried out in accordance with established safety practices.
 - 3) All operators of the completed equipment should be trained to use that product in a safe and coordinated manner in compliance with established safety practices. The operators should also be familiar with documentation that is connected with the actual operation of the completed equipment.
- Note:** the term 'completed equipment' refers to a third party constructed device that contains or uses the product associated with this manual.
- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
 - Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
 - This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions into the system.
 - When combining this product with other products, please confirm the standards and codes of regulation to which the user should follow. Moreover, please confirm the compatibility of this product with the system, machines, and apparatuses to be used.
 - If there is doubt at any stage during installation of the product, always consult a professional electrical engineer who is qualified and trained in the local and national standards. If there is doubt about the operation or use, please consult your local Mitsubishi Electric representative.
 - Since the examples within this manual, technical bulletin, catalog, etc. are used as reference; please use it after confirming the function and safety of the equipment and system. Mitsubishi Electric will not accept responsibility for actual use of the product based on these illustrative examples.
 - The content, specification etc. of this manual may be changed for improvement without notice.
 - The information in this manual has been carefully checked and is believed to be accurate; however, if you notice any doubtful point, error, etc., please contact your local Mitsubishi Electric representative.

Registration

- Microsoft[®], Windows[®] and Windows Vista[®] are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- The company name and the product name to be described in this manual are the registered trademarks or trademarks of each company.

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Associated Manuals

Only the installation manual is included with the FX-30P.

For a detailed explanation of the FX-30P, refer to FX-30P operation manual.

For the hardware information and instructions of PLC main units, refer to the respective manuals.

For acquiring manuals, contact the distributor you purchased the product from.


- ⊙ Essential manual
- Manual required depending on application
- △ Manual with additional manual for detailed explanation


		Manual name	Manual number	Contents	Model name code
△	Supplied with product	FX-30P INSTALLATION MANUAL	JY997D34201	Specifications, and installation of the FX-30P extracted from the FX-30P Operation Manual. For detailed explanation, refer to the FX-30P Operation Manual.	-
⊙	Additional manual	FX-30P Operation Manual	JY997D34401	Describes FX-30P type Handy programming panel details.	09R924

Generic Names and Abbreviations Used in the Manual

Abbreviation/ generic name	Name
Programming tool	Generic name of programming software and handy programming panels
Programming software	Generic name of programming software
GX Works2	Generic name of programming software packages SW □ DNC-GXW2-J and SW □ DNC-GXW2-E
GX Developer	Generic name of programming software packages SW □ D5C-GPPW-J and SW □ D5C-GPPW-E
FX-PCS/WIN(-E)	Generic name of programming software packages FX-PCS/WIN and FX-PCS/WIN-E
Handy programming panel (HPP)	Generic name of programming panels FX-30P, FX-20P(-E) and FX-10P(-E)
30P	Abbreviation of FX-30P
F/W	Abbreviation of firmware (Software for FX-30P to operate)

1. Outline

DESIGN PRECAUTIONS	 CAUTION
<ul style="list-style-type: none"> • Install module so that excessive force will not be applied to the communication cables. Failure to do so may result in wire damage/breakage or PLC failure. • Do not transfer other files than specified data files to FX-30P. Otherwise the firmware of the FX-30P may be broken. 	

INSTALLATION PRECAUTIONS	 CAUTION
<ul style="list-style-type: none"> • Do not touch the conductive parts of the product directly. Doing so may cause device failures or malfunctions. • Connect cables securely to their designated connectors. Loose connections may cause malfunctions. • Do not connect a PLC and a personal computer at the same time to the FX-30P. Failure to do so may cause equipment failures or malfunctions. 	

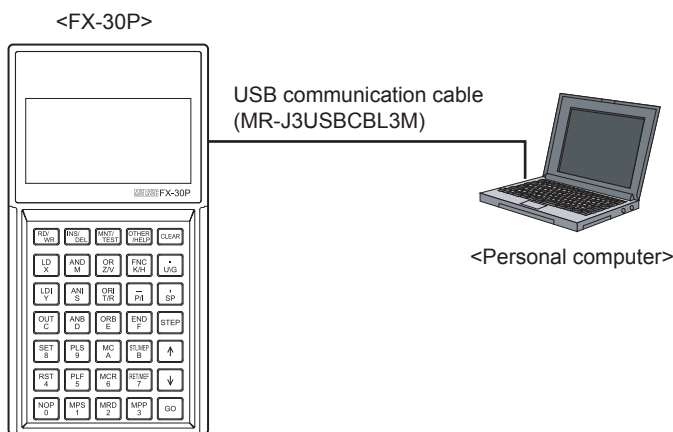
1.1 Outline

FX-30P F/W Update Tool (SW1DN-FX30P-UPDATE) is the software for updating the FX-30P firmware using a personal computer.

1.2 System Configuration

1.2.1 System Configuration

The system configuration is as shown below.



Caution

Do not connect a PLC and a personal computer at the same time to the FX-30P. Doing so may cause equipment failures or malfunctions.

1.2.2 About connection of the FX-30P and a personal computer

For connection between the FX-30P and a personal computer, use the USB communication cable (MR-J3USBCBL3M).

Connect the A-type plug of the USB communication cable (MR-J3USBCBL3M) into the USB port of the personal computer.

Remove the USB cover from the right side of the FX-30P, and connect the Mini-B type plug of the USB communication cable (MR-J3USBCBL3M) into the USB communication port.

If the USB driver is not installed, a message for executing the installation is displayed. For details, refer to Chapter 3.

1.2.3 System Requirements

Item	Description
Connection device	FX-30P
Personal computer	The personal computer with the following properties
HDD availability	100MB or more
Display	800x600 or more dots of resolution
For communication I/F	USB port
OS	Microsoft® Windows® 2000/XP ^{*1} /Vista ^{*1} /7 ^{*2} /8 ^{*3} /8.1 ^{*4}

- *1. Only the 32-bit version of this operating system is supported.
- *2. USB driver Ver. 1.30 or later is applicable to Windows® 7 32-bit version.
USB driver Ver. 1.40 or later is applicable to Windows® 7 64-bit version.
- *3. USB driver Ver. 1.50 or later is applicable to Windows® 8 (32-bit version/64-bit version).
- *4. USB driver Ver. 1.60 or later is applicable to Windows® 8.1 (32-bit version/64-bit version).

1.2.4 File list

When a downloaded file "sw1dn-fx30p-update-e_****.zip" is extracted, the following files and folders are stored. (The portion (****) of the file name may be different depending on the version of the firmware for the 30P or others.)

- Folder structure

The PDF file "jy997d36201*.pdf" of this manual is stored in the top level.

<FX30PUPDATE>

The execution file "FX30PUPD.exe" is stored here.

<FWDDataFile>

The firmware data file "V***.30P" is stored here.

<fx30pusbdv***>

— <Win2000>

The USB driver for Windows® 2000.

— <WinVista_XP>

The USB driver for Windows® XP and Windows Vista®.

— <Win7>^{*1}

The USB driver for Windows® 7 32-bit version.

— <Win7_64>^{*2}

The USB driver for Windows® 7 64-bit version.

— <Win8>^{*3}

The USB driver for Windows® 8.

— <Win8_1>^{*4}

The USB driver for Windows® 8.1.

- *1. USB driver Ver. 1.30 or later is applicable to Windows® 7 32-bit version.
- *2. USB driver Ver. 1.40 or later is applicable to Windows® 7 64-bit version.
- *3. USB driver Ver. 1.50 or later is applicable to Windows® 8.
- *4. USB driver Ver. 1.60 or later is applicable to Windows® 8.1.

- Execution file

File name	File type	Language	Remarks
FX30PUPD.exe	Execution file	English	-

- F/W data file

File name	File type	Remarks
V***.30P	Firmware data file	The asterisk marks (***) of the file name are replaced by three numbers indicating the version of the firmware.

- USB driver

Folder name	Description	Remarks
fx30pusbdrv***	The folder storing the USB driver file.	The asterisk marks (***) of the folder name are replaced by three numbers indicating the version of the USB driver. Under this folder, a folder "Win2000" (for Windows® 2000), "WinVista_XP" (for Windows® XP/Vista®), "Win7" (for Windows® 7 32-bit version), "Win7_64" (for Windows® 7 64-bit version), "Win8" (for Windows® 8), "Win8_1" (for Windows® 8.1) is stored.

- Manual file

File name	File type	Language	Remarks
jjy997d36201*.pdf	pdf file	English	The asterisk mark (*) of the file name is replaced with a sub-number of the manual.

1.3 Function List

Function	Description
Specification of the F/W data file	To select the F/W data file for the FX-30P. Also can be designated by drag & drop.
F/W update	The designated F/W data file is written into the connected FX-30P.
Diagnostics	To confirm the version of the connected FX-30P.
Connections setting	To set the COM number for connecting the FX-30P.

2. Starting / Closing

2.1 Install

The FX-30P F/W update tool is not provided with an installer.

- 1) Please save the downloaded file "sw1dn-fx30p-update-e_****.zip" in an arbitrary folder.
(The portion (****) of the file name may be different depending on the version of the firmware for the 30P or others.)
- 2) When extracted, the execution file (FX30PUPD.exe) is stored in the folder "FX30PUPDATE." (From here, the FX-30P F/W update tool can be started.)

2.2 Uninstall

The FX-30P F/W update tool is not provided with an uninstaller.

If the FX-30P F/W update tool is no longer necessary, please delete the execution file (FX30PUPD.exe) stored in section 2.1.

There is no registration data in the registry and others, and it is not necessary to delete them.

2.3 Starting

Select and execute the execution file (FX30PUPD.exe) stored in section 2.1.

2.4 Closing

To close the application use one of the three methods below.

- Press the "Close" button on the display screen.
- Press the "x" button at upper right corner of the display screen.
- Press the Alt + F4 keys.

3. About the USB driver

When the downloaded file "sw1dn-fx30p-update-e_****.zip" is extracted, the following folder structure and files are stored in the folder "fx30pusbdrv***."

```

<fx30pusbdrv***>
├── <Win2000>
│   └── The USB driver for Windows® 2000.
├── <WinVista_XP>
│   └── The USB driver for Windows® XP and Windows Vista®.
├── <Win7>*1
│   └── The USB driver for Windows® 7 32-bit version.
├── <Win7_64>*2
│   └── The USB driver for Windows® 7 64-bit version.
├── <Win8>*3
│   └── The USB driver for Windows® 8.
└── <Win8_1>*4
    └── The USB driver for Windows® 8.1.
  
```

- *1. USB driver Ver. 1.30 or later is applicable to Windows® 7 32-bit version.
- *2. USB driver Ver. 1.40 or later is applicable to Windows® 7 64-bit version.
- *3. USB driver Ver. 1.50 or later is applicable to Windows® 8.
- *4. USB driver Ver. 1.60 or later is applicable to Windows® 8.1.

3.1 Windows® 2000 and Windows® XP

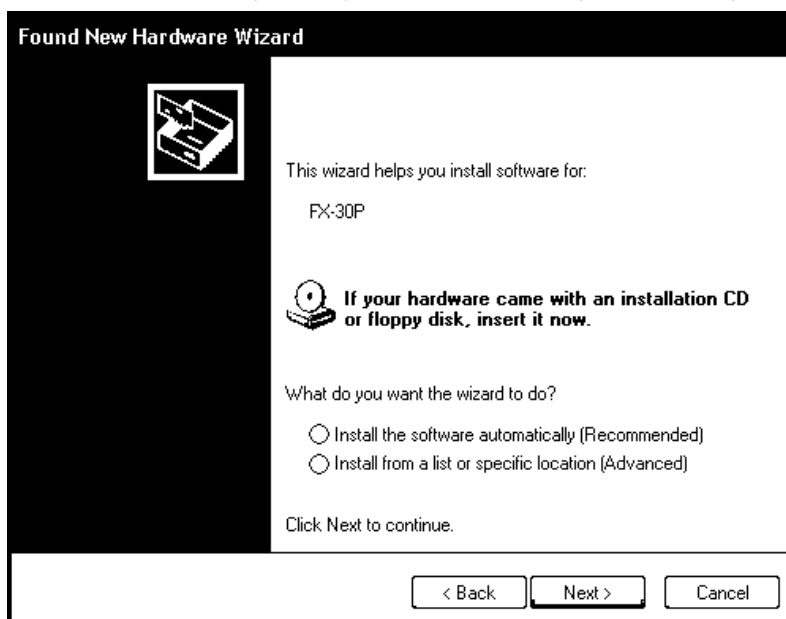
3.1.1 Driver Installation

Please install the driver using the following procedure.

The installation procedure is explained for connecting a personal computer with Windows® XP to the FX-30P.

In Windows® 2000, the installation method will vary.

- 1) When the USB cable (FX-30P) is connected to the personal computer, the following screen is displayed.



Select "Install from a list or specific location (Advanced)," and click [Next >]. Designate and install "\fx30pusbdrv***\WinVista_XP" in the previously extracted folder.

In the case of Windows® 2000, a selection screen for the place of installation is displayed. Designate and install "\fx30pusbdrv***\Win2000" in the previously extracted folder.

Caution

The driver may be automatically installed depending on the personal computer being used.

In Windows® 2000, if the error message screen is displayed and the install is not started, please confirm that "fx30pusbrv***Win2000" is specified as the folder to be installed from.

- 2) The following screen is displayed. (Only in Windows® XP)



Click [Continue Anyway].

- 3) The following screen is displayed.

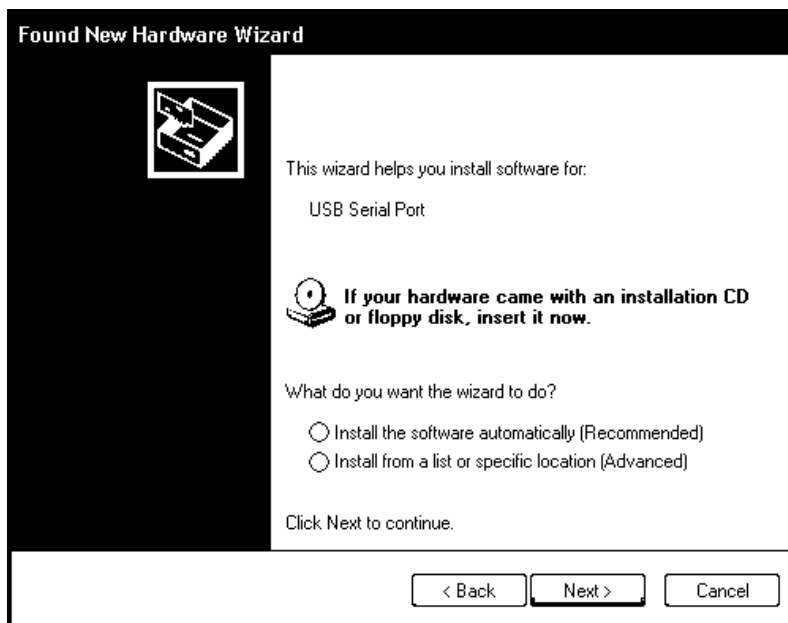


Click [Finish].

Advance to 4).

Installation of the USB Serial Port software will begin.

- 4) The following screen is displayed.



Select "Install from a list or specific location (Advanced)," and click [Next >]. Designate and install "\fx30pusbdrv***\WinVista_XP" in the previously extracted folder. If using Windows® 2000, a screen to select the location of the installation files is displayed. Designate and install "\fx30pusbdrv***\Win2000" in the previously extracted folder.

- 5) Screen 2) is displayed. (Only in Windows® XP)
Click [Continue Anyway].
- 6) The following screen is displayed.



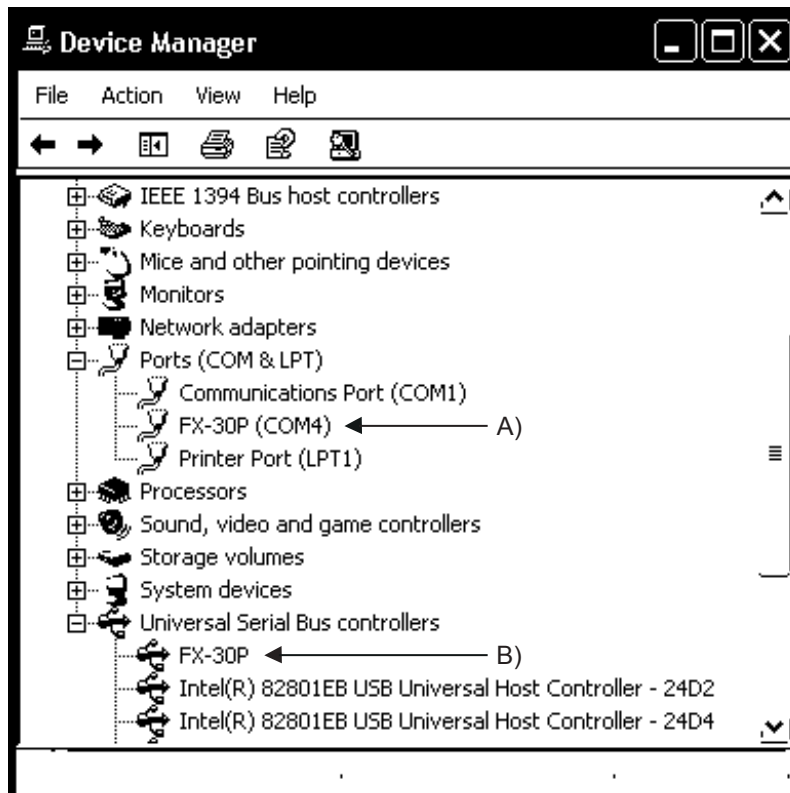
Click [Finish].
The installation of the USB Serial Port software will finish.

3.1.2 Confirming Installation of the Driver


The procedure for confirming the installation of the driver is described below.

A Windows® XP example follows.

- In Windows® XP, click [Start] → [Control Panel] → [Performance and Maintenance] → [System] → [Hardware] → [Device Manager] and the window below will be displayed.
Please confirm the COM number to which the driver is allocated (COM and LPT).
- If using Windows® 2000
A screen that is equivalent to the one below is displayed by clicking [My Computer] → [Control Panel] → [System] → [Hardware] → [Device Manager] in the menu of the personal computer.



Check following:

- FX-30P (COM *) is indicated at A).
* indicates the COM number used in the FX-30P.
- FX-30P is indicated at B).
- Re-install the driver again by double-clicking if  is displayed.

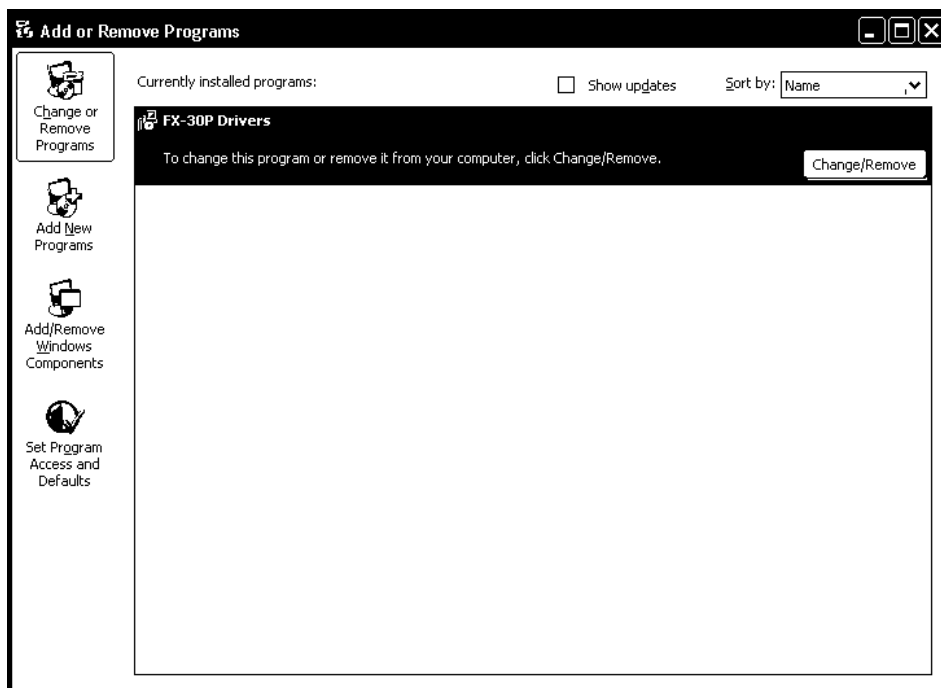
Adjust the COM number (refer to subsection 4.3.2) of the F/W update tool to the COM number assigned herein.

3.1.3 Uninstalling the Driver

Please uninstall the driver using the following procedure.

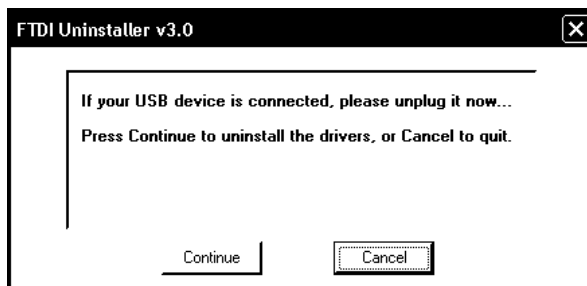
A Windows® XP example follows.

- 1) Detach the USB cable from the personal computer.
Click [Start] → [Control Panel] → [Add or Remove Programs] in the menu of the personal computer, the window below will be displayed.
 - If using Windows® 2000
A screen that is equivalent to the one below is displayed by clicking [My Computer] → [Control Panel] → [Add/Remove Programs] in the menu of the personal computer.



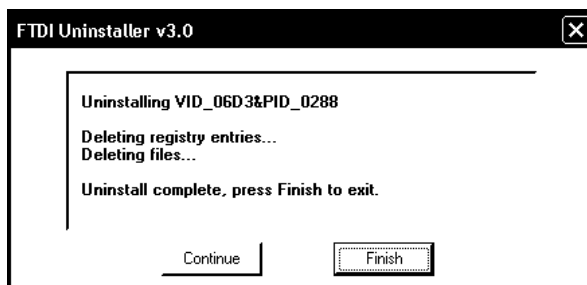
Select [FX-30P Drivers], and click [Change/Remove].

- 2) The following screen is displayed.



Click [Continue].

- 3) The following screen is displayed.



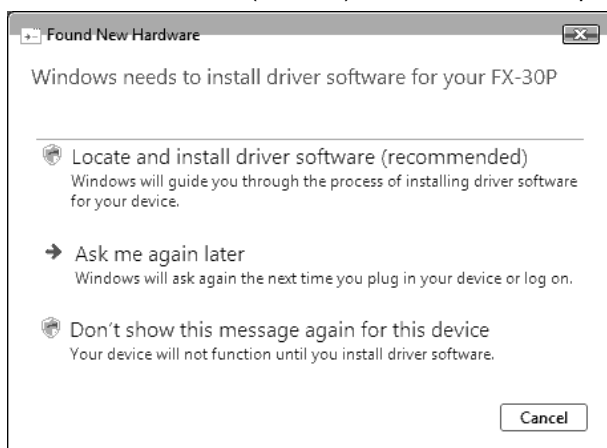
Click [Finish].

3.2 Windows Vista®

3.2.1 Driver Installation

Please install the driver using the following procedure.

- 1) When the USB cable (FX-30P) is connected to the personal computer, the following screen is displayed.



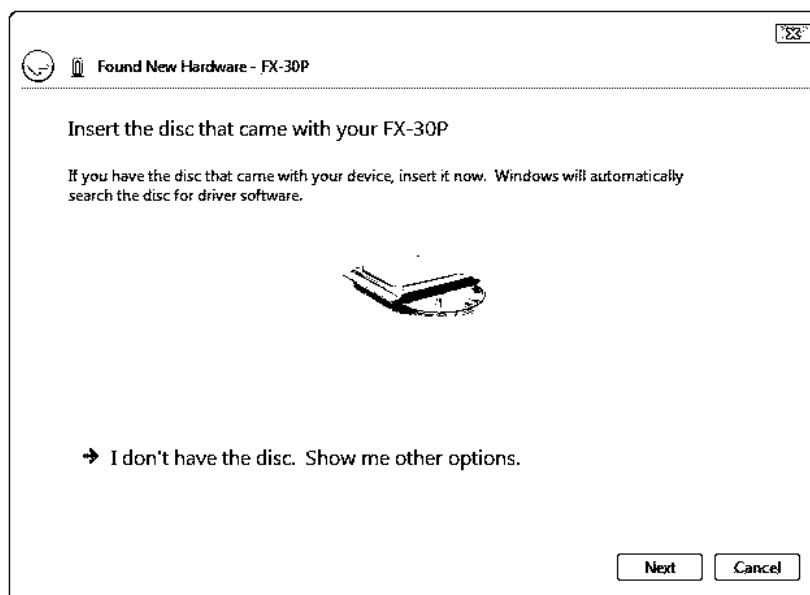
Click [Locate and install driver software (recommended)].

- 2) Only when user account control is enabled, the "user account control" screen is displayed. Click [Continue], when displayed.

Caution

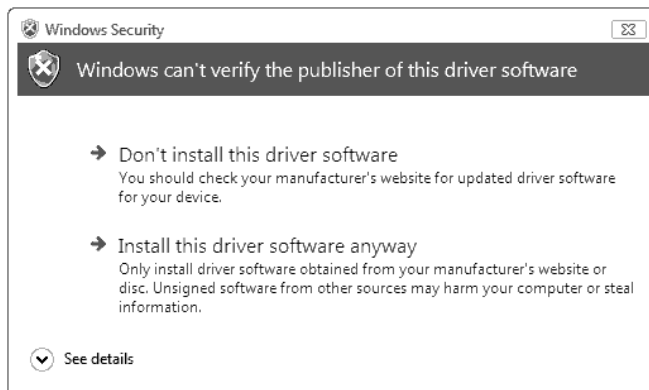
The driver may be installed automatically if the USB driver is installed in another port.

- 3) When connecting with the network, the message to search online may be displayed. Click [Don't search online] when displayed.)
- 4) The following screen is displayed.



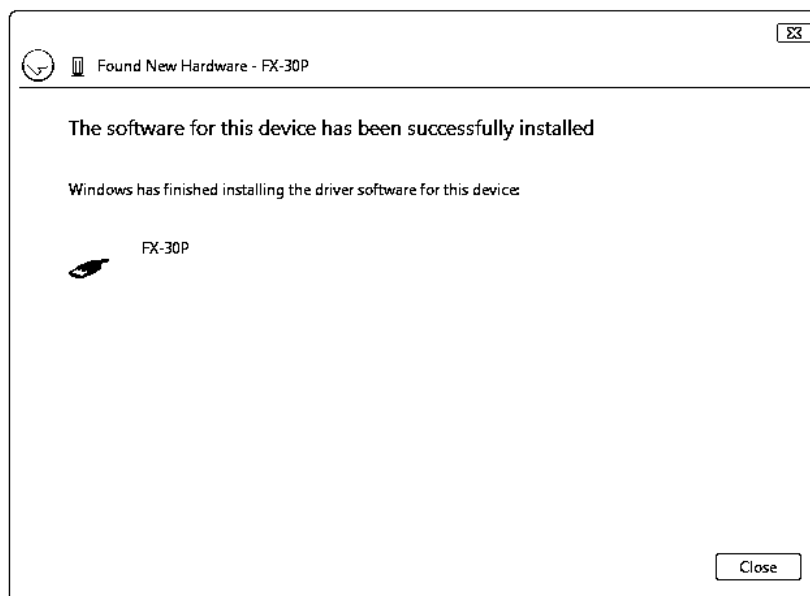
Click [I don't have the disc. Show me other options.], and designate "\\fx30pusdrv***\WinVista_XP" in the previously extracted folder.

- 5) The following screen is displayed.



Click [Install this driver software anyway].

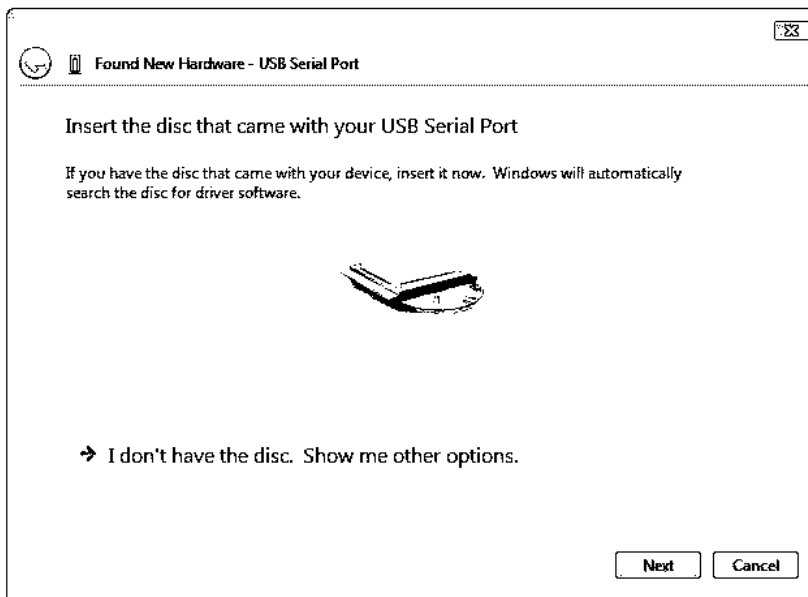
- 6) The following screen is displayed.



Click [Close].

- 7) When connecting with the network, the message to search online may be displayed.
Click [Don't search online] when displayed.

- 8) The following screen is displayed.

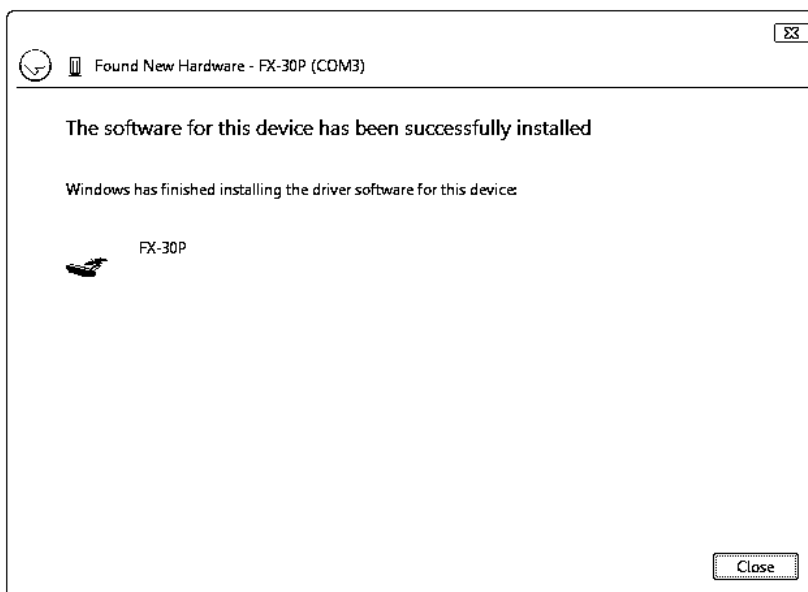


Click [I don't have the disc. Show me other options.], and designate "fx30pusdrv***\WinVista_XP" of the folder extracted previously.

Installation of the USB Serial Port software will begin.

- 9) Screen 5) is displayed.
Click [Install this driver software anyway].

- 10) The following screen is displayed.



Click [Close].

The installation of the USB Serial Port software will finish.

3.2.2 Confirming the Installation of the Driver

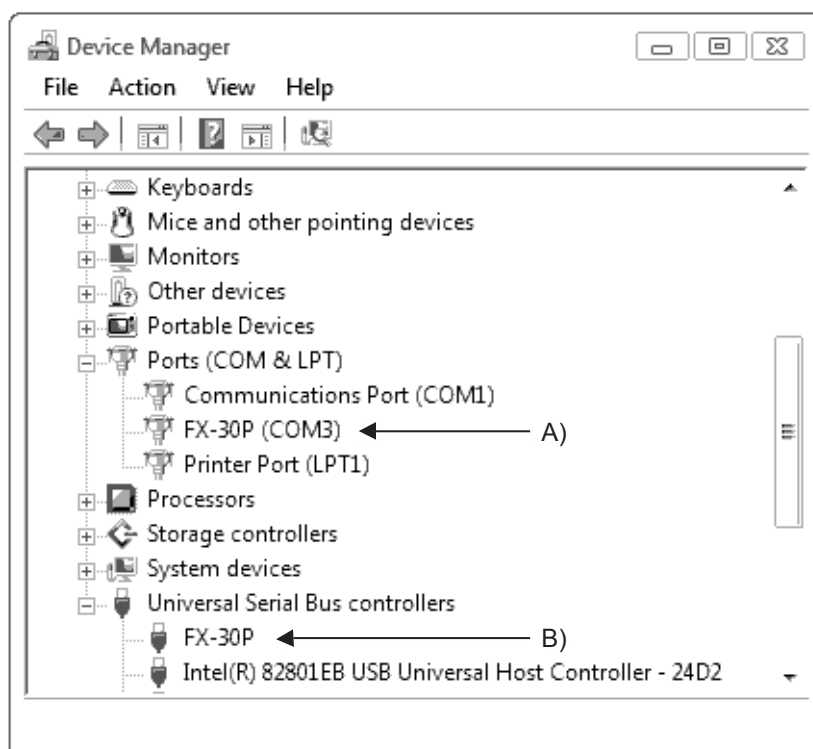
Procedure for confirming the installation of the driver is described below.

- If using Windows Vista®
A screen that is equivalent to the one below is displayed by clicking [Start] → [Control Panel] → [Hardware and Sound] → [Device Manager] in the menu of the personal computer.


When user account control is enabled

Only when user account control is enabled will the "user account control" screen be displayed.

Click [Continue] when displayed.



Check following:

- FX-30P (COM*) is indicated at A.
* indicates the COM number used in the FX-30P.
- FX-30P is indicated at B).
- Re-install the driver again by double-clicking if  is displayed.

Adjust the COM number (refer to subsection 4.3.2) of the F/W update tool to the COM number assigned herein.

3.2.3 Uninstalling Driver

Please uninstall the driver using the following procedure.

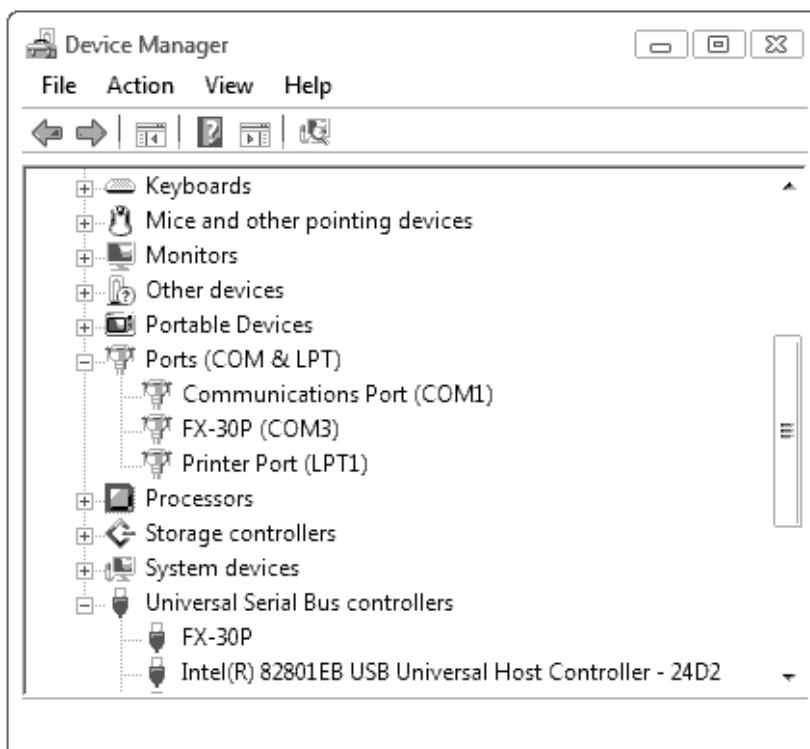
Caution

"Universal Serial Bus Controllers" should be uninstalled.

If uninstalling directly from the "Universal Serial Bus Controllers", the driver software for the FX-30P will not be uninstalled correctly.

When uninstalling from "Universal Serial Bus Controllers", uninstall USB driver software after re-installation in the order of "Ports (COM & LPT)" after which the "Universal Serial Bus Controllers" should be uninstalled.

- 1) Connect the FX-30P to the personal computer via a USB cable.
Click [Start] → [Control Panel] → [Hardware and Sound] → [Device Manager] and the window below will be displayed.



Double-click [FX-30P (COM*)] in the [Ports (COM & LPT)].

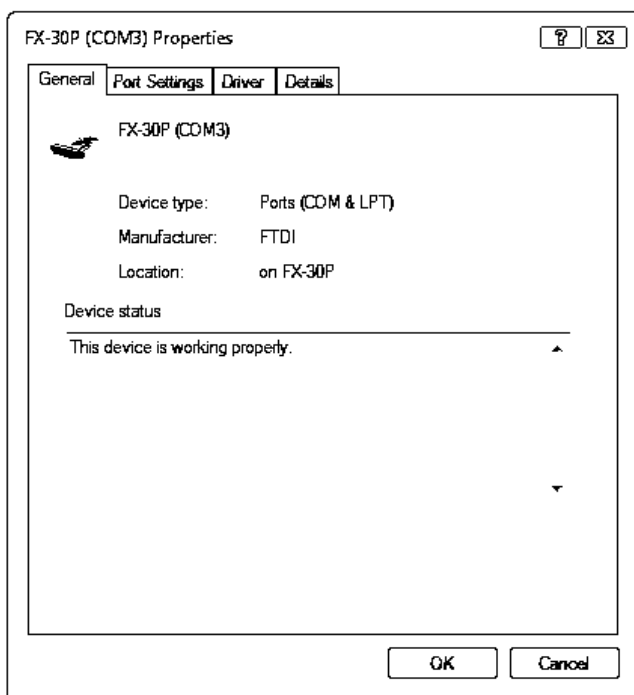
* indicates the COM number used in the FX-30P.

When user account control is enabled

Only when user account control is enabled will the "user account control" screen be displayed.

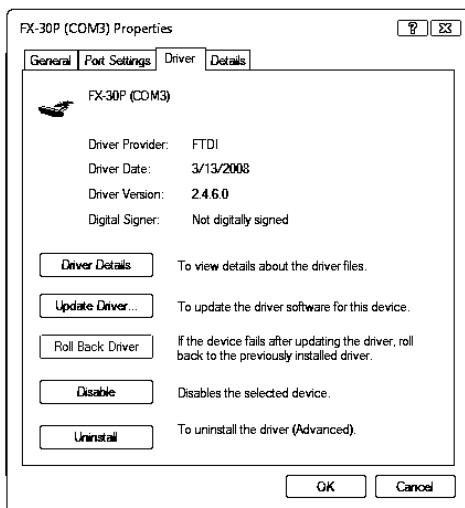
Click [Continue] when displayed.

- 2) The following screen is displayed.



Select the [Driver] tab.

- 3) The following screen is displayed.



Click [Uninstall].

- 4) The following screen is displayed.



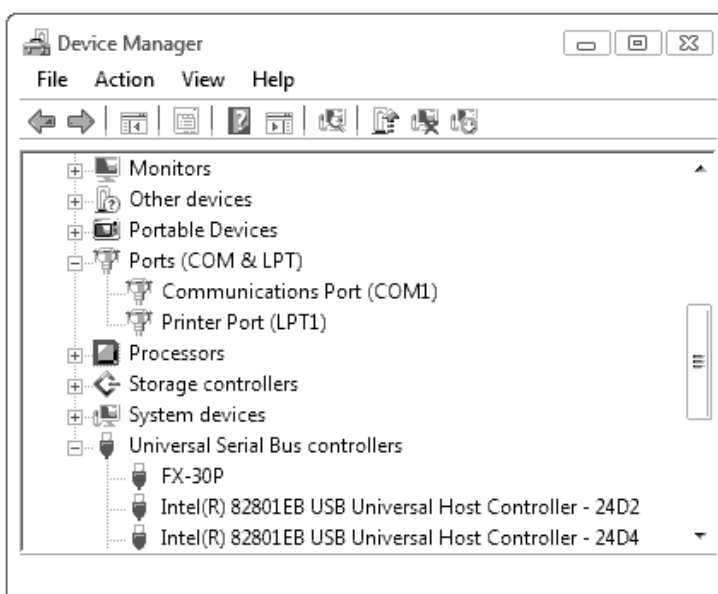
Add check mark

Check [Delete the driver software for this device], and click [OK].

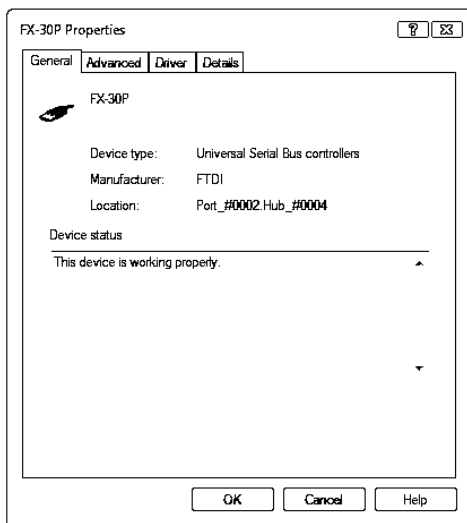
The USB Serial Port software is uninstalled.

Then, uninstall the USB driver through operation of 5) to 8).

- 5) Double-click [FX-30P] in the [Universal Serial Bus Controllers] from the device manager.

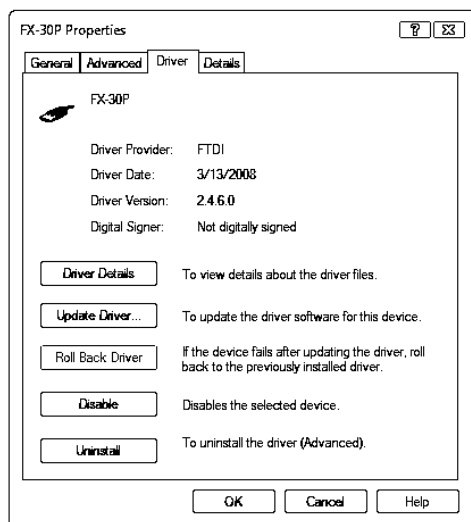


- 6) The following screen is displayed.



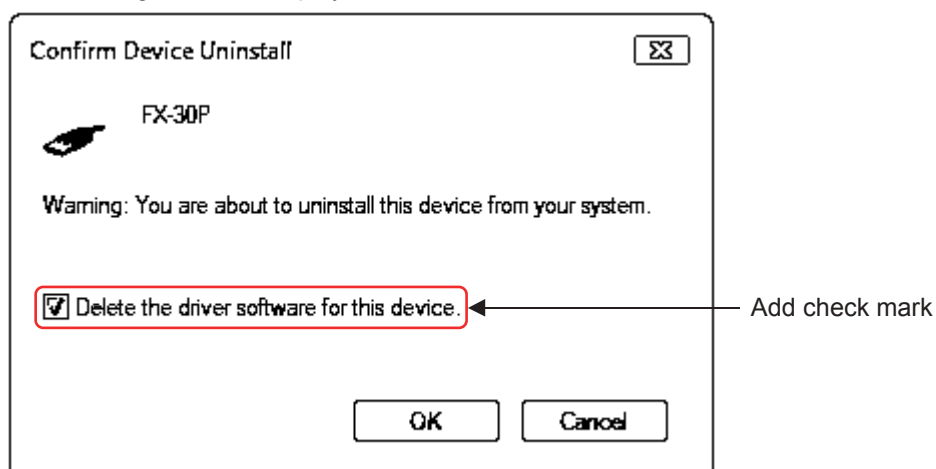
Select the [Driver] tab.

- 7) The following screen is displayed.



Click [Uninstall].

- 8) The following screen is displayed.



Check [Delete the driver software for this device], and click [OK].
The USB driver is uninstalled.

3.3 Windows® 7

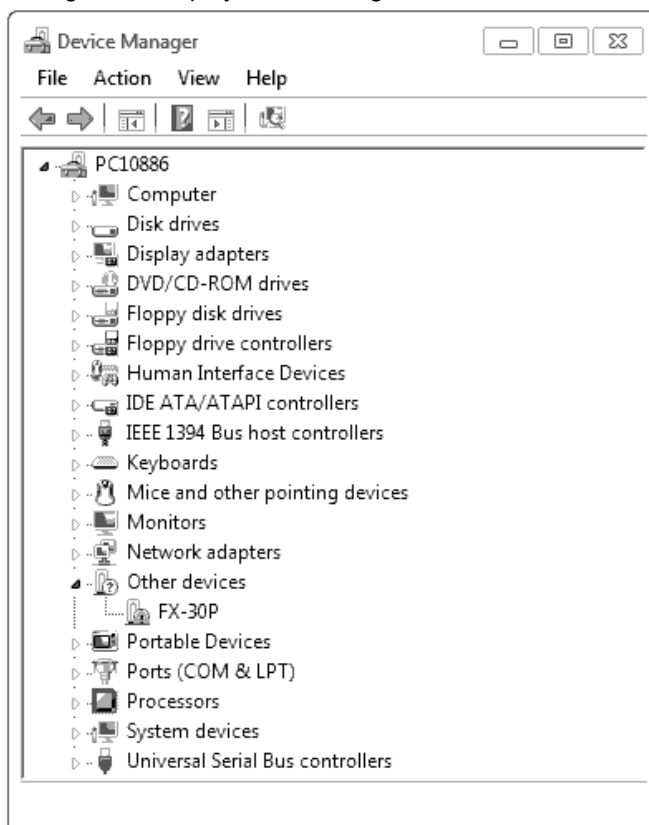
- USB driver Ver. 1.30 or later is applicable to Windows® 7 32-bit version.
- USB driver Ver. 1.40 or later is applicable to Windows® 7 64-bit version.



3.3.1 Driver Installation

Please install the driver with the following procedure.

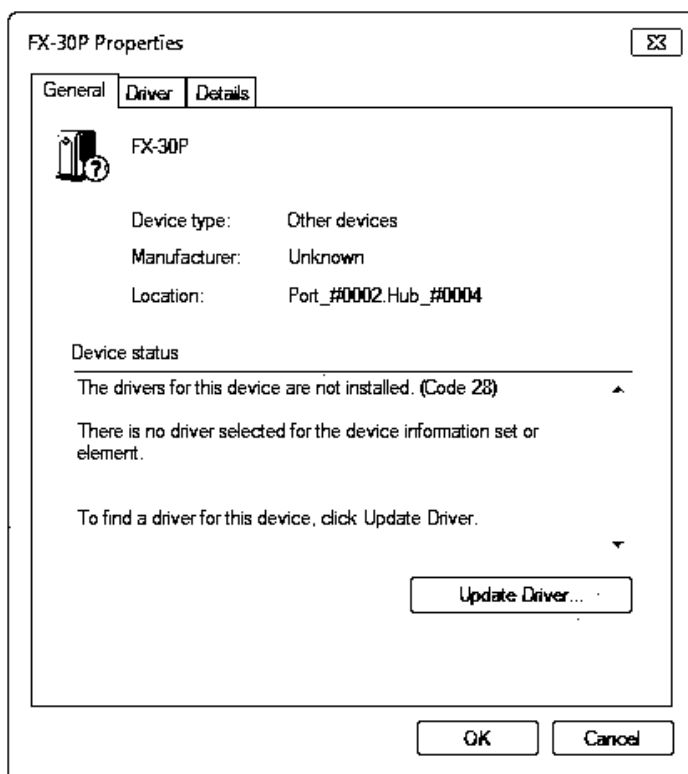
Caution

- Two driver installations are necessary, "USB driver software" and "USB Serial Port", are both required. Communication is not possible with only one of the two. Please perform both installations with reference to the following procedures.
- 1) When the USB cable is connected to the personal computer, the message "Installing device driver software" appears, and then the message "Device driver software was not successfully installed" appears.
Clicking [Click here for details.] does not enable installation.
Click [X] at the upper right corner to close this message.
 - 2) Click [Start] → [Control Panel] → [System and Security] → [Device Manager] to start up Device Manager and display the following screen.



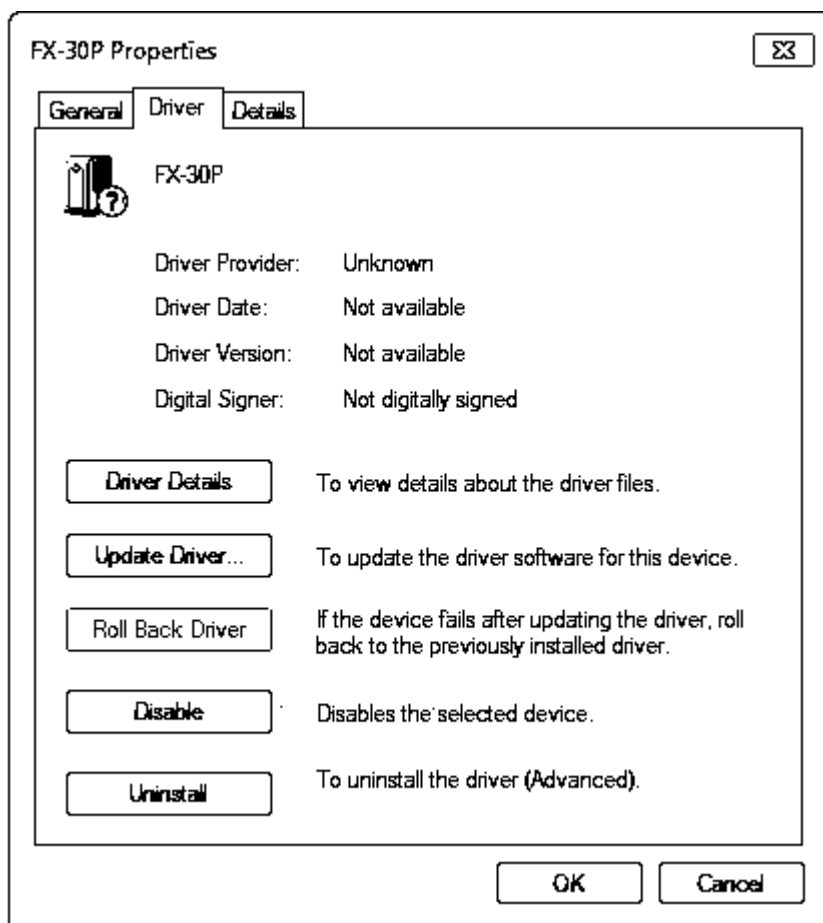
Put the cursor on [ FX-30P] in [Other devices], double-click or right-click it, and select [Properties]. Or put the cursor on [ FX-30P], right-click it, and select [Update Driver Software...] to omit steps 3) and 4) and jump to step 5).

- 3) The following screen is displayed.



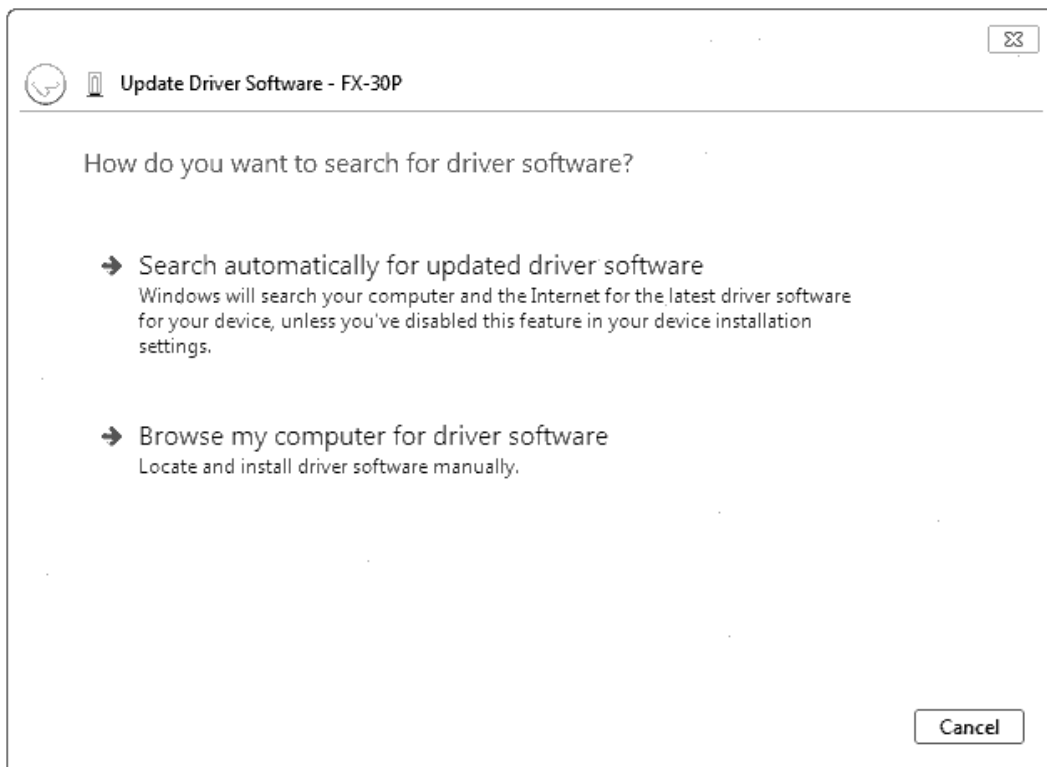
Select [Driver] tab.

- 4) The following screen is displayed.



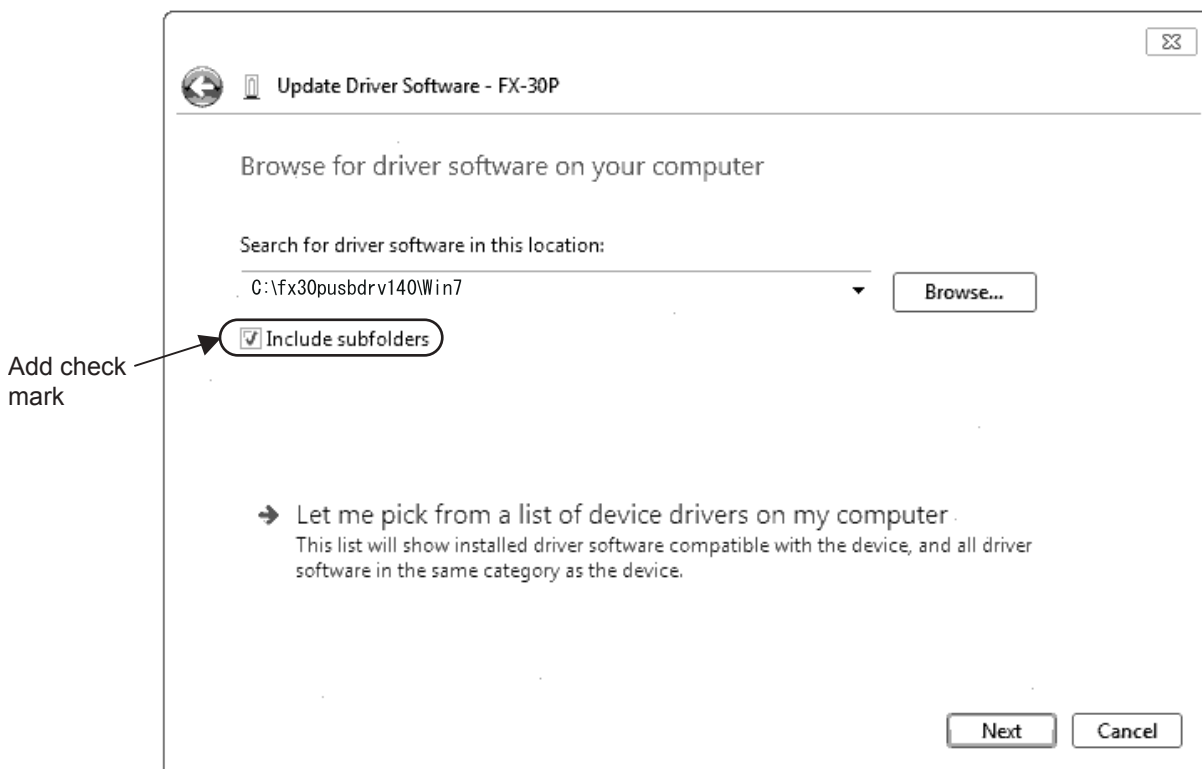
Click [Update Driver...].

- 5) The following screen is displayed.



Click [Browse my computer for driver software].

- 6) The following screen is displayed, specify the location of the driver.

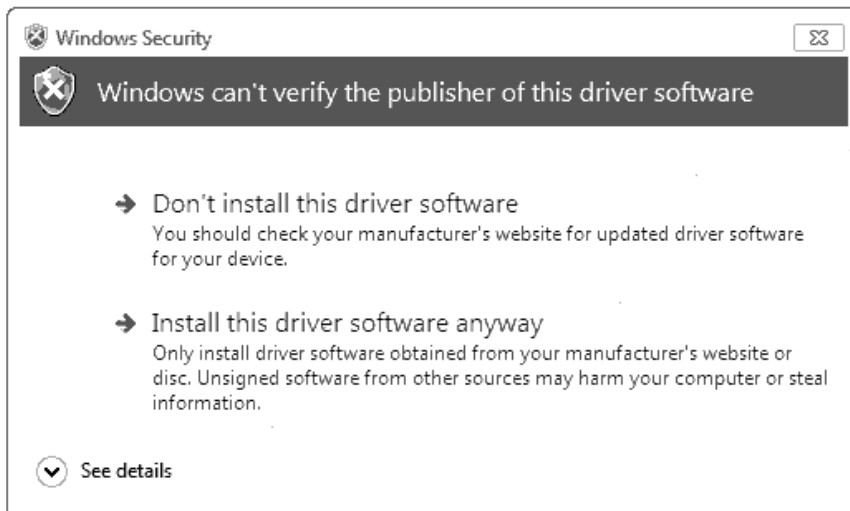


Add a check mark to [Include subfolders].

For Windows® 7 32-bit version, designate "fx30pusbdrv***Win7" of the previously extracted folder, and click [Next].

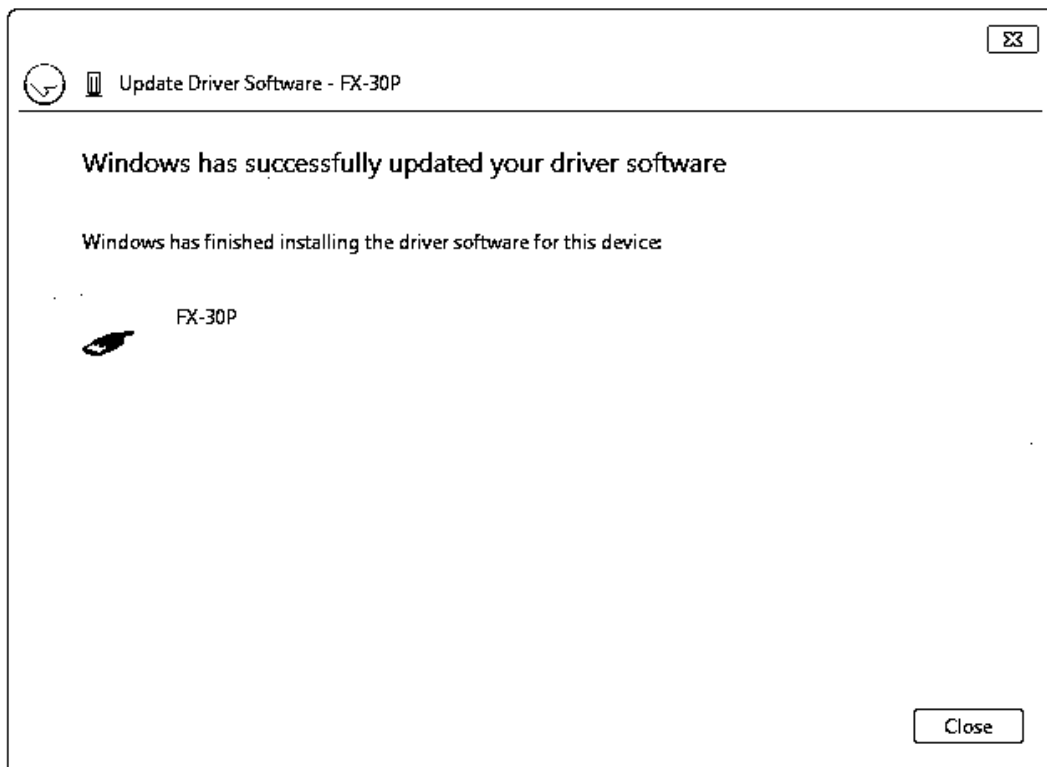
For Windows® 7 64-bit version, designate "fx30pusbdrv***Win7_64" of the previously extracted folder, and click [Next].

- 7) The following screen is displayed.



Click [Install this driver software anyway].

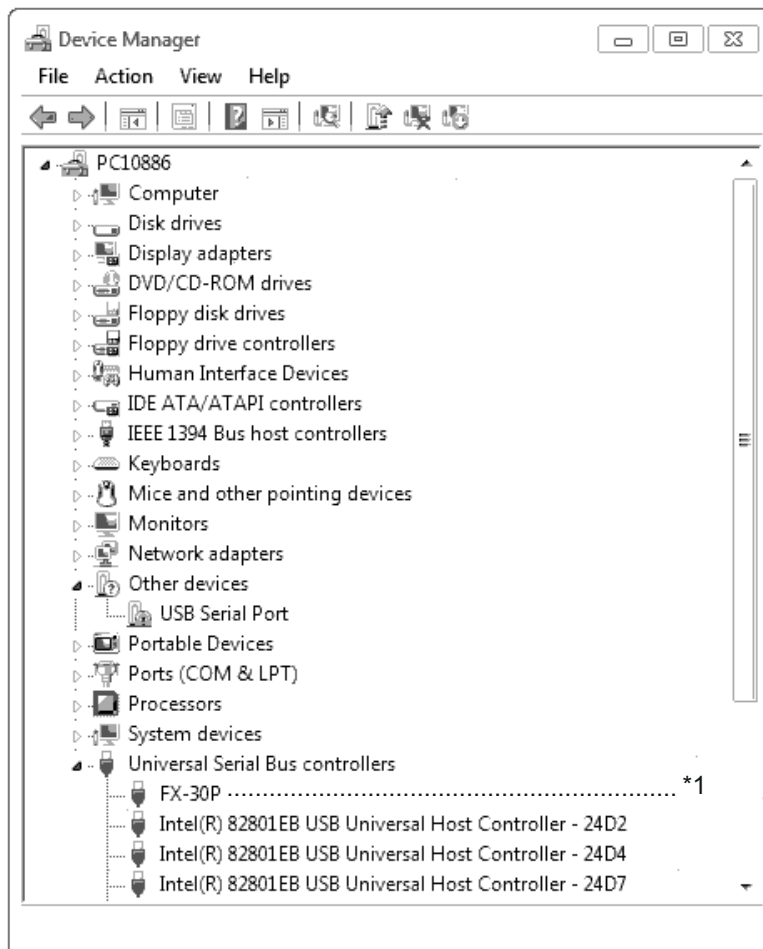
- 8) The installation of the USB driver software is completed, and the following screen is displayed.





Click [Close].

- 9) The message "Device driver software was not successfully installed" appears again. Clicking [Click here for details.] does not enable installation. Click [X] at the upper right corner to close this message. In order to close the screen of 4) and to install "USB Serial Port", please continue on to the following procedure.

10) Install the USB serial port from Device Manager.

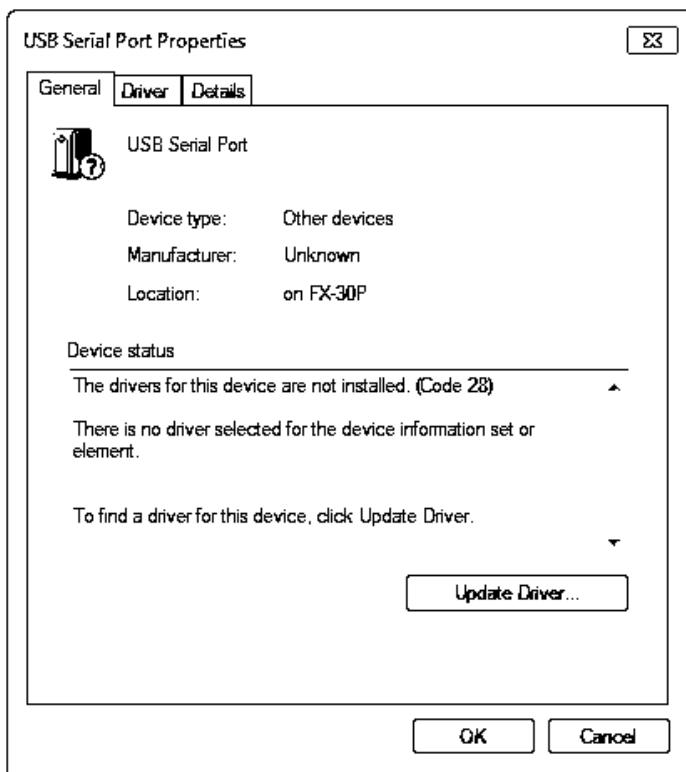


Put the cursor on [ USB Serial Port] in [Other devices], double-click or right-click it, and select [Properties].

Or put the cursor on [ USB Serial Port], right-click it, and select [Update Driver Software...] to omit steps 11) and 12) and jump to step 13).

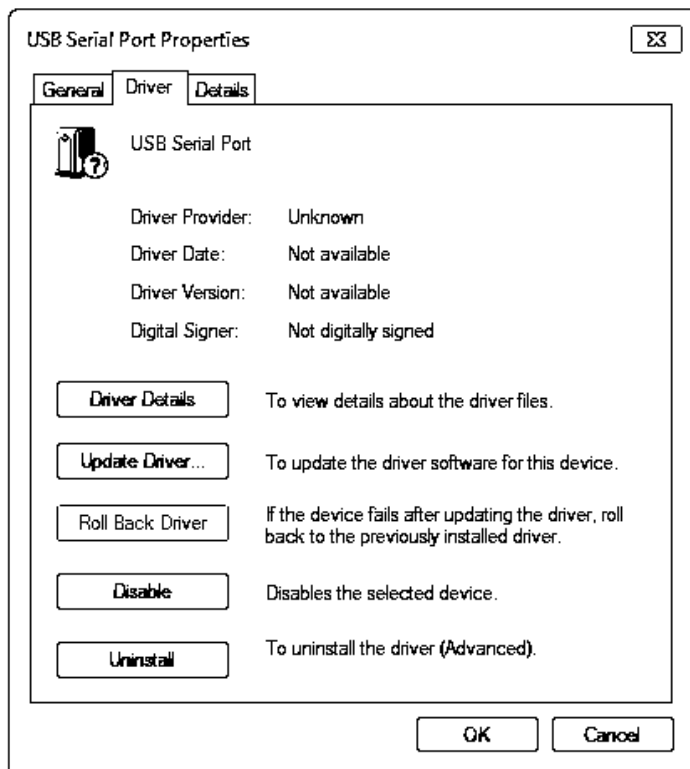
- *1. When the driver software is installed successfully by the procedure up to step 9), [FX-30P] is displayed.

11) The following screen is displayed.



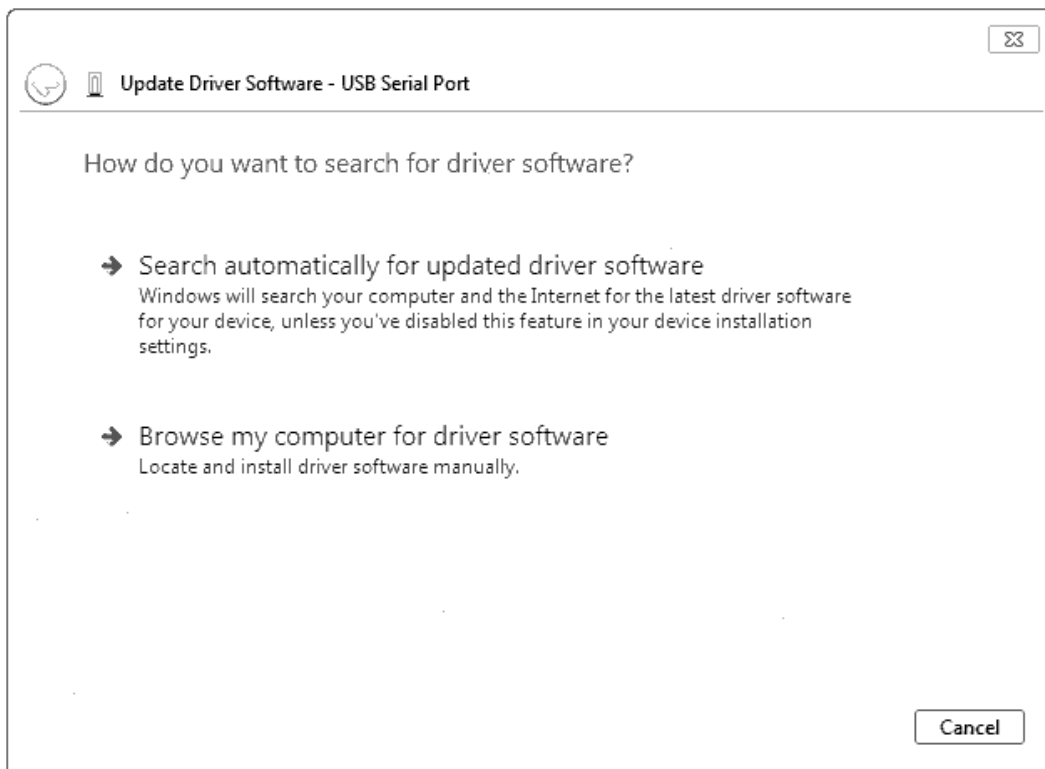
Select [Driver] tab.

12) The following screen is displayed.



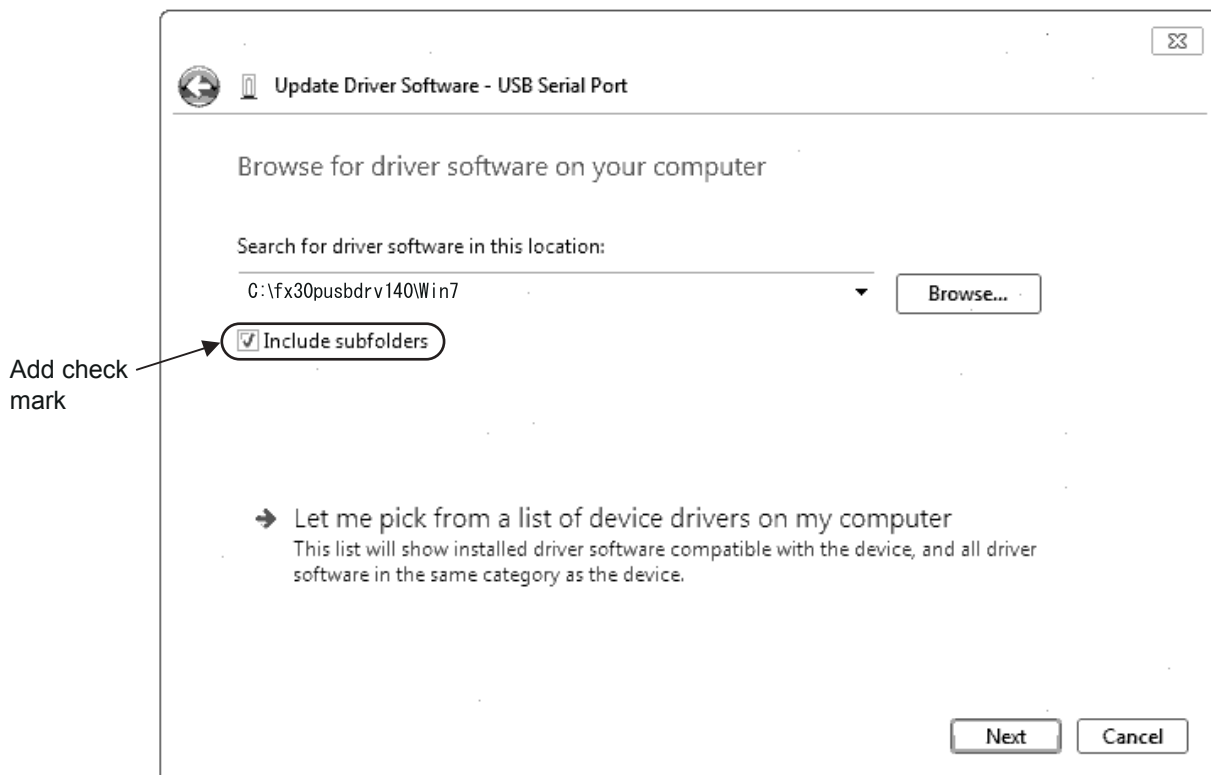
Click [Update Driver...].

13) The following screen is displayed.



Click [Browse my computer for driver software].

14) The following screen is displayed, specify the location of the driver.

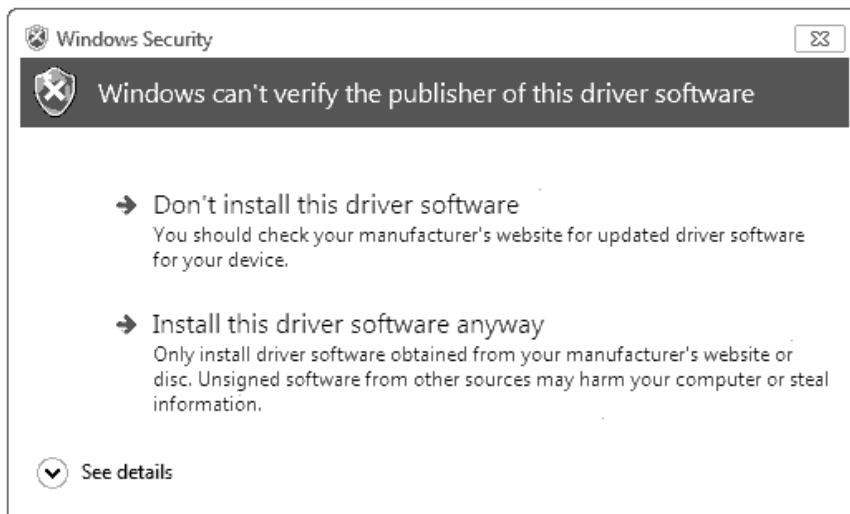


Add a check mark to [Include subfolders].

For Windows® 7 32-bit version, designate "fx30pusbdrv***\Win7" of the previously extracted folder, and click [Next].

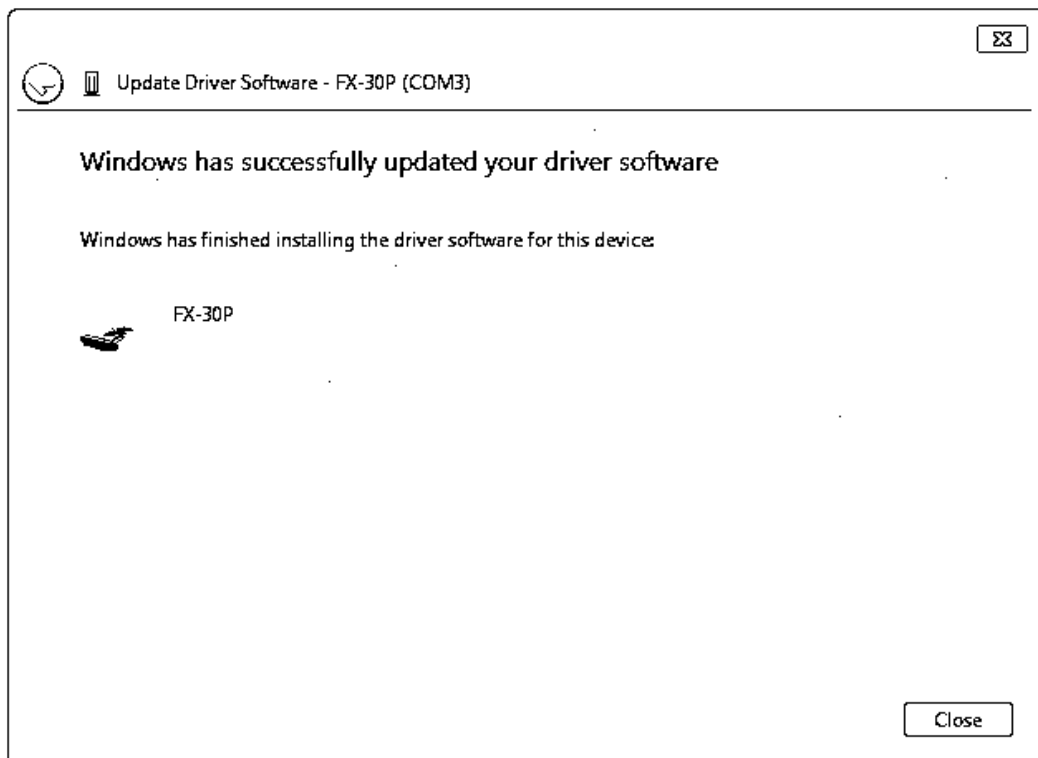
For Windows® 7 64-bit version, designate "fx30pusbdrv***\Win7_64" of the previously extracted folder, and click [Next].

15) The following screen is displayed.



Click [Install this driver software anyway].

16) The following screen is displayed.



Click [Close].

The installation of the USB Serial Port software will finish.

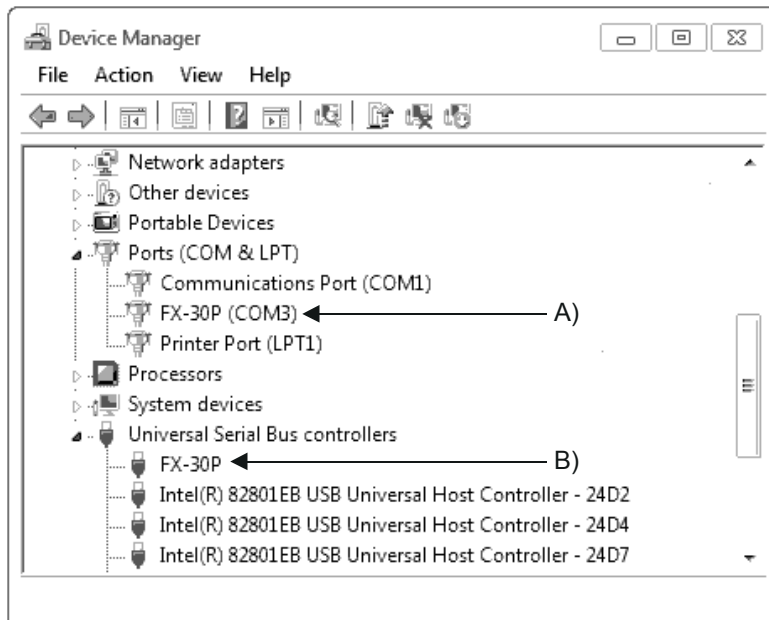
Next, please confirm whether the installation is performed normally. Regarding confirmation, refer to subsection 3.3.2.

3.3.2 Confirming the Installation of the Driver


Procedure for confirming the installation of the driver is described below.

Please perform the following procedure, where the FX-30P is connected to the personal computer.

- A screen that is equivalent to the one below is displayed by clicking [Start] → [Control Panel] → [System and Security] → [Device Manager] in the menu of the personal computer.



Check following:

- 1) "FX-30P (COM*)" is displayed at A), as part of the serial port list.
* indicates the COM number used in the FX-30P.
- 2) "FX-30P" is displayed at B), as part of the list of the "Universal Serial Bus controllers".
- 3)  is not displayed.

Identification result:

- If 1) through 3) are all confirmed, installation is normal.
Select the F/W Update Tool COM number (refer to subsection 4.3.2) as the COM number currently assigned on the screen above.
- If any one of 1) through 3) is not satisfied, installation is not normal. (If the USB serial port software is not installed or the installation procedure is canceled in process are possible causes)
In this case, please start the installation procedure again from the beginning, after uninstalling the driver.
For the installation procedure of the driver, refer to subsection 3.3.1. For the uninstallation procedure of the driver, refer to subsection 3.3.3.

3.3.3 Uninstalling Driver



Please uninstall the driver using the following procedure.

Caution

Driver software must be uninstalled starting with "Ports (COM & LPT)" after which the "Universal Serial Bus Controllers" should be uninstalled.

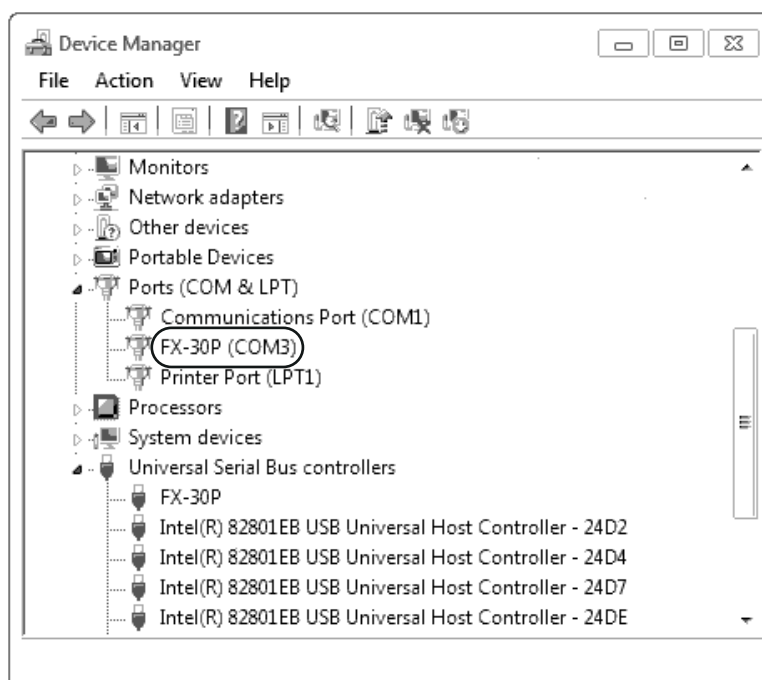
If uninstalling directly from the "Universal Serial Bus Controllers", the driver software for the FX-30P will not uninstall correctly.

When uninstalling from "Universal Serial Bus Controllers", uninstall USB driver software after re-installation starting with "Ports (COM & LPT)" after which the "Universal Serial Bus Controllers" should be uninstalled.

 may be displayed when the installation of the driver is not performed normally. In that case, select the item that has  displayed next to it and uninstall with the following procedure.

- 1) Connect the FX-30P to the personal computer via a USB cable.

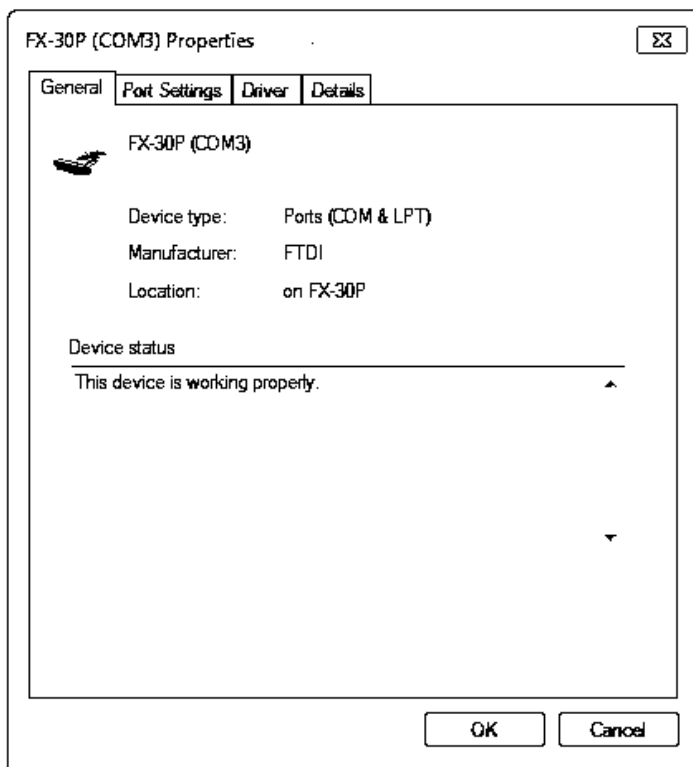
Click [Start] → [Control Panel] → [System and Security] → [Device Manager] and the window below will be displayed.



Double-click or right-click [FX-30P (COM*)] in [Ports (COM & LPT)], and select [Properties].

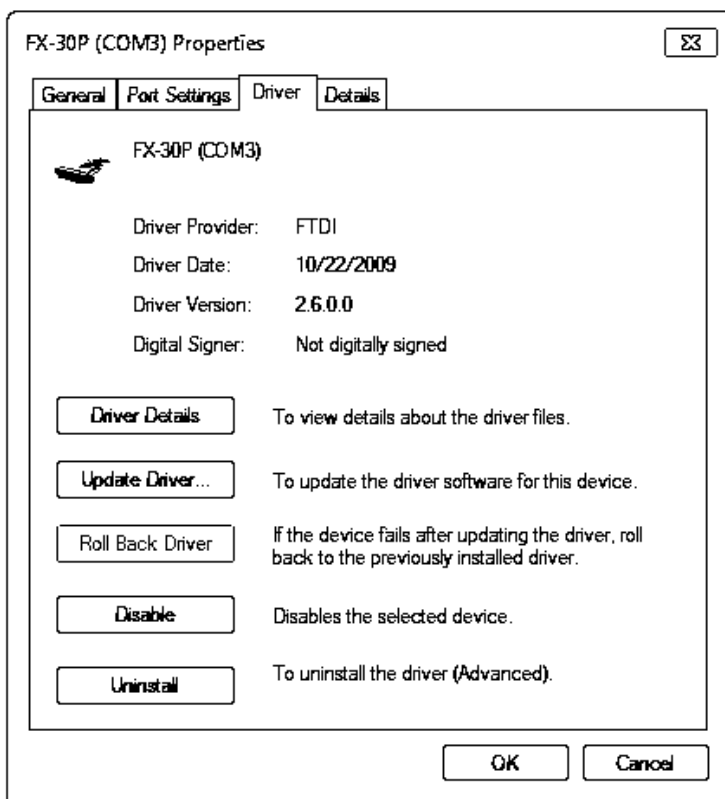
* indicates the COM number used in the FX-30P.

- 2) The following screen is displayed.



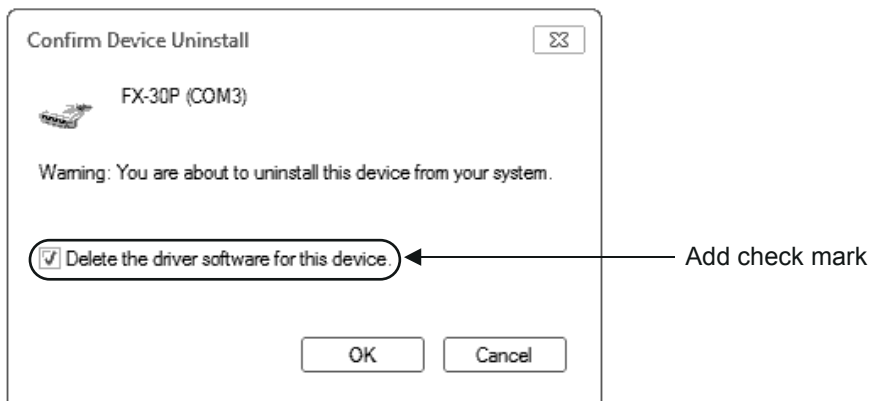
Select [Driver] tab.

- 3) The following screen is displayed.



Click [Uninstall].

- 4) The following screen is displayed.

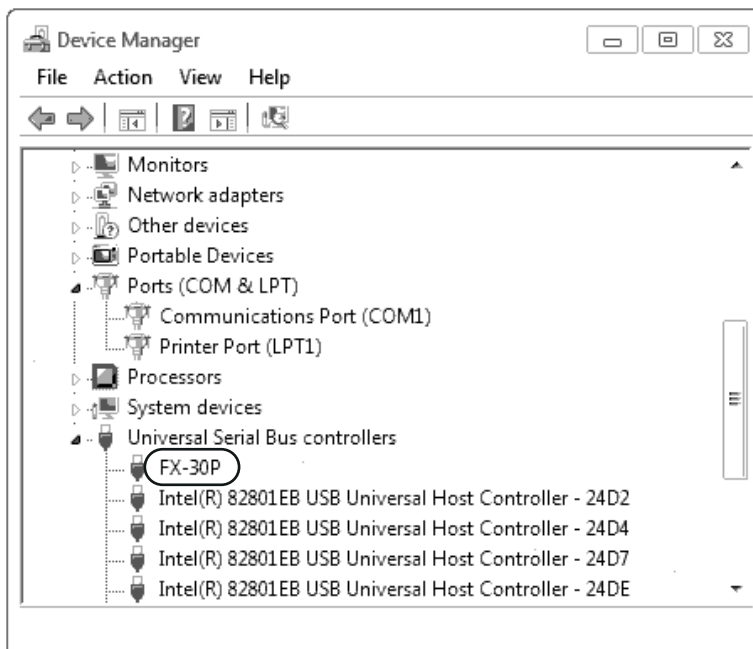


Add a check mark to [Delete the driver software for this device.], and click [OK].

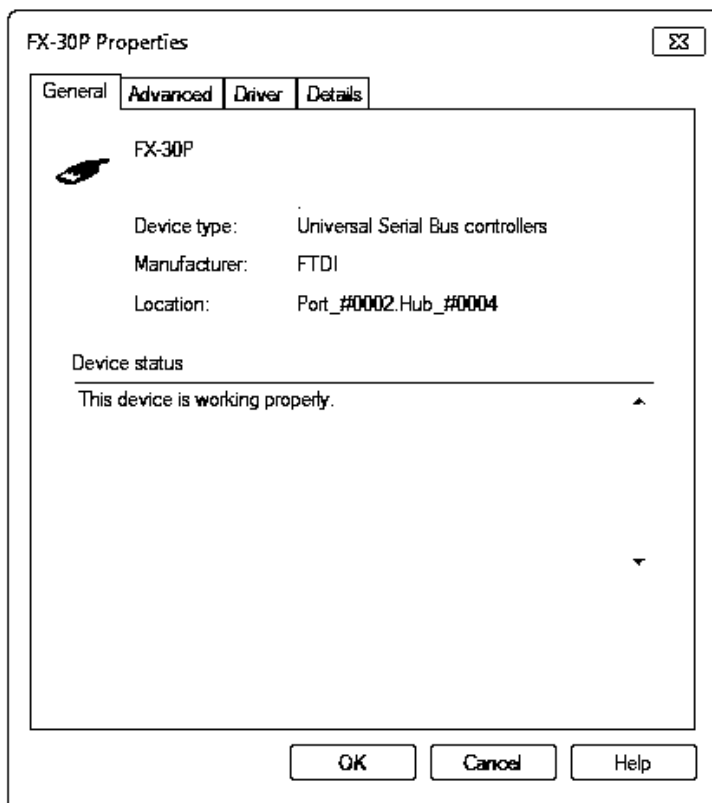
The USB Serial Port software is uninstalled.

Afterward, uninstall the USB driver following steps of 5) to 8).

- 5) Double-click or right-click [FX-30P] in [Universal Serial Bus controllers] on the displayed Device Manager screen, and select [Properties].

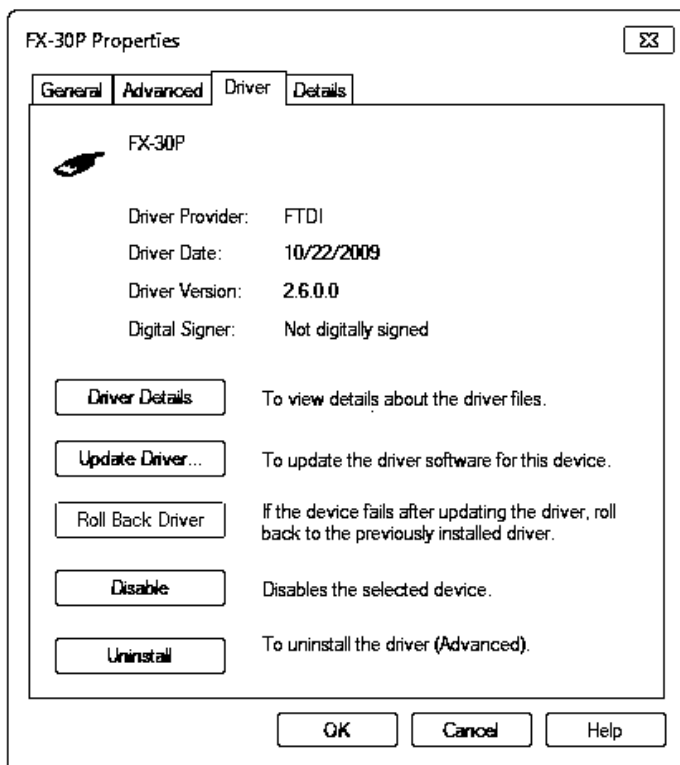


- 6) The following screen is displayed.



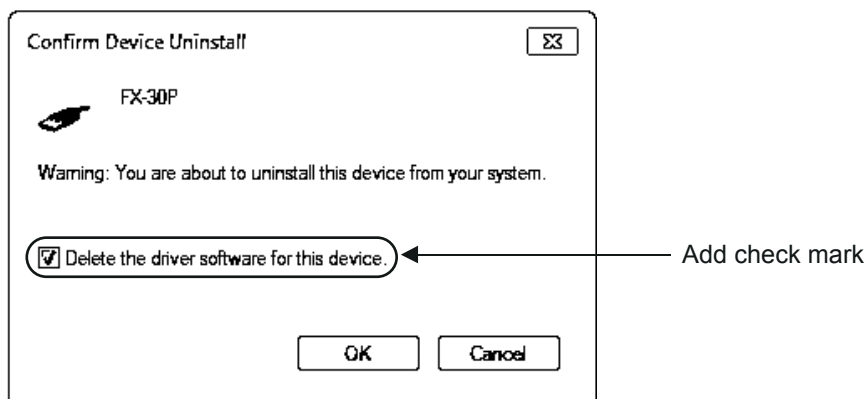
Select [Driver] tab.

- 7) The following screen is displayed.



Click [Uninstall].

8) The following screen is displayed.



Add a check mark to [Delete the driver software for this device.], and click [OK].
The USB driver is uninstalled.

3.4 Windows® 8/8.1

USB driver Ver. 1.50 or later is applicable to Windows® 8 (32-bit version/64-bit version).

USB driver Ver. 1.60 or later is applicable to Windows® 8.1 (32-bit version/64-bit version).

3.4.1 Driver Installation

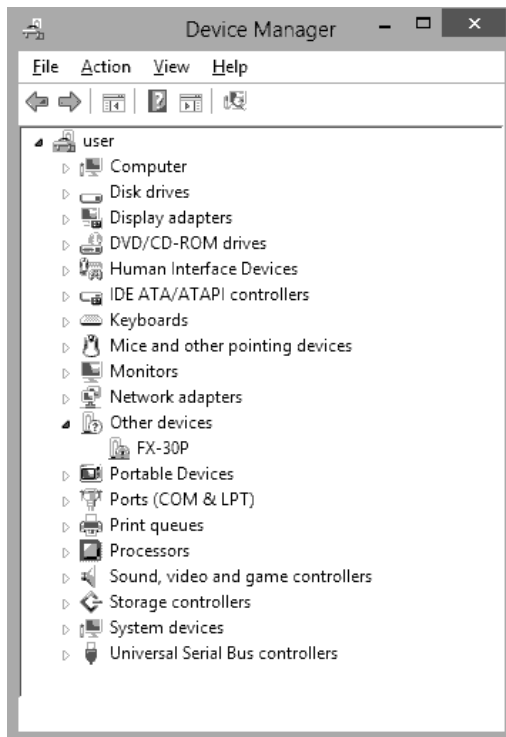
Please install the driver with the following procedure.



Caution

- Two driver installations are necessary, "USB driver software" and "USB Serial Port", are both required. Communication is not possible with only one of the two. Please perform both installations with reference to the following procedures.

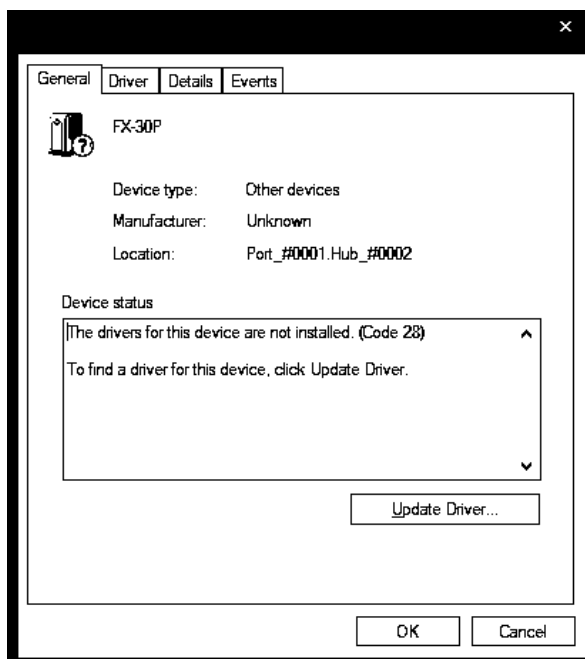
1) Connect the FX-30P to the personal computer via a USB cable.

- 2) Click [Start] → [All apps] → [Control Panel] → [System and Security] → [Device Manager] to start up Device Manager and display the following screen.



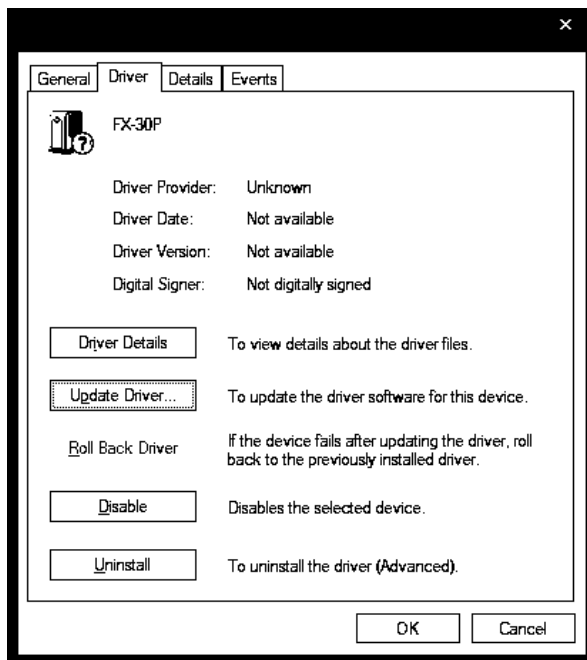
Put the cursor on [ FX-30P] in [Other devices], double-click or right-click it, and select [Properties]. Or put the cursor on [ FX-30P], right-click it, and select [Update Driver Software...] to omit steps 3) and 4) and jump to step 5).

- 3) The following screen is displayed.



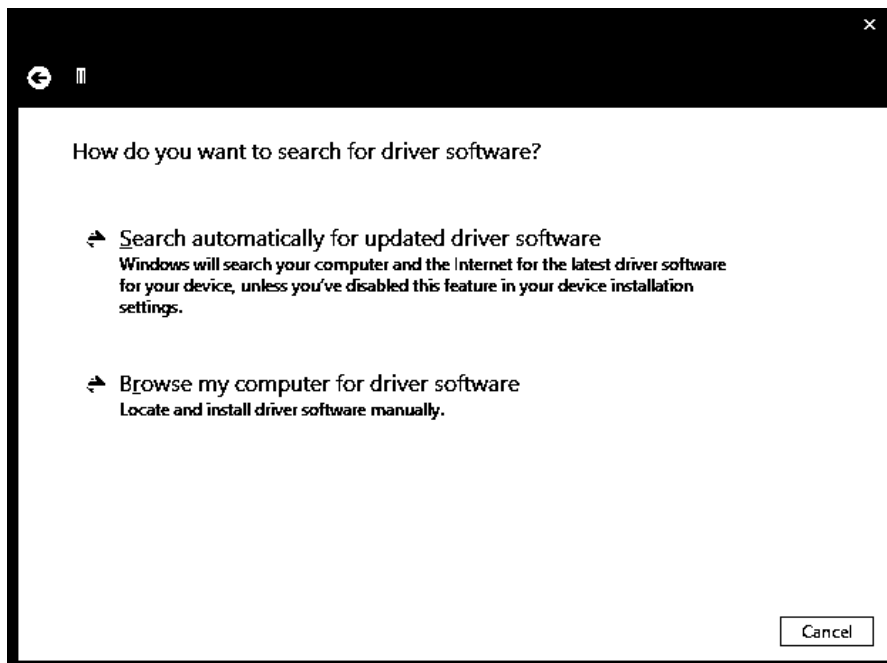
Select [Driver] tab.

- 4) The following screen is displayed.



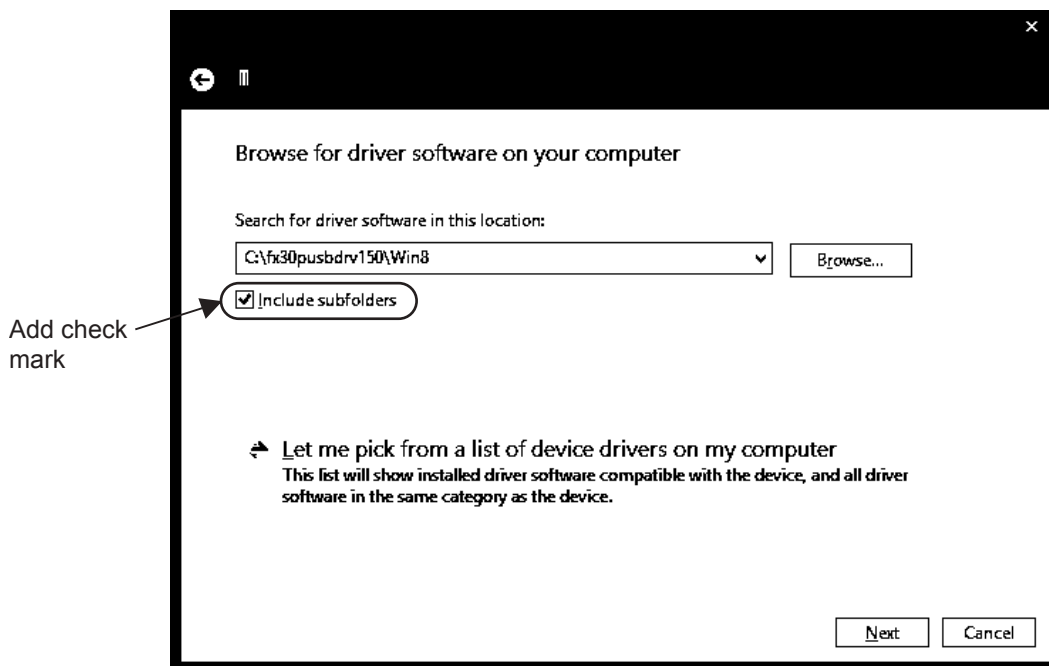
Click [Update Driver...].

- 5) The following screen is displayed.



Click [Browse my computer for driver software].

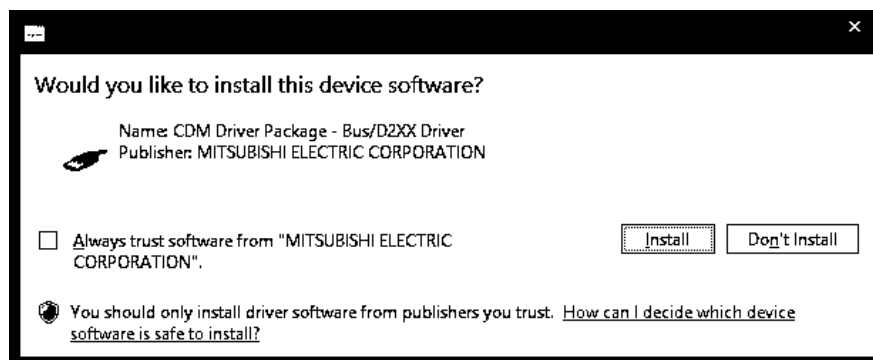
- 6) The following screen is displayed, specify the location of the driver.



Add a check mark to [Include subfolders].

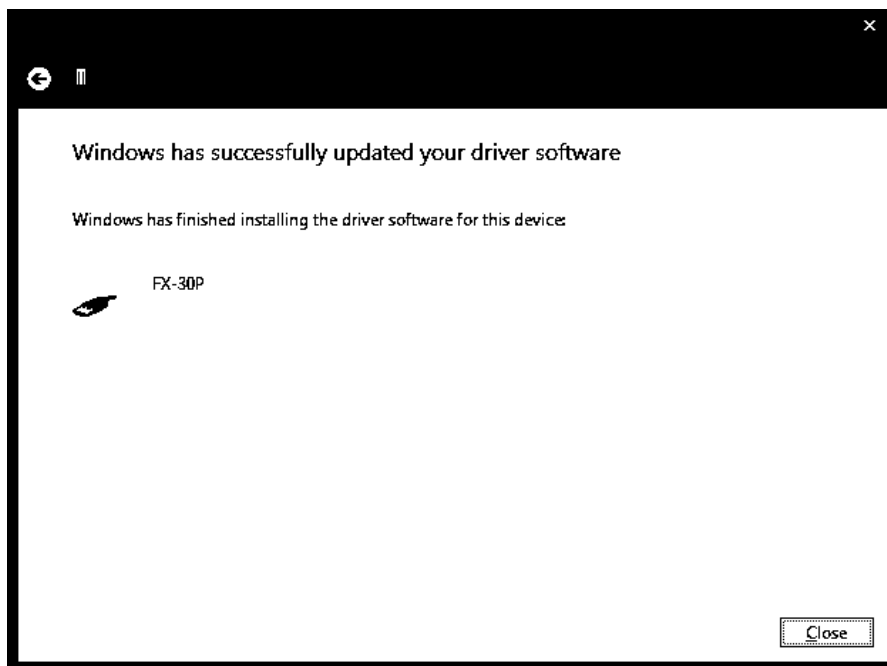
Designate "fx30pusbdvr***\Win8" of the previously extracted folder, and click [Next].

- 7) The following screen is displayed depending on the settings of the personal computer.



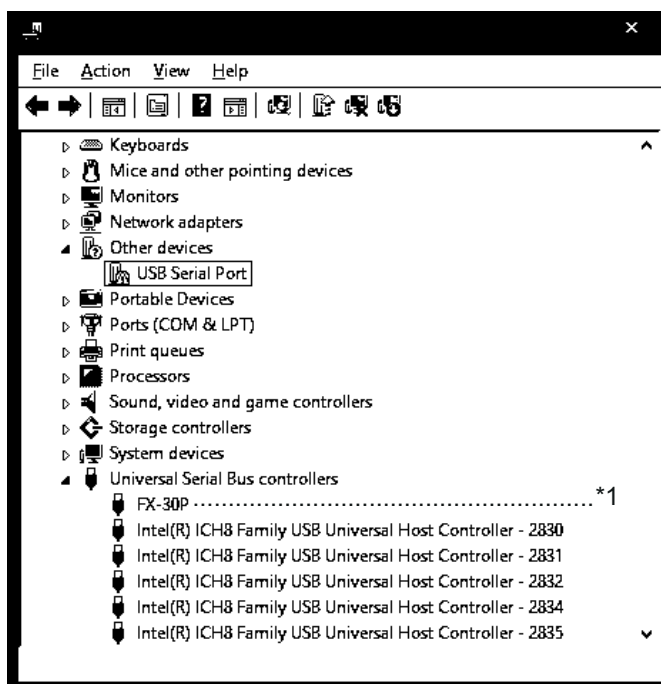
Click [Install this driver software anyway].


- 8) The installation of the USB driver software is completed, and the following screen is displayed.




Click [Close].

- 9) In order to close the screen of 4) and to install "USB Serial Port", please continue on to the following procedure.
- 10) Install the USB serial port from Device Manager.

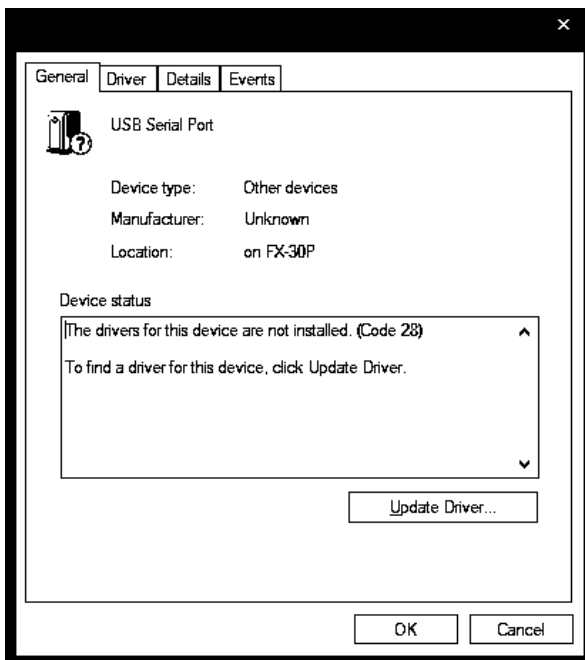


Put the cursor on [ USB Serial Port] in [Other devices], double-click or right-click it, and select [Properties].

Or put the cursor on [ USB Serial Port], right-click it, and select [Update Driver Software...] to omit steps 11) and 12) and jump to step 13).

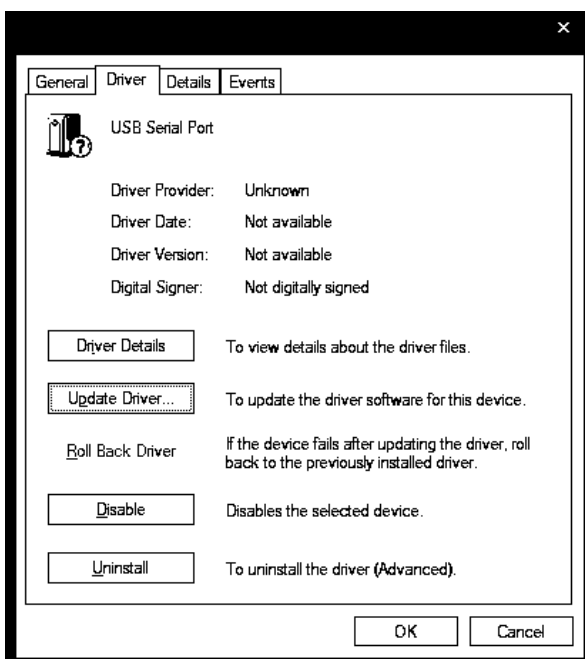
- *1. When the driver software is installed successfully by the procedure up to step 9), [FX-30P] is displayed.

11) The following screen is displayed.



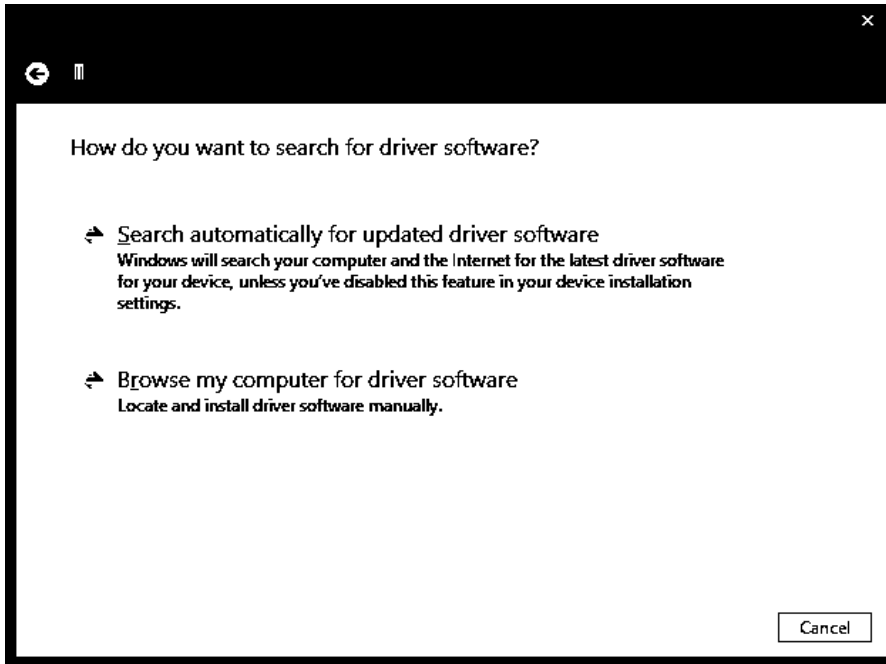
Select [Driver] tab.

12) The following screen is displayed.



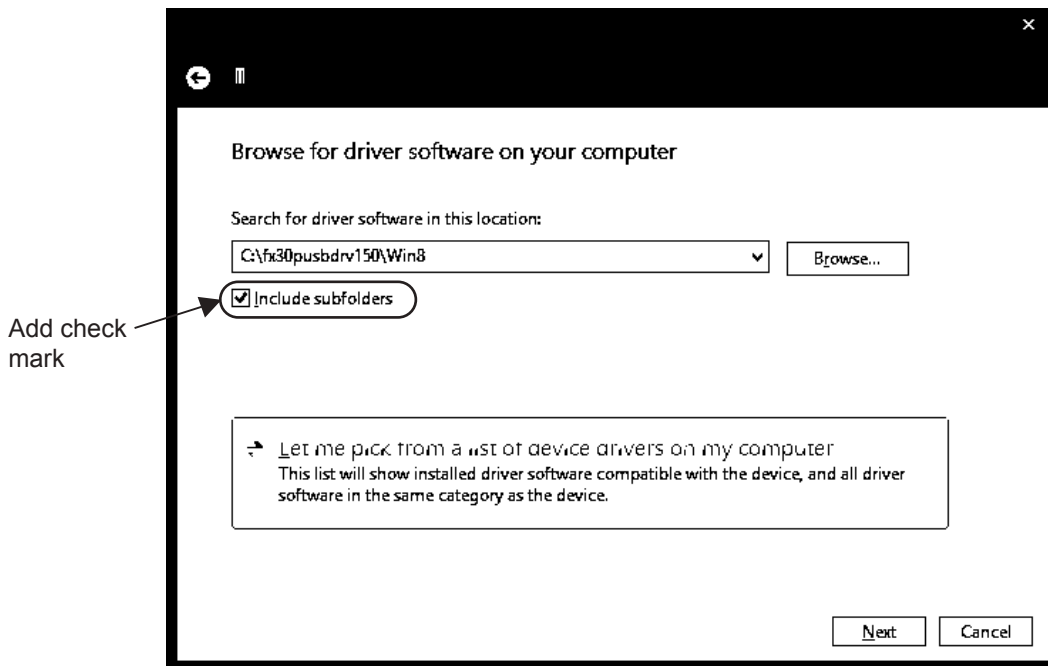
Click [Update Driver...].

13) The following screen is displayed.



Click [Browse my computer for driver software].

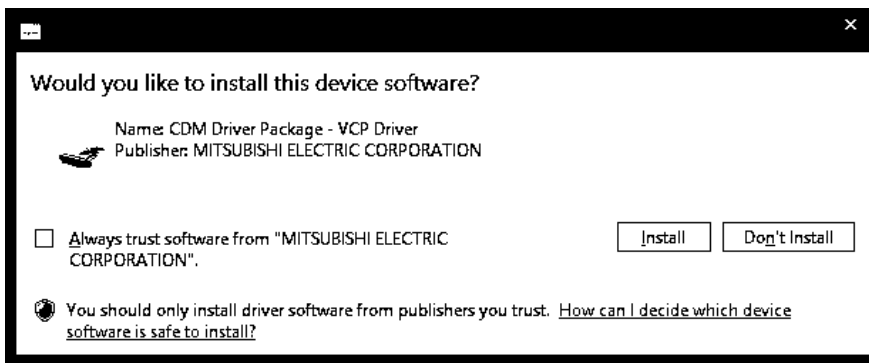
14) The following screen is displayed, specify the location of the driver.



Add a check mark to [Include subfolders].

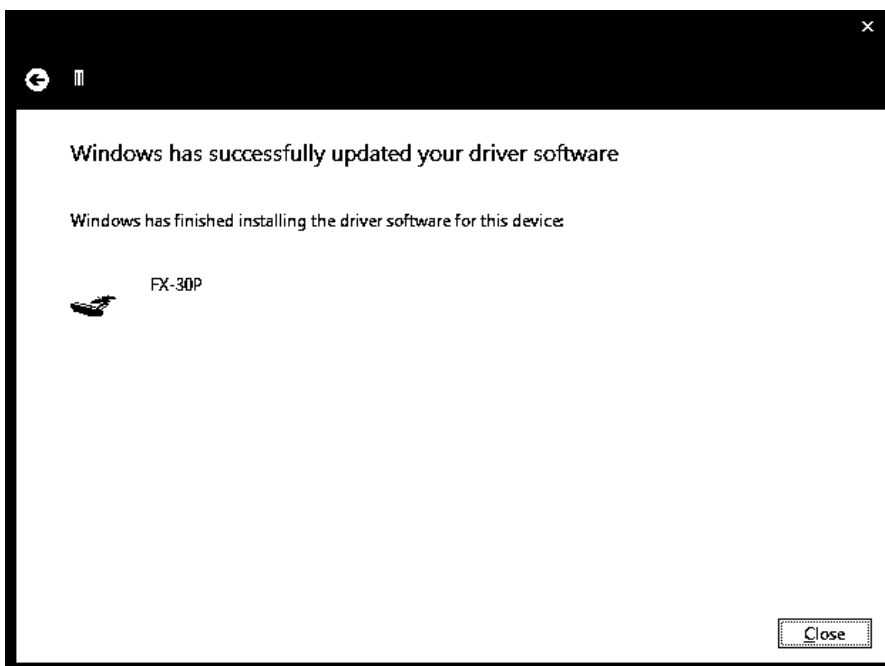
Designate "fx30pusbdv**\Win8" of the previously extracted folder, and click [Next].

15) The following screen is displayed depending on the settings of the personal computer.



Click [Install this driver software anyway].

16) The following screen is displayed.



Click [Close].

The installation of the USB Serial Port software will finish.

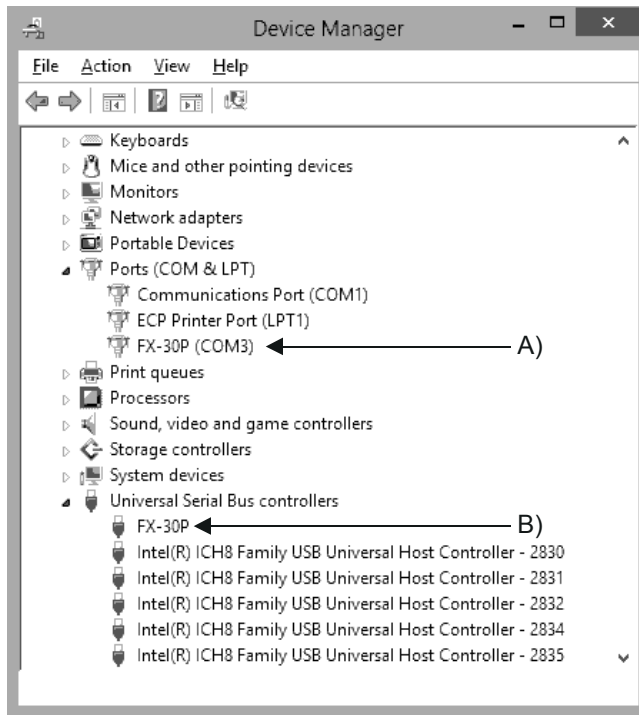
Next, please confirm whether the installation is performed normally. Regarding confirmation, refer to subsection 3.4.2.

3.4.2 Confirming the Installation of the Driver


Procedure for confirming the installation of the driver is described below.

Please perform the following procedure, where the FX-30P is connected to the personal computer.

- A screen that is equivalent to the one below is displayed by clicking [Start] → [All apps] → [Control Panel] → [System and Security] → [Device Manager] in the menu of the personal computer.



Check following:

- 1) "FX-30P (COM*)" is displayed at A), as part of the serial port list.
* indicates the COM number used in the FX-30P.
- 2) "FX-30P" is displayed at B), as part of the list of the "Universal Serial Bus controllers".
- 3)  is not displayed.

Identification result:

- If 1) through 3) are all confirmed, installation is normal.
Select the F/W Update Tool COM number (refer to subsection 4.3.2) as the COM number currently assigned on the screen above.
- If any one of 1) through 3) is not satisfied, installation is not normal. (If the USB serial port software is not installed or the installation procedure is canceled in process are possible causes)
In this case, please start the installation procedure again from the beginning, after uninstalling the driver.
For the installation procedure of the driver, refer to subsection 3.4.1. For the uninstallation procedure of the driver, refer to subsection 3.4.3.

3.4.3 Uninstalling Driver



Please uninstall the driver using the following procedure.

Caution

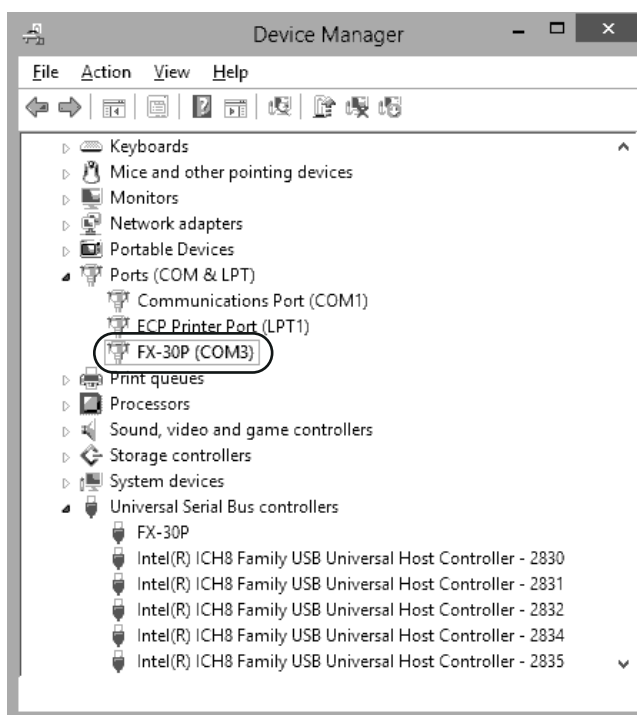
Driver software must be uninstalled starting with "Ports (COM & LPT)" after which the "Universal Serial Bus Controllers" should be uninstalled.

If uninstalling directly from the "Universal Serial Bus Controllers", the driver software for the FX-30P will not uninstall correctly.

When uninstalling from "Universal Serial Bus Controllers", uninstall USB driver software after re-installation starting with "Ports (COM & LPT)" after which the "Universal Serial Bus Controllers" should be uninstalled.

 may be displayed when the installation of the driver is not performed normally. In that case, select the item that has  displayed next to it and uninstall with the following procedure.

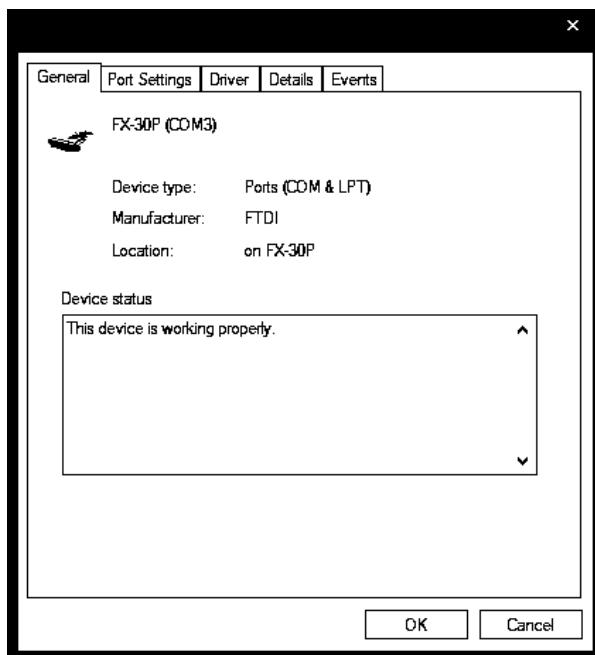
- 1) Connect the FX-30P to the personal computer via a USB cable.
Click [Start] → [All apps] → [Control Panel] → [System and Security] → [Device Manager] and the window below will be displayed.



Double-click or right-click [FX-30P (COM*)] in [Ports (COM & LPT)], and select [Properties].

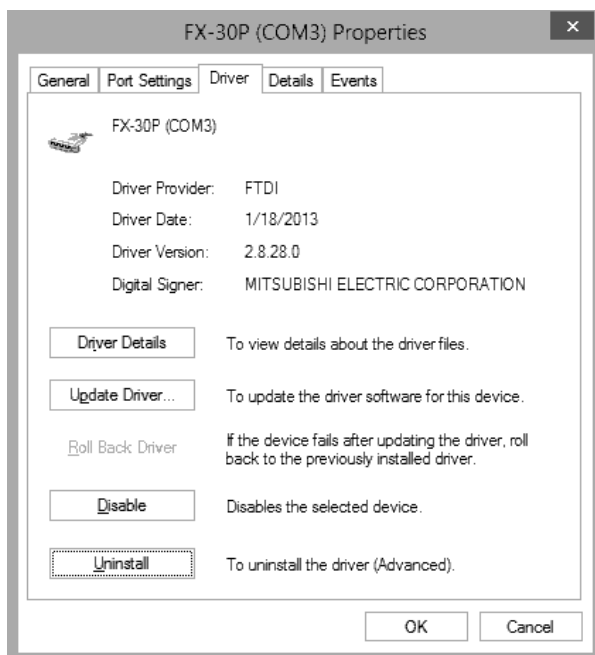
* indicates the COM number used in the FX-30P.

- 2) The following screen is displayed.



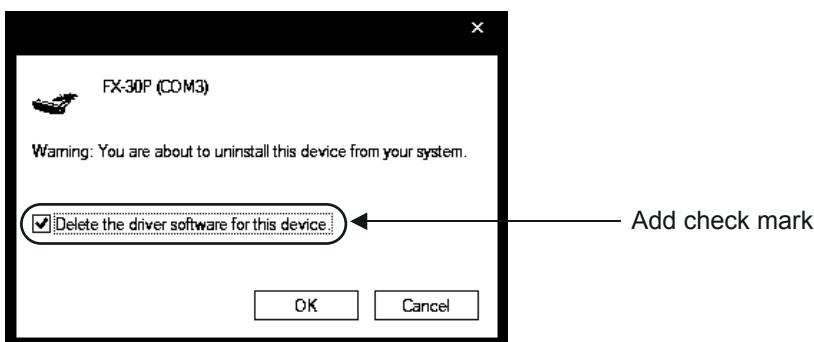
Select [Driver] tab.

- 3) The following screen is displayed.



Click [Uninstall].

- 4) The following screen is displayed.

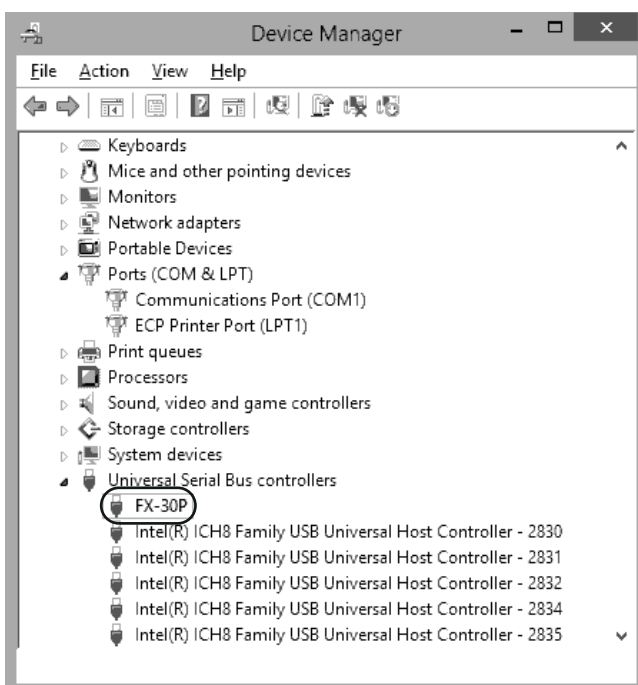


Add a check mark to [Delete the driver software for this device.], and click [OK].

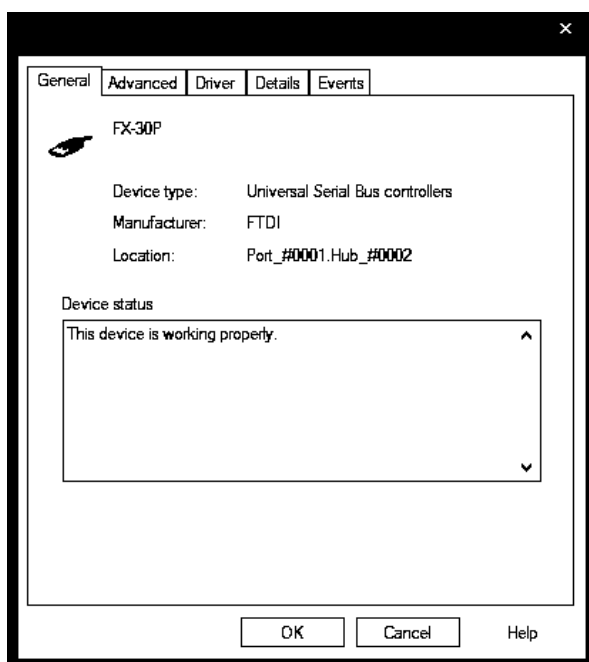
The USB Serial Port software is uninstalled.

Afterward, uninstall the USB driver following steps of 5) to 8).

- 5) Double-click or right-click [FX-30P] in [Universal Serial Bus controllers] on the displayed Device Manager screen, and select [Properties].

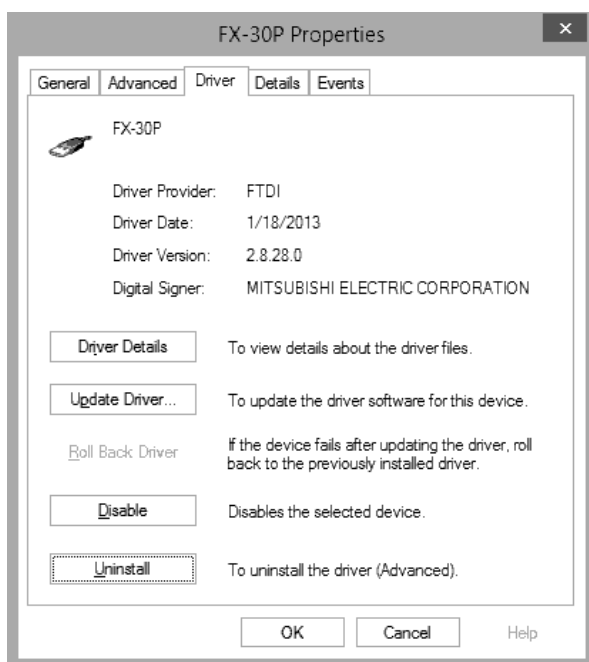


- 6) The following screen is displayed.



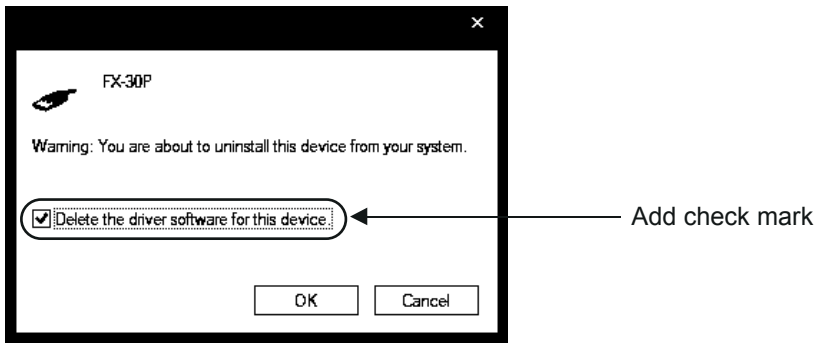
Select [Driver] tab.

- 7) The following screen is displayed.



Click [Uninstall].

8) The following screen is displayed.

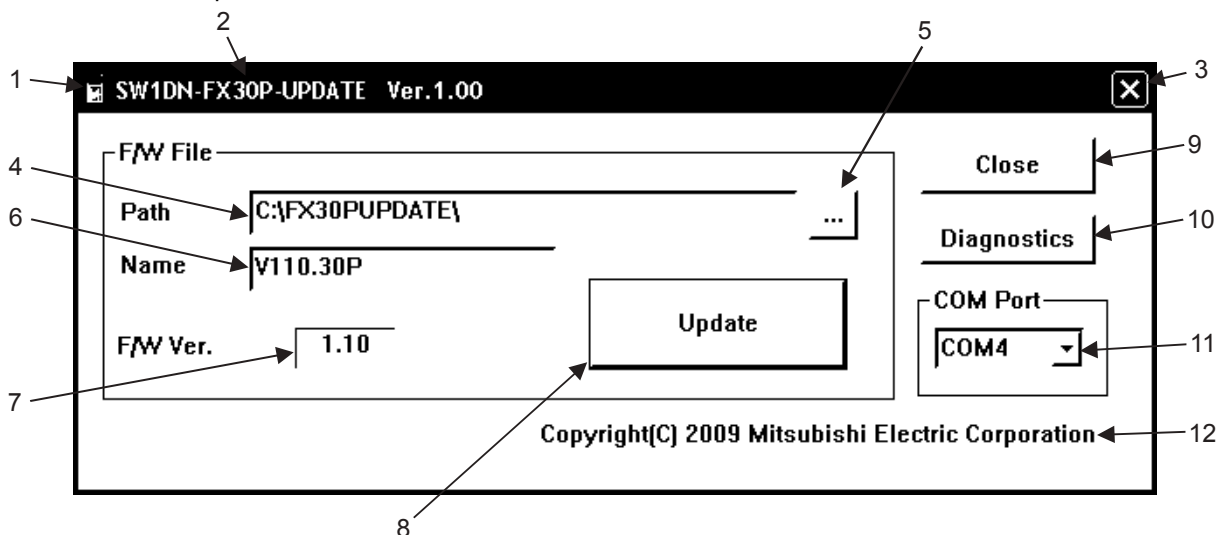


Add a check mark to [Delete the driver software for this device.], and click [OK].
The USB driver is uninstalled.

4. Function details

4.1 Screen display

The screen is composed as follows.



No.	Classification	Explanation
1	Icon	Application icon.
2	Title	The application title is displayed. The type and the version are displayed.
3	End button	The button for terminating the application.
4	Path name	To designate the full path of F/W data file for the FX-30P. This is for display only, and no input is allowed.
5	Reference button	The button for opening the file selection dialog when selecting the F/W data file for the FX-30P from the list.
6	File name	To designate the F/W data file name for FX-30P. This is for display only, and no input is allowed.
7	Firmware version display area	To display the version of the designated F/W data file for the FX-30P.
8	Update execution button	The button for executing updating of the FX-30P.
9	Close button	The button for terminating the application.
10	Diagnostics button	The button for displaying the F/W version confirmation screen of the connected FX-30P.
11	COM port selection drop down box	The drop down box for selecting the COM port to be connected to the FX-30P. The number is COM4 when starting up.
12	Copyright display	The copyright is displayed.

4.2 Basic operation

The procedure of F/W update is as follows.

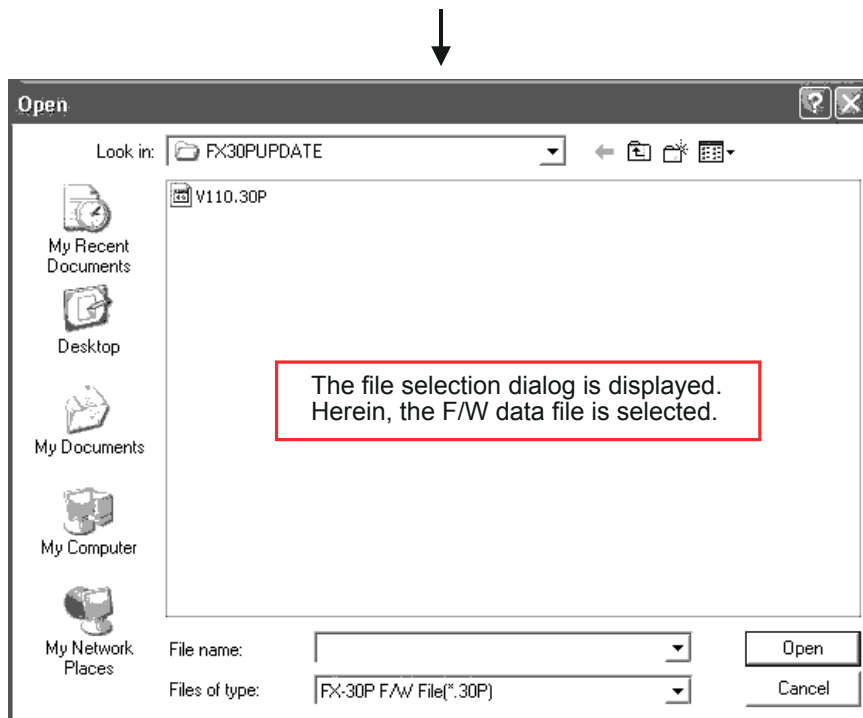
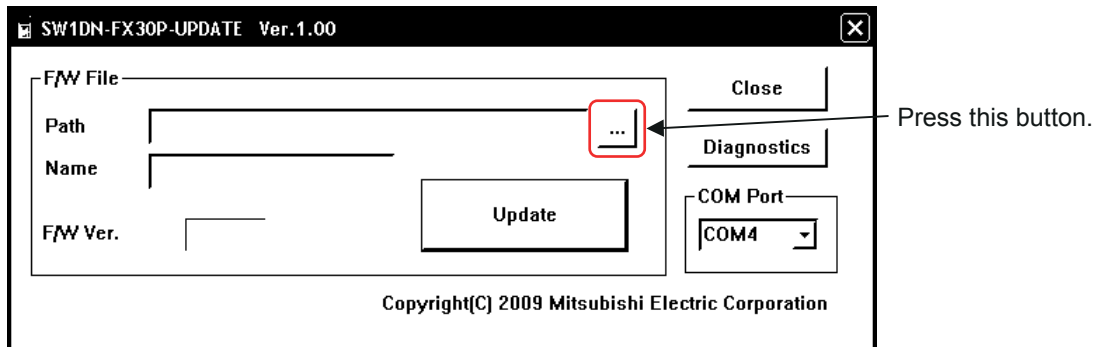
- 1) The personal computer is connected to the FX-30P with a USB cable, and the FX-30P is set in F/W update wait state.
→ As for use of 30P, refer to the FX-30P operation manual.
- 2) Start the update tool with the personal computer.
- 3) Select the F/W data file.
- 4) Select the COM port.
- 5) Execute the update tool.
- 6) Terminate the tool.

4.3 Function details

4.3.1 File selection

The file is selected using one of the three methods below.

- 1) The file select dialog is displayed, and the file is designated in the dialog.



- 2) Drag and drop the F/W data file on the screen of the tool from Windows[®] Explorer or equivalent. (Windows Vista[®], Windows[®] 7 (the OS itself) dose not support the function to drag & drop on the screen of the tool.)
- 3) Drag and drop the F/W data file on the icon or short-cut icon of the tool from Windows[®] Explorer or equivalent.

Automatic selection of file upon start up

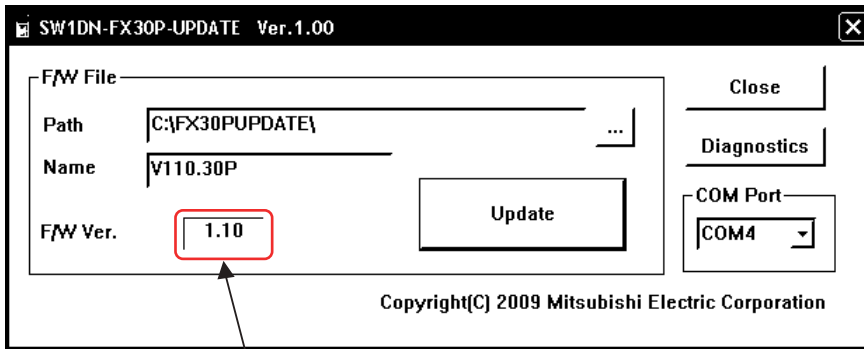
When starting up this tool, F/W data files in the same folder as FX30PUPD.exe are searched for, and when a file is present, this file is selected. In the same folder as FX30PUPD.exe, if multiple F/W data files are present, the file with the longest number in the file name is selected.

Not searched, however, if started by dropping the file on the icon of the tool.

F/W files are not searched for when the application is started by dropping the file on the icon of the tool.

Version display of F/W data file

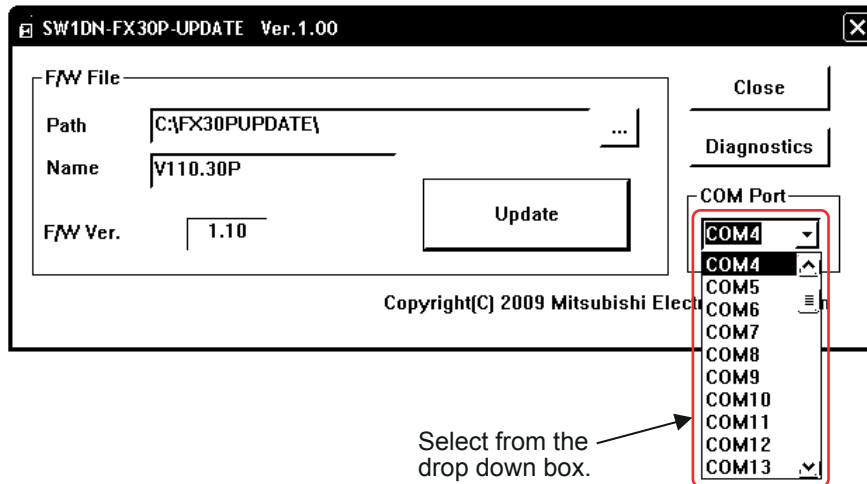
When a F/W data file is selected, the version number is displayed on the screen.



Displays the version of F/W data file.

4.3.2 Connection destination specification

The COM port to be connected to can be set to be COM1 to COM63. The initial value is COM4. As for confirmation of the COM port connected to the FX-30P, refer to subsection 3.1.2, subsection 3.2.2, subsection 3.3.2.



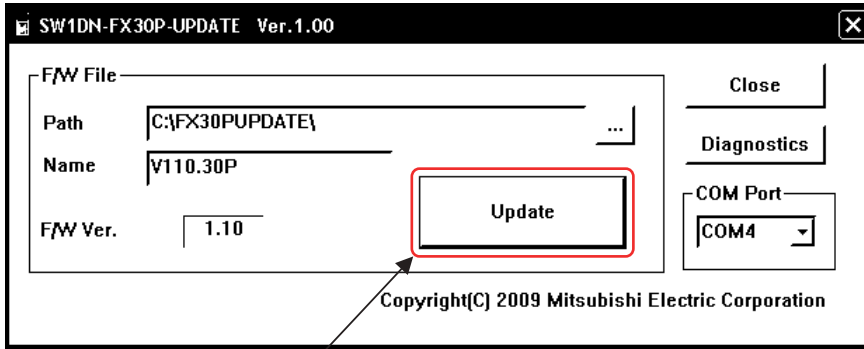
4.3.3 Update execution

- 1) The operation of the FX-30P
Execute by selecting [HPP setting] to [HPP F/W update].
As for details on the use of the FX-30P, refer to the FX-30P operation manual.

Caution

Setting the state of FX-30P in waiting state of HPP F/W update, execute the F/W update tool from the personal computer.

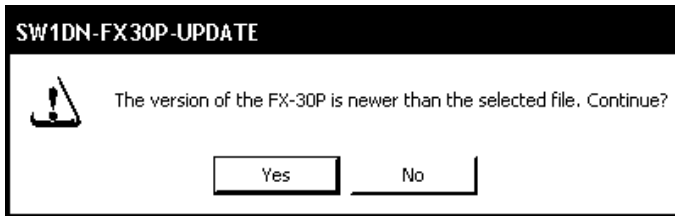
- 2) The execution method
Press the Update button on the screen, and execute the update process.



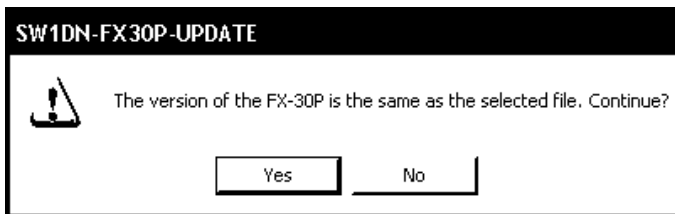
Press this button and execute the update process.

Caution

The following message is displayed if the F/W version in the FX-30P is later than the version of the selected F/W file.

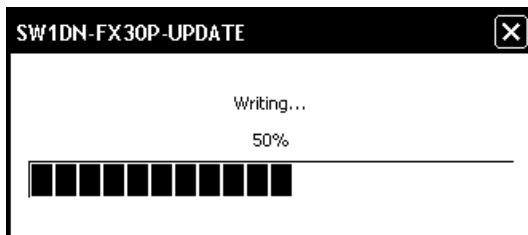


The following message is displayed if the F/W version in the FX-30P is same as the version of the selected F/W file.



In each case, if Yes is selected, the F/W writing is executed. If No is selected, the process is interrupted.

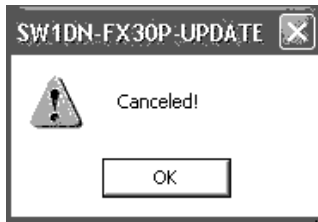
- Progress bar display during update execution
During update execution, the following progress bar is displayed.



- When the update is complete, the following message is displayed.



- The following message is displayed if the update is canceled during the update process.



4.3.4 F/W version confirmation of the FX-30P

When the Diagnostics button is pressed on the screen, the F/W version of the FX-30P is read out, and the following message is displayed.



4.4 Message list

4.4.1 The error message list and details

The following table shows a list of error messages and corresponding actions.

No.	Message	Explanation and the corresponding actions
1	Memory error!	Failure in acquiring the memory. Save memory by terminating other software or re-starting the personal computer.
2	File open error!	File name error. Specify file name correctly.
3	File format error!	Failure in file conversion. Specify correct F/W data file.
4	Communication error!	Communication error. Check connection of USB cable.
5	The connected module is not supported.	Not connected to the FX-30P. Connect the FX-30P.
6	Update failure!	An error has occurred during the update. Execute the update again.

MEMO

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Outline

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Starting /
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About the USB
driver

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Function details

Revised History

Date	Revision	Description
4/2009	A	First Edition
8/2010	B	<ul style="list-style-type: none">• USB driver Ver. 1.30 or later is applicable to Windows[®] 7.• Errors are corrected.
6/2011	C	USB driver Ver. 1.40 or later is applicable to Windows [®] 7 64-bit version.
5/2013	D	USB driver Ver. 1.50 or later is applicable to Windows [®] 8 (32-bit version/64-bit version).
3/2014	E	USB driver Ver. 1.60 or later is applicable to Windows [®] 8.1(32-bit version/64-bit version).
4/2015	F	A part of the cover design is changed.

OPERATION MANUAL

FX-30P F/W UPDATE TOOL

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