

GX Developer Version 8

mitsubishi

Operating Manual

(Startup)



MELSOFT
Integrated FA Software

SW8D5C-GPPW-E

• CONDITIONS OF USE FOR THE PRODUCT •

- (1) Mitsubishi programmable controller ("the PRODUCT") shall be used in conditions;
- i) where any problem, fault or failure occurring in the PRODUCT, if any, shall not lead to any major or serious accident; and
 - ii) where the backup and fail-safe function are systematically or automatically provided outside of the PRODUCT for the case of any problem, fault or failure occurring in the PRODUCT.

- (2) The PRODUCT has been designed and manufactured for the purpose of being used in general industries.

MITSUBISHI SHALL HAVE NO RESPONSIBILITY OR LIABILITY (INCLUDING, BUT NOT LIMITED TO ANY AND ALL RESPONSIBILITY OR LIABILITY BASED ON CONTRACT, WARRANTY, TORT, PRODUCT LIABILITY) FOR ANY INJURY OR DEATH TO PERSONS OR LOSS OR DAMAGE TO PROPERTY CAUSED BY the PRODUCT THAT ARE OPERATED OR USED IN APPLICATION NOT INTENDED OR EXCLUDED BY INSTRUCTIONS, PRECAUTIONS, OR WARNING CONTAINED IN MITSUBISHI'S USER, INSTRUCTION AND/OR SAFETY MANUALS, TECHNICAL BULLETINS AND GUIDELINES FOR the PRODUCT.

("Prohibited Application")

Prohibited Applications include, but not limited to, the use of the PRODUCT in;

- Nuclear Power Plants and any other power plants operated by Power companies, and/or any other cases in which the public could be affected if any problem or fault occurs in the PRODUCT.
- Railway companies or Public service purposes, and/or any other cases in which establishment of a special quality assurance system is required by the Purchaser or End User.
- Aircraft or Aerospace, Medical applications, Train equipment, transport equipment such as Elevator and Escalator, Incineration and Fuel devices, Vehicles, Manned transportation, Equipment for Recreation and Amusement, and Safety devices, handling of Nuclear or Hazardous Materials or Chemicals, Mining and Drilling, and/or other applications where there is a significant risk of injury to the public or property.

Notwithstanding the above, restrictions Mitsubishi may in its sole discretion, authorize use of the PRODUCT in one or more of the Prohibited Applications, provided that the usage of the PRODUCT is limited only for the specific applications agreed to by Mitsubishi and provided further that no special quality assurance or fail-safe, redundant or other safety features which exceed the general specifications of the PRODUCTS are required. For details, please contact the Mitsubishi representative in your region.

REVISIONS

* The manual number is given on the bottom left of the back cover.

Print Date	* Manual Number	Revision
Feb., 2003	SH(NA)-080372E-A	First edition
Jul., 2003	SH(NA)-080372E-B	Correction Appendix 2
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* The manual number is given on the bottom left of the back cover.

Print Date	* Manual Number	Revision
Apr.,2011	SH(NA)-080372E-N	<div data-bbox="603 342 754 376" style="border: 1px solid black; padding: 2px;">Correction</div> About Manuals, Section 2.2, Section 3.1.2
Jul.,2013	SH(NA)-080372E-O	<div data-bbox="603 439 754 472" style="border: 1px solid black; padding: 2px;">Correction</div> Abbreviations and Generic Terms in This Manual, Section 2.2, Section 3.1.2, Section 3.2, Section 3.3, Section 3.4

Japanese Manual Version SH-080355-R

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INTRODUCTION

Thank you for choosing the Mitsubishi MELSOFT series Integrated FA software.
Read this manual and make sure you understand the functions and performance of MELSOFT series programmable controller thoroughly in advance to ensure correct use.

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About Manuals

The manuals related to this product are shown below.
Refer to the following table when ordering required manuals.

Related Manuals

Manual Name	Manual Number (Model Code)
GX Developer Version8 Operating Manual Explains operation methods such as creating, printing, monitoring, and debugging programs using GX Developer. (Sold separately)	SH-080373E (13JU40)
GX Developer Version8 Operating Manual (SFC) Explains the editing and monitoring operations of the SFC functions using GX Developer. (Sold separately)	SH-080374E (13JU42)
GX Developer Version8 Operating Manual (MELSAP-L) Explains the editing and monitoring operations of the MELSAP-L format SFC functions using GX Developer. (Sold separately)	SH-080375E (13JU43)
GX Developer Version8 Operating Manual (Function Block) Explains the editing and monitoring operations of the function blocks using GX Developer. (Sold separately)	SH-080376E (13JU44)
GX Developer Version 8 Operating Manual (Structured Text) Explains operation methods such as creating and printing structured text (ST) programs using GX Developer. (Sold separately)	SH-080367E (13JU37)
GX Simulator Version6 Operating Manual Explains the setting and operating methods for monitoring the device memory and simulating the machine side operations using GX Simulator. (Sold separately)	SH-080169 (13JU17)
Structured Text (ST) Programming Guide Book Intended for beginners, i.e., those who create structured text program for the first time. Explains basic operations and functions using sample programs. (Sold separately)	SH-080368E (13JF69)

REMARK

The Operating Manuals and Structured Text (ST) Programming Guide Book are included on the CD-ROM of the software package in a PDF file format.
Manuals in printed form are sold separately for single purchase. Order a manual by quoting the manual number (model code) listed in the table above.

Abbreviations and Generic Terms in This Manual

Unless otherwise specified, the following generic names and abbreviations are used for explanations in this manual.

Generic terms and abbreviations	Description
GX Developer	Generic product name of the product types SW8D5C-GPPW-E, SW8D5C-GPPW-EA, SW8D5C-GPPW-EV and SW8D5C-GPPW-EVA.
1-license product	Abbreviation of the 1-license product of GX Developer or GX Simulator.
Multiple-license product	Abbreviation of the multiple-license product of GX Developer or GX Simulator.
Windows® 8	Generic term for Microsoft® Windows® 8 Operating System, Microsoft® Windows® 8 Pro Operating System and Microsoft® Windows® 8 Enterprise Operating System.
Windows® 7	Generic term for Microsoft® Windows® 7 Starter Operating System, Microsoft® Windows® 7 Home Premium Operating System, Microsoft® Windows® 7 Professional Operating System, Microsoft® Windows® 7 Ultimate Operating System and Microsoft® Windows® 7 Enterprise Operating System.
Windows Vista®	Generic term for Microsoft® Windows Vista® Home Basic Operating System, Microsoft® Windows Vista® Home Premium Operating System, Microsoft® Windows Vista® Business Operating System, Microsoft® Windows Vista® Ultimate Operating System and Microsoft® Windows Vista® Enterprise Operating System.
Windows® XP	Generic term for Microsoft® Windows® XP Professional Operating System and Microsoft® Windows® XP Home Edition Operating System.
Basic model QCPU	Generic term for Q00JCPU, Q00CPU and Q01CPU.
Built-in Ethernet port QCPU	Generic term of Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q10UDEHCPU, Q13UDEHCPU, Q20UDEHCPU and Q26UDEHCPU.
ACPU	Generic term for programmable controller available with MELSEC-A. Including MOTION (SCPU). (However, GX Developer does not support A1, A2, A3, A3H, A3M, A52G, A73, A0J2 and A3V.)
QCPU (A mode)	Generic term for Q02(H)CPU-A and Q06HCPU-A.
QnACPU	Generic term for programmable controller available with MELSEC-QnA.
LCPU	Generic term for L02CPU and L26CPU-BT.
QCPU (Q mode)	Generic term for Q00J, Q00UJ, Q00, Q00U, Q01, Q01U, Q02(H), Q02PH, Q02U, Q03UD, Q03UDE, Q04UDH, Q04UDEH, Q06H, Q06PH, Q06UDH, Q06UDEH, Q10UDH, Q10UDEH, Q12H, Q12PH, Q12PRH, Q13UDH, Q13UDEH, Q20UDH, Q20UDEH, Q25H, Q25PH, Q25PRH, Q26UDH and Q26UDEHCPU.
QSCPU	Abbreviation of QS001CPU.

Product Makeup

GX Developer and GX Simulator are made up of the following products.

Type	Product Name	Quantity
SW8D5C-GPPW-E(V)	GX Developer Version8 (1-license product) (CD-ROM)	1
	Method of installing the MELSOFT Series	1
	End-user software license agreement	1
	Software registration notice	1
	License certificate	1
SW8D5C-GPPW-E(V)A	GX Developer Version8 (Multiple license product) (CD-ROM)	1
	Method of installing the MELSOFT Series	1
	End-user software license agreement	1
	Software registration notice	1
	License certificate	n* ¹

*1: The number of included license agreements is equivalent to the number of licenses.

NOTICES
<ul style="list-style-type: none"> • We don't guarantee the commercially-available Microsoft® Windows® Operating System-based software products that have been introduced in this manual. • We hold the copyrights of this software package. • No part of this manual may be transcribed or duplicated in any form without prior permission by Mitsubishi Electric Corporation. • We have attempted to cover all the revisions of software and hardware, but this manual may not contain the latest revisions. • The software of this product requires one license to be purchased per computer. • We permit the user to use this software package (including this manual) based on the Software License Agreement. • We are not liable for consequences or influences due to this software package (including this manual). • The specifications of this software package and the descriptions in this manual may be altered in future without prior notice.

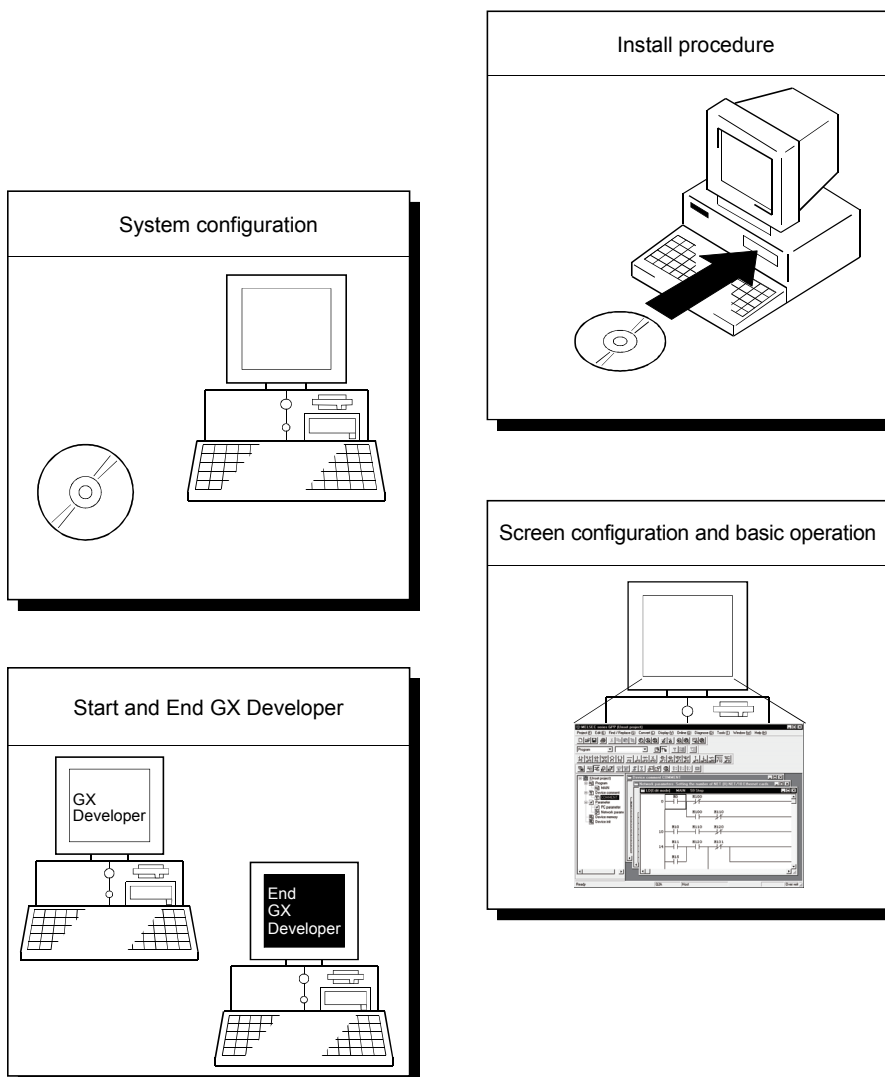
1. GENERAL DESCRIPTION

1

This manual describes the system configuration, installation procedure, start method, screen configuration, and basic operations of the following Microsoft® Windows® Operating System compatible products.

- GX Developer (CD-ROM Version)

The product type ended by "V" is an update-only product.



2. SYSTEM CONFIGURATION

2.1 System Configuration

GX Developer is available to install into the PC that meets the operating environment specification in Section 2.2.

2.2 Operating Environment

The following table summarizes the operating environment.

Item		Contents
Peripheral device	Personal computer	Personal computer in which Windows® operates.
	PC CPU module	MELSEC-Q Series-compatible PC CPU module (CONTEC CO., Ltd.)
Personal computer main body	CPU	See "Applicable operating system and the corresponding required PC performance" shown below.
	Required memory	
Available hard disk space		200MB or more
Disk drive		CD-ROM drive (if using CD-ROM media)
Monitor		Resolution 800x600 pixels or higher * ¹ However, set the resolution to 1024x768 pixels or higher when using the CC IE Control diagnostics function.
Communication interface		RS-232 port : Needed when communicating with the programmable controller CPU. (Required when accessing the Basic model QCPU, QCPU (A mode), ACPU, QnACPU, and FXCPU) USB port : Can be used when communicating with the QCPU (Q mode), LCP, QSCPU, FXCPU(FX3G). (Excludes the Basic model QCPU, Q02CPU and remote I/O modules.) Ethernet port : Can be used when communicating with the Built-in Ethernet port QCPU and LCP
Operating system * ³		Microsoft® Windows® 95 Operating System * ² Microsoft® Windows® 98 Operating System Microsoft® Windows® Millennium Edition Operating System Microsoft® WindowsNT® Workstation Operating System Version 4.0 Microsoft® Windows® 2000 Professional Operating System Microsoft® Windows® XP Professional Operating System Microsoft® Windows® XP Home Edition Operating System Microsoft® Windows Vista® Home Basic Operating System Microsoft® Windows Vista® Home Premium Operating System Microsoft® Windows Vista® Business Operating System Microsoft® Windows Vista® Ultimate Operating System Microsoft® Windows Vista® Enterprise Operating System Microsoft® Windows® 7 Starter Operating System Microsoft® Windows® 7 Home Premium Operating System Microsoft® Windows® 7 Professional Operating System Microsoft® Windows® 7 Ultimate Operating System Microsoft® Windows® 7 Enterprise Operating System Microsoft® Windows® 8 Operating System Microsoft® Windows® 8 Pro Operating System Microsoft® Windows® 8 Enterprise Operating System

*1: Resolution 1024 × 768 pixels or higher is recommended for Windows Vista® or later.

*2: Windows® 95 does not support the structured text language function.

*3: 64-bit Windows® XP and 64-bit Windows Vista® are not supported.

Applicable operating system and the corresponding required PC performance.

Item	Required PC performance	
	CPU	Required memory
Windows® 95 (Service Pack 1 or higher)	Pentium® 133MHz or higher *4	32MB or more *5
Windows® 98	Pentium® 133MHz or higher *4	32MB or more *5
Windows® Millennium Edition	Pentium® 150MHz or higher *4	32MB or more *5
WindowsNT® Workstation 4.0 (Service Pack 3 or higher)	Pentium® 133MHz or higher *4	32MB or more *5
Windows® 2000 Professional	Pentium® 133MHz or higher *4	64MB or more *5
Windows® XP	Pentium® 300MHz or higher *4	128MB or more *5
Windows Vista®	Pentium® 1GHz or higher	1GB or more
Windows® 7	Pentium® 1GHz or higher	1GB or more (32-bit Windows® 7) 2GB or more (64-bit Windows® 7)
Windows® 8	Pentium® 1GHz or higher	1GB or more (32-bit Windows® 8) 2GB or more (64-bit Windows® 8)

*4: Pentium® 300MHz or higher is recommended when creating label programs.

*5: 64MB or more is recommended when creating label programs.

POINT

- When using PDF data or online manuals, adding memory of the personal computer enables more comfortable operation.
- Depending on the operating environment of the personal computer, editing on multiple screens opened for programming or like may cause a memory shortage error.
When the personal computer is used with only GX Developer booted, the number of edit screens should be up to 40 as a guideline.
- When Microsoft® Windows® XP or later is used, the following new functions cannot be used.
If any of the following new functions is used, this product may not operate normally.
 - Start of application in Windows® compatible mode
 - Fast user switching
 - Remote desktop
 - Big fonts (Details setting of Screen properties)
 - DPI setting other than 100 % (set the size of text and illustration other than [smaller-100%])
 - Windows XP Mode
 - Modern UI
 - Client Hyper-V
 - Touch
- In Windows Vista® or later, log in as a user having User authority or higher.

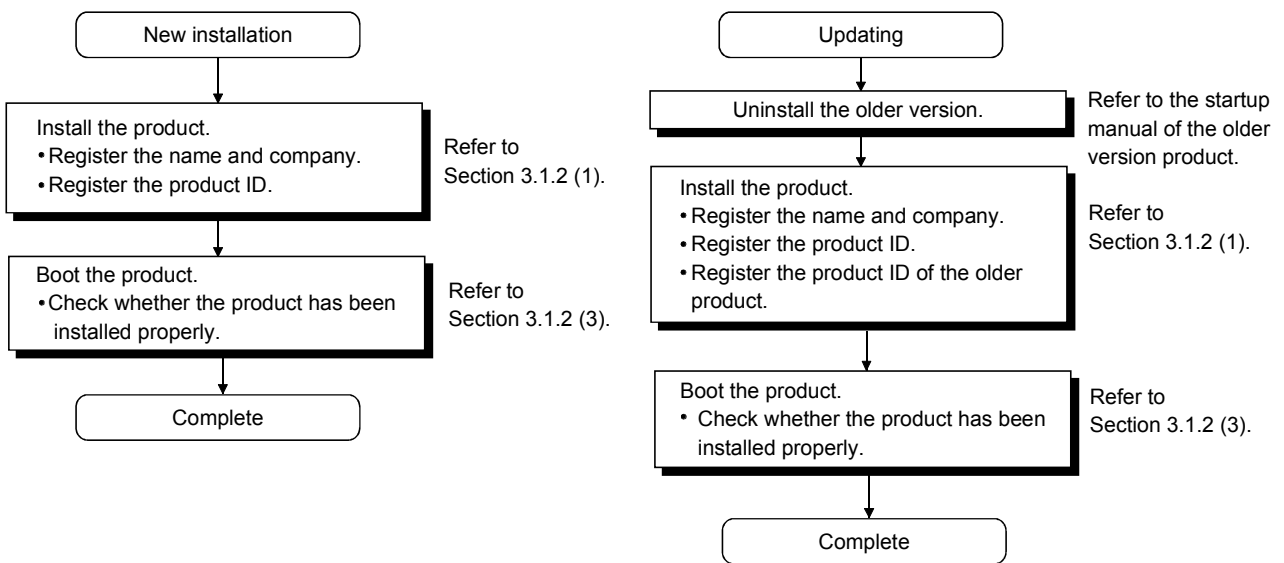
3. INSTALLATION AND UNINSTALLATION

This chapter explains how to install and uninstall the product.

3.1 Installation

3.1.1 Installing Procedure

Install GX Developer in the following procedure.



POINT
 If the DLL overwrite confirmation message appears during installation, choose "Yes" to overwrite the DLLs.
 If they are not overwritten, the product may not be run properly.

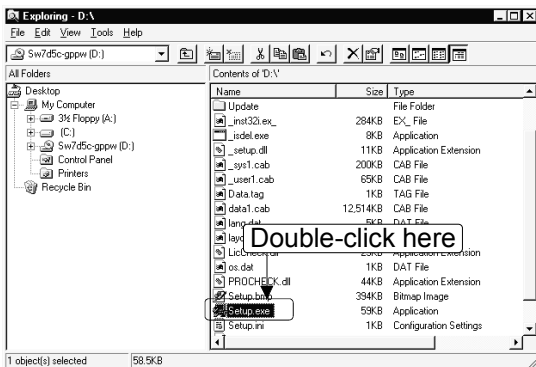


3.1.2 Installing Operation

Before starting installation, confirm the following.

POINT
<ul style="list-style-type: none"> • Terminate all the other applications running under Microsoft® Windows® Operating System before installation. • The installer may not work normally because the update program of operating system or other companies' software such as Windows Update and java update may start automatically. Please install the driver after changing the setting of the update program not to start automatically. • When the OS is Windows NT® Workstation Operating System Version 4.0, Microsoft® Windows® 2000 Professional Operating System, Windows® XP, Windows Vista®, Windows® 7, or Windows® 8, log on as a user with administrator privileges. • If the license key FD is valid, installing this product enables updating. (The license volume of the older version decreases by 1 license.)

(1) Installing the product
(The screens of Windows® 98 are used in the explanation.)



1) Start Explorer and click the drive in which the disk has been inserted.

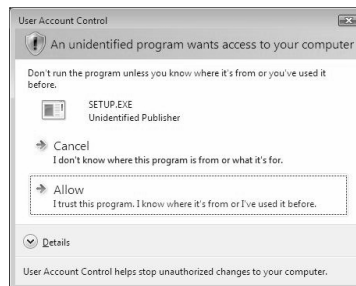
Double-click "setup.exe".

To display Explorer, right-click "Start" and select "Explorer".

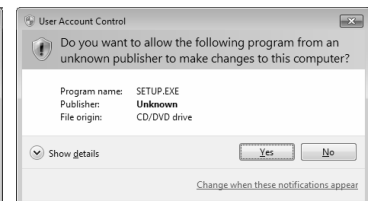
*: When user account control is enabled, the following screen appears.

Click "Allow" or the **Yes** button.

<Windows Vista® >

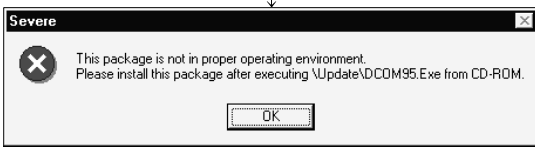


<Windows® 7 or later>

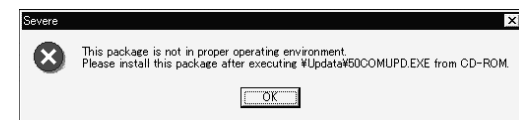
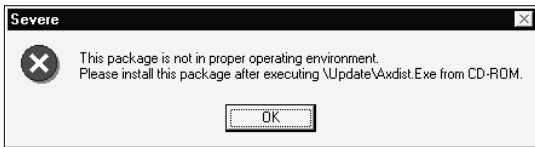


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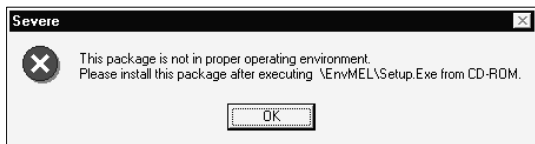
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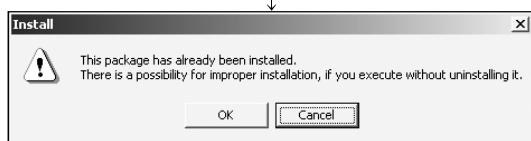
2) If either of the screens shown on the left appears, perform operation in accordance with the instructions given in (a) in "(2) When message appears at start of installation". After the operation is over, restart installation operation.



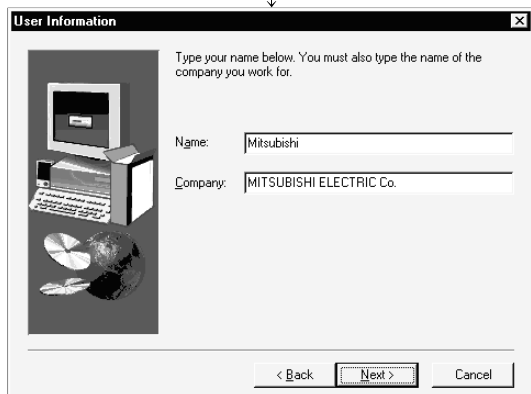
If the screen shown on the left appears, perform operation in accordance with the instructions given in (b) of "(2) When message appears a start of installation". After the operation is over, restart installation operation.



If the screen shown on the left appears, perform operation in accordance with the instructions given in (b) of "(2) When message appears at start of installation". After the operation is over, restart installation operation.



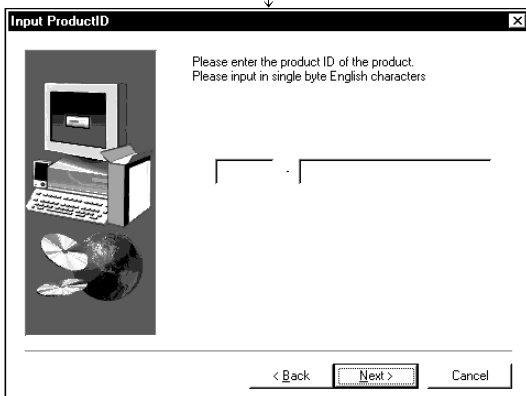
3) If the screen shown on the left appears, click the **OK** button to uninstall the product once and then reinstall the product.



4) Type the name and company, and click the **Next>** button. As the confirmation dialog box appears, perform operation in accordance with the message.

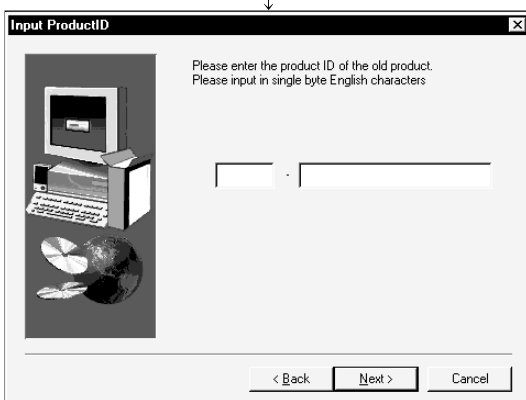
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5) Type the product ID and click the **Next>** button.

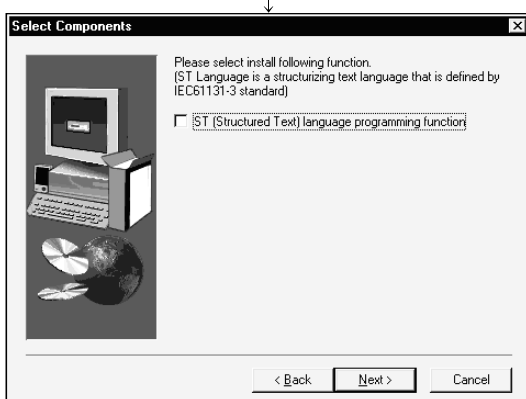
The product ID is described on the "License agreement" included in the product.



6) When the product is to be updated, the screen shown on the left appears. Type the product ID of the older product and click the **Next>** button.

The product ID is described on the "Software Registration Card" or "License agreement" included in the older product.

When newly installing the product, the left screen does not appear.

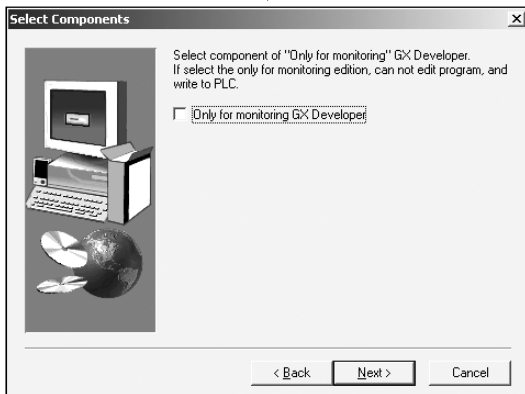


7) When using structured text (ST) language, check the corresponding check box, and click the **Next>** button.

When structured text (ST) language is not required, just click the **Next>** button.

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8) When using all functions, click the **Next>** button.

When installing monitoring-only GX Developer, turn on the check box and click the **Next>** button.

Installing the product as monitoring-only GX Developer prevents on-the-spot editing, accidental changes, and so on. (This disables such functions as write to PLC and PLC data deletion.)

Refer to the GX Developer Operating Manual for the functions available for monitoring-only GX Developer.



9) When you want to import to GX Developer the data created with MELSEC MEDOC or the data output as a printout data file, check the check box and click the **Next>** button.

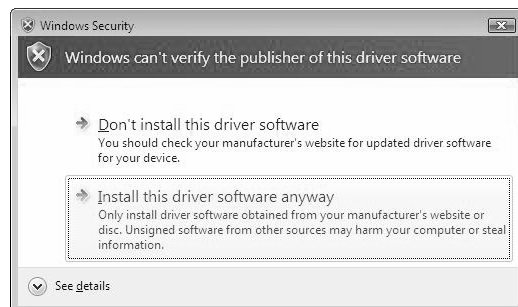


10) Specify the installation destination folder.

If the installation destination folder displayed is correct, click the **Next>** button.

If you change the destination folder, click the **Browse** button and specify a new drive and folder.

*: When the following screen appears, Click "Install this driver software anyway". This screen may appear in several times.

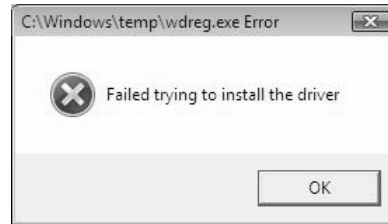
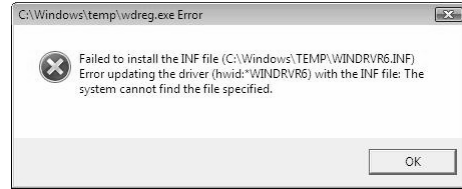


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The either of the following screens may appear behind the Windows Security screen. Then, press the **[Alt] + [Tab]** keys to bring it to the front.

Click the **[OK]** button on the following screens.



*: The following screen may appear at first installation. The following screen may appear behind another screen. Then, press the **[Alt] + [Tab]** keys to bring it to the front.

[Windows® XP]

Click the **[Continue]** button.

We checked operations in Windows® XP (Problems never occur after installation.)

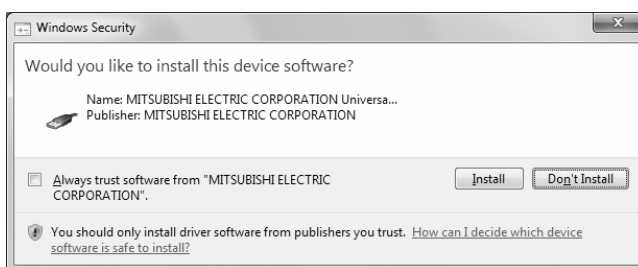
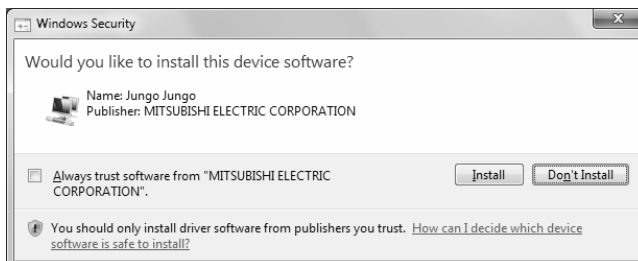


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[Windows Vista® or later]

Click Install button. (Although the displayed screen may differ for some operating systems, the operation is the same.)

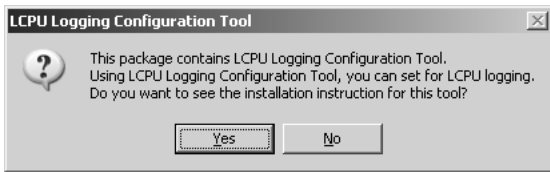


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11) This completes installation.

Click the **OK** button.

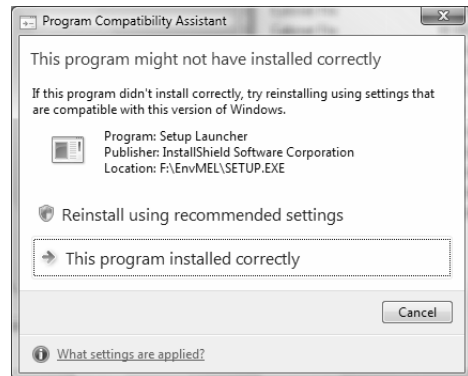
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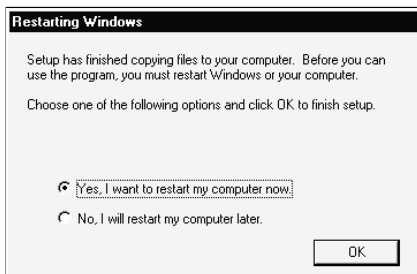
12) The screen shown on the left appears.

Click the **Yes** button to display the installation instruction.

*: When the following screen appears, regardless of the installation result, select "This program installed correctly".



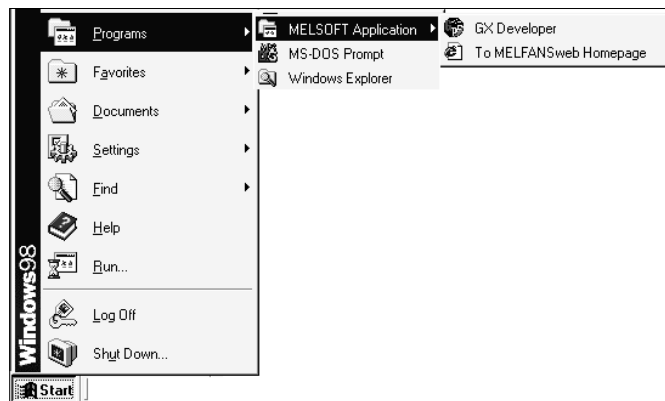
Do not select "Reinstall using recommended settings", because the installer installs an incorrect module. If it was selected by mistake, reinstall GX Developer in accordance with following POINT on the next page.



13) When the screen shown on the left appears, restart Windows® .

(Completion)

Installation of the product registers the icon as shown below.



REMARK

When Windows® XP Professional, Windows Vista® or Windows® 7 is used, the icons are registered to [Start] - [All Programs] - [MELSOFT Application].

POINT

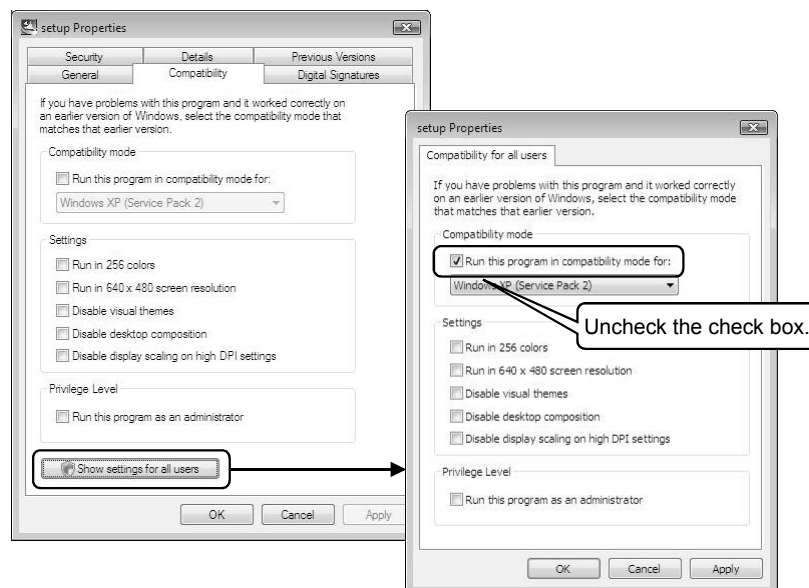
Note the following instructions when the installer is started from the hard disk drive of the personal computer.

If the "Program Compatibility Assistant" screen appears after the installation, select "This program installed correctly".

If "Reinstall using recommended settings" is selected by mistake, 'Windows XP compatibility mode' is set automatically.

Disable the 'Windows XP compatibility mode' by following the procedure described below, and perform the reinstallation.

1. Right-click on the setup.exe icon of the installation target in the Windows explorer, and open the "setup Properties" screen.
2. Select the "Compatibility" tab and click the "Show settings for all users" button.
3. Uncheck the "Run this program in compatibility mode for:" check box of compatibility mode in the "Compatibility for all users" tab and click the **OK** button .
4. Click the **OK** button on the "setup Properties" screen.



(2) When message appears at start of installation

When the installation of this product starts, the "This package is not in proper operating environment" message appears, disabling normal completion of installation.

In such a case, close all applications and perform the (a) to (c) operation.

(a) Installation of dcom95.exe or Axdist.exe

Execute "/Update/dcom95.exe" or "/Update/Jaaxdist.exe" within the product (CD-ROM).

Then, restart the personal computer and install the product.

The exe file to be executed on the corresponding operating system is indicated below.

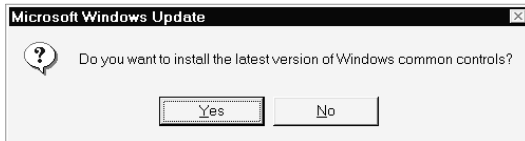
OS	File name
Microsoft® Windows® 95 Operating System	dcom95.exe
Microsoft® Windows® 98 Operating System	Axdist.exe
Microsoft® Windows NT® Workstation Operating System Version 4.0	Axdist.exe

(dcom95.exe and Axdist.exe are in the "Update" folder on CD-ROM.)

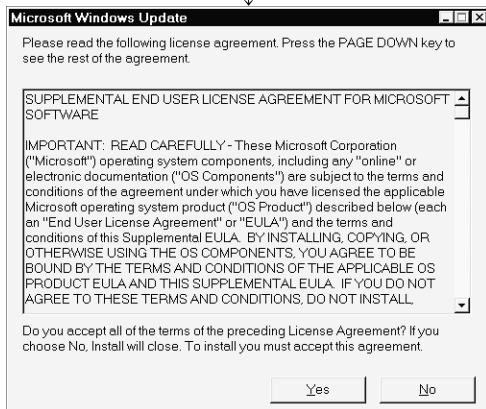
(b) Installation of 50comupd.exe

Execute "/Update/50comupd.exe" within the product (CD-ROM).

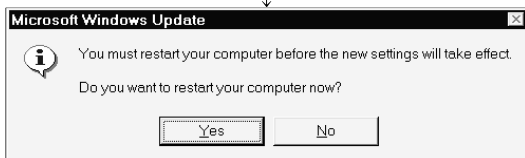
Then, restart the personal computer and install the product.



1) Click the **Yes** button to start updating Windows.



2) Accept the agreement on the left screen and click the **Yes** button.



3) Click **Yes** button to restart.
After a restart, install the product.

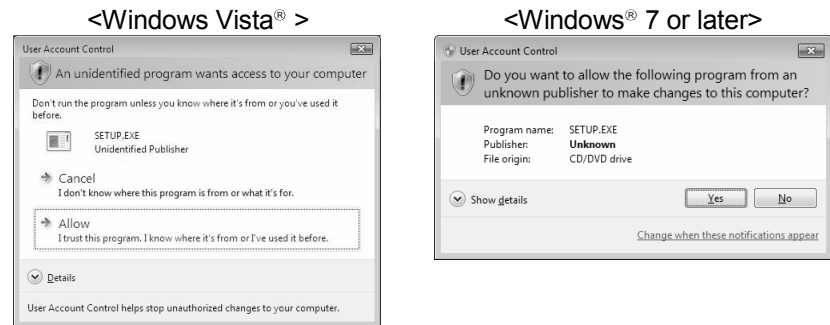
(c) Installation of EnvMEL

Execute "/EnvMEL/Setup.exe" within the product (CD-ROM).

Then, install the product.

* : When user account control is enabled, the following screen appears.

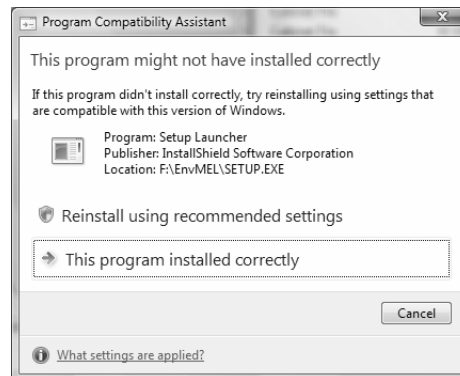
Click "Allow" or the **Yes** button.



* : After executing the above exe file, reinstall the product. If this product is not installed properly at this time, reboot the personal computer.

* : When the following screen appears, regardless of the installation result, select "This program installed correctly".

Do not select "Reinstall using recommended settings", because the installer installs an incorrect module.

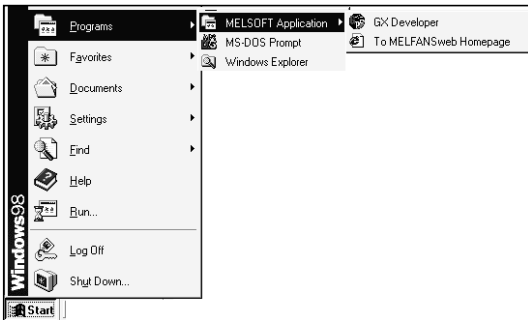


Point

When using Windows® 8, refer to the following document.

- TECHNICAL BULLETIN No.FA-A-0153

(3) Confirming that the product has booted
(The screens of Windows 98 are used in the explanation.)

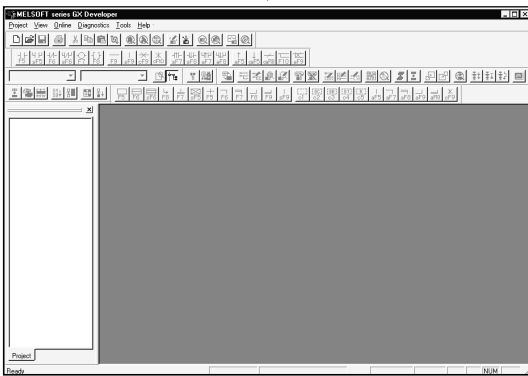


1) Click [Start] and move the cursor to the [Programs]-
[MELSOFT Application] menu.

*: [All Programs] appears when using Windows® XP Professional, Windows Vista® or Windows® 7.



2) Click the [GX Developer] menu.



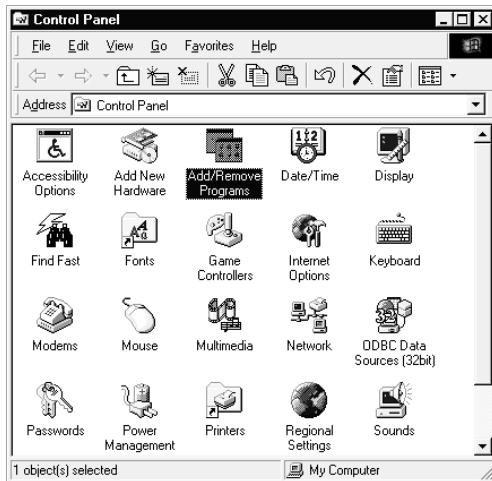
3) The product boots.

If displayed, the screen shown on the left indicates normal installation.

3.2 Uninstallation

This section describes the operation for removing the product from the hard disk.

Uninstallation of the product



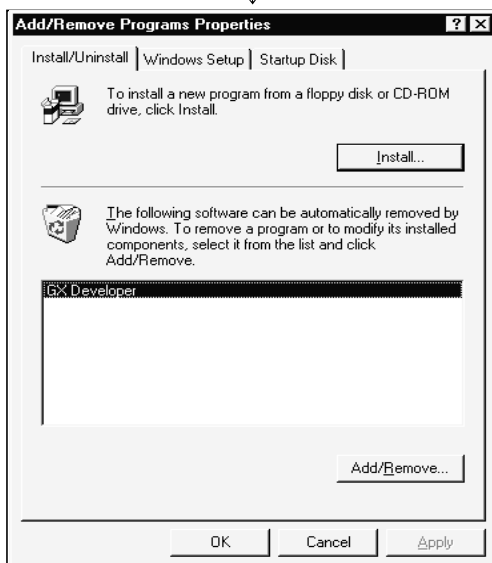
- 1) From the Control Panel, choose and double-click "Add/Remove Programs".
To display the Control Panel, choose [Start]-[Settings]-[Control Panel].

REMARKS

When using Windows® XP, select "Add or Remove Programs" from the Control Panel.

Select "Uninstall a program" on the Control Panel in Windows Vista® or later.

To display the Control Panel, select [Start] - [Control Panel].



- 2) Select the software package to be deleted/modified.
Select "GX Developer".

After selection, click the **Add/Remove...** button.

The screen shown on the left is the one for Windows® 98.
The displayed screen varies with the OS.

REMARKS

The screen shown on the left is that of Windows® 98.

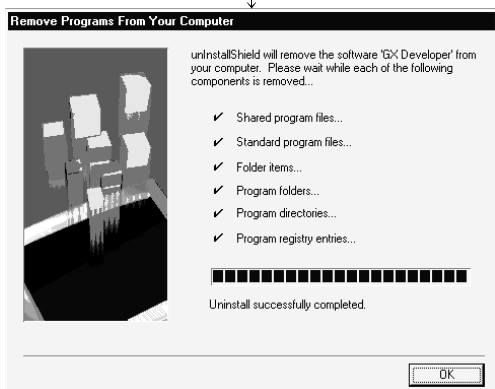
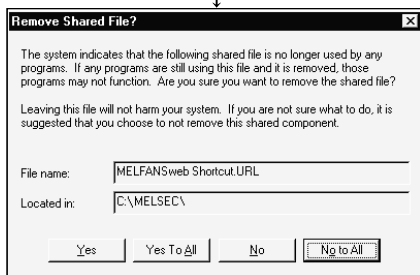
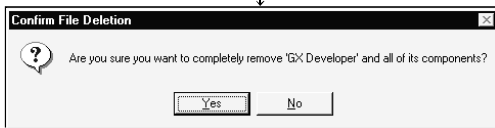
The displayed screen varies with the OS.

When using Windows® 2000 Professional, Windows® XP, perform the following operation.

- (a) Click "Change/Remove Programs".
- (b) Click "GX Developer".
- (c) Click **Change/Remove** button.

(To the next page)

(From the previous page)

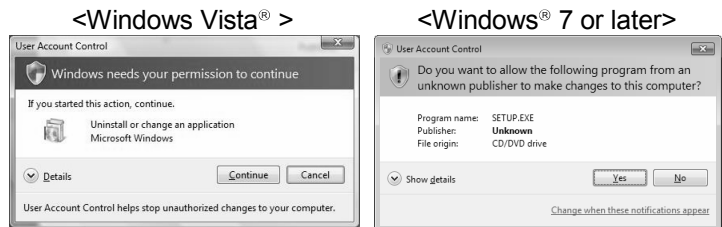


(Completion)

When Windows Vista® or later is used, select GX Developer on the "Uninstall or change a program" screen, and click "Uninstall/Change".

*: When user account control is enabled, the following screen appears.

Click the **Continue** button or the **Yes** button.



3) Check whether you will remove the software package or not.

When uninstalling it, click **Yes** button.

Uninstallation starts.

When not uninstalling it, click **No** button.

This returns to the preceding screen.

*: Components indicate the icons and files installed.

4) If the left screen has appeared, click the **No To All** button.

Clicking the **Yes** or **Yes To All** button deletes all shared files of Windows® compatible MELSOFT software.

Therefore, when deleting the product only, click **No To All** button.

5) Click **OK** button when the message indicating the end of removal has appeared.

When the message indicating completion has appeared, uninstallation is complete.

3.3 Installing the USB Driver

When Windows® 2000 Professional or later used, the USB driver must be installed to make CPU USB communication.

The following is the USB driver installation procedure.



- If the USB driver cannot be installed, check the following setting.
 - (1) When Windows® 2000 Professional is used

If you have selected "Block-Prevent installation of unsigned files" after [Control Panel] - [System] - [Hardware] - [Driver Signing], the USB driver may not be installed.

Choose "Ignore-Install all files, regardless of file signature" or "Warn-Display a message before installing an unsigned file" for [Driver Signing], and install the USB driver.
 - (2) When Windows® XP used

If you have selected "Block-Never install unsigned driver software" after [Control Panel] - [System] - [Hardware] - [Driver Signing], the USB driver may not be installed.

Choose "Ignore-Install the software anyway and don't ask for my approval" or "Warn-Prompt me each time to choose an action" for [Driver Signing], and install the USB driver.
- When the FXCPU is used

Since a USB driver depends on a connected device, install the driver according to the connected device.

 - (1) When connecting to the built-in USB port of the FX3G

Install the USB driver stored to the installation location of GX Developer, "Easysocket\USBDrivers".
 - (2) When connecting to the USB port of the FX-USB-AW or FX3U-USB-BD

Install the USB driver*1 on the CD-ROM included with the FX-USB-AW or FX3U-USB-BD.

For how to install the driver, refer to the following manual.

 - FX-USB-AW/FX3U-USB-BD User's Manual – USB Driver Installation Edition

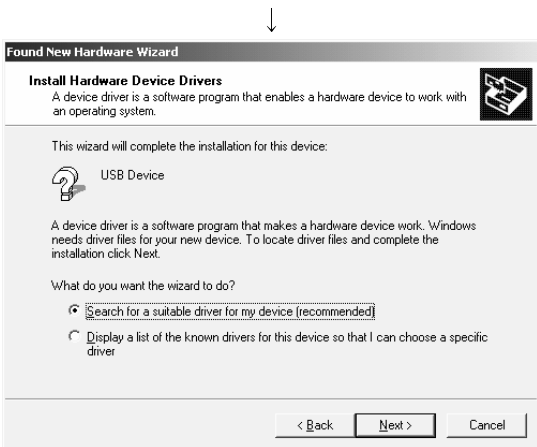
*1 GX Developer Version 8.72A or later stores a USB driver for the FX-USB-AW and FX3U-USB-BD to its installation location, "Easysocket\FXOptionDrivers".

[1] When Windows® 2000 Professional is used

The following indicates the procedure for installing the USB driver when using Windows® 2000 Professional.



1) Connecting the QCPU (Q mode), LCPU or built-in USB port of the FX3G to personal computer with USB cable displays the screen shown on the left. Click the **Next>** button.



2) Choose "Search for a suitable driver for my device (recommended)" and click the **Next>** button.



3) Check "Specify a location" and click the **Next>** button.

↓
(To the next page)

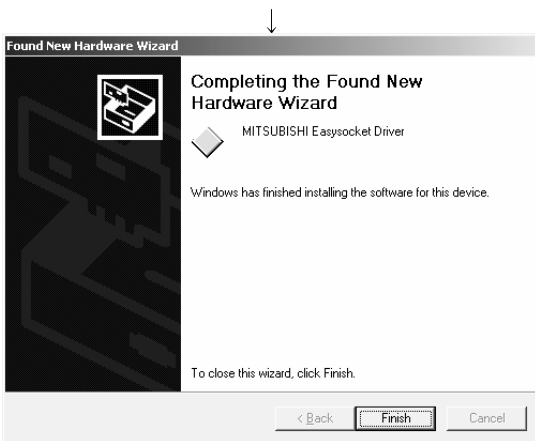
(From the previous page)



4) As the left screen appears, set the product installation destination "Easysocket\USBDrivers" and click the **Next>** button.

The screen shown on the left shows the example of setting C:\MELSEC\Easysocket\USBdrivers.

If volume MELSOFT products have been installed, browse the installation destination of the first product.



5) The screen on the left appears to indicate completion of installation.

Click the **Finish** button to terminate installation.

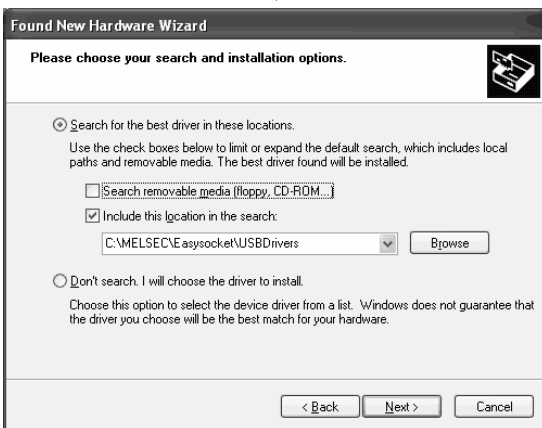
(Completion)

[2] When Windows® XP used

The following indicates the procedure for installing the USB driver when using Windows® XP.



1) Connecting the QCPU (Q mode), LCPU or built-in USB port of the FX3G to personal computer with USB cable displays the screen shown on the left. Choose "Install from a list or specific location [Advanced]" and click the **Next>** button.



2) As the screen on the left appears, choose "Include this location in the search". Check "Include this location in the search" and set "Easysocket\USBDrivers" of the folder where GX Developer was installed. After setting, click the **Next>** button. The screen shown on the left shows the example of setting C: \MELSEC\Easysocket\USBDrivers. If volume MELSOFT products have been installed, browse the installation destination of the first product.



3) As the screen on the left appears, click the **Continue Anyway** button.

REMARKS

Though the screen on the left appears during installation of the USB driver, we have confirmed that the USB driver operates properly using Windows® XP. (No problem will occur after installation of the USB driver.) Click **Continue Anyway** button to continue the installation of the USB driver.

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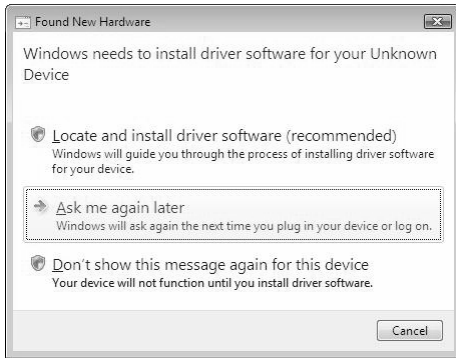
4) The screen on the left appears to indicate completion of installation.
Click the **Finish** button to terminate installation.



(Completion)

[3] When Windows Vista® used

The following shows installation procedure of USB driver when using Windows Vista® .

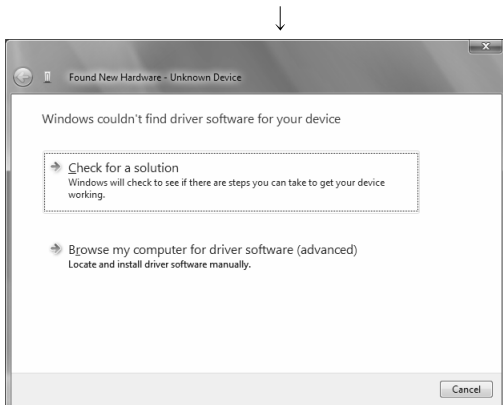
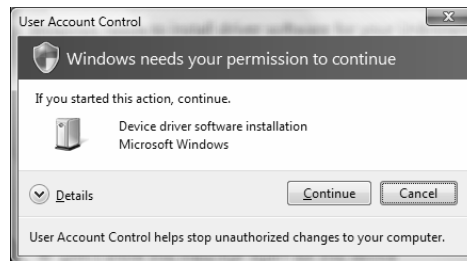


1) Connecting the QCPU (Q mode), LCPU or built-in USB port of the FX3G to personal computer with USB cable displays the screen shown on the left.

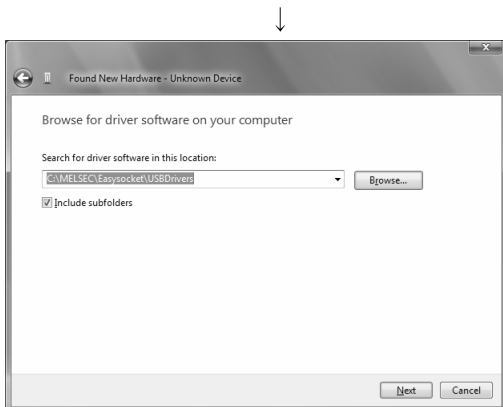
Choose "Locate and install driver software (recommended)" and wait until searching ends.

*: When user account control is enabled, the following screen appears.

Click the **Continue** button.



2) The left screen appears. Choose "Browse my computer for driver software (advanced)".



3) The left screen appears. Set installation location of GX Developer, "Easysocket\USBdrivers".

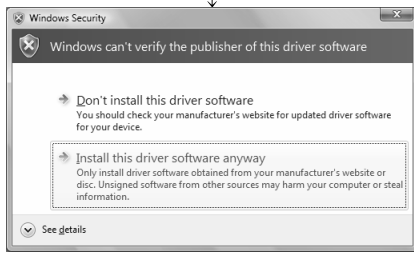
Then, click the **Next>** button.

The left screen shows an example when C:\MELSEC\Easysocket\USBdrivers is set.

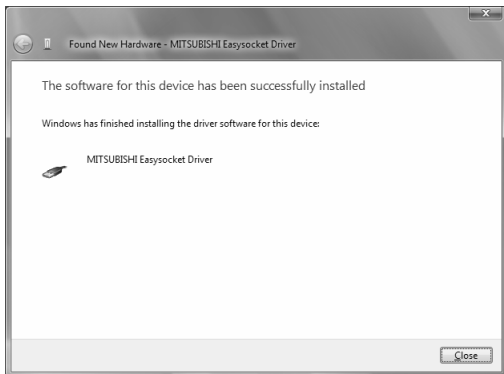
If multiple MELSOFT products have been installed, refer to the installation location of the first installed product.

(To the next page)

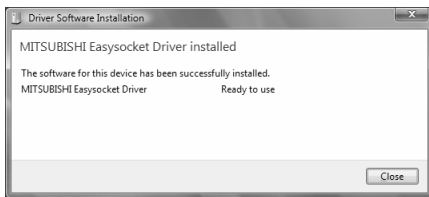
(From the previous page)



4) The left screen appears. Select "Install this driver software anyway".



5) The left screen appears. Click the **Close** button.

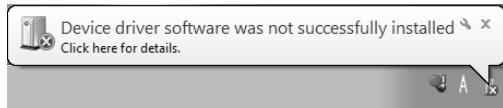


6) The left screen appears when the installation ends. Click the **Close** button to exit.

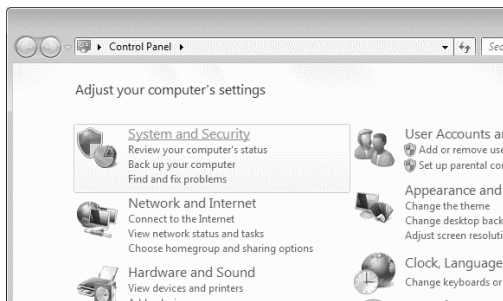
(Completion)

[4] When Windows® 7 or later used

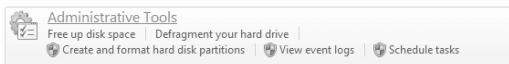
The following shows installation procedure of USB driver when using Windows® 7 or later.



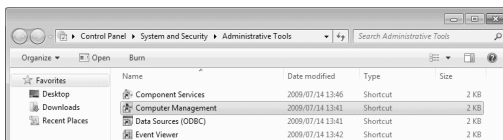
- 1) Connect the personal computer and the programmable controller CPU with USB cable, and then turn on the programmable controller CPU.
 <When using Windows® 7>
 The screen shown on the left is displayed.
 <When using Windows® 8>
 The screen is not displayed.



- 2) Select "System and Security" from the Control Panel.
 To display the Control Panel, select [Start] - [Control Panel].



- 3) The screen shown on the left appears. Select "Administrative Tools"

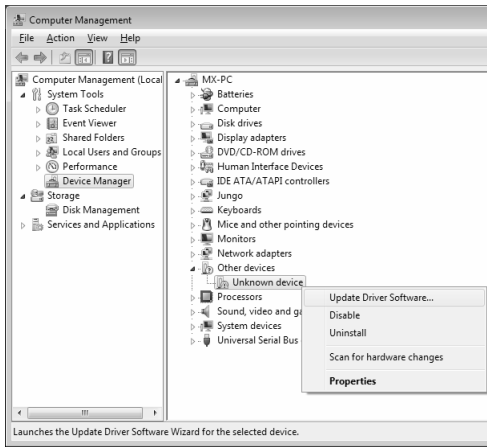


- 4) The screen shown on the left appears. Select "Computer Management" and double-click it.



(To the next page)

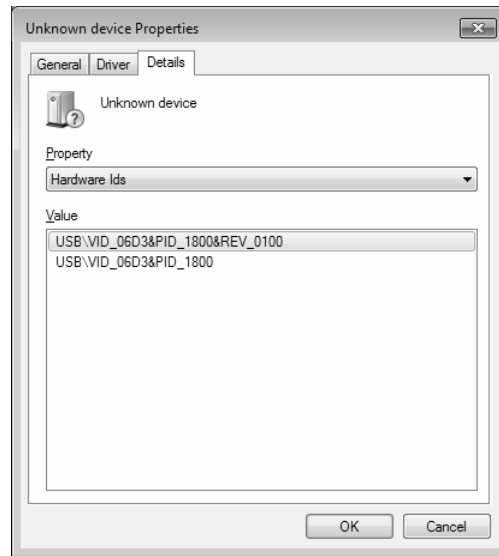
(From the previous page)



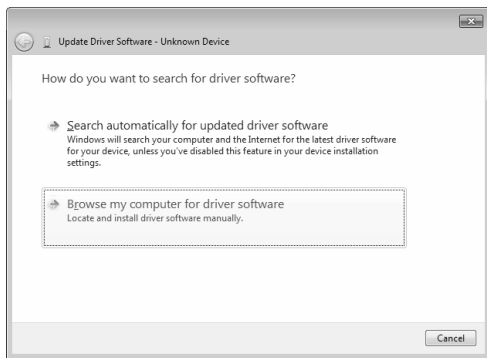
5) The screen shown on the left appears. Select "Device Manager" and double-click "Unknown device"

REMARKS

If multiple "Unknown devices" exist therefore cannot be specified, right-click "Unknown device" and select "Properties". The "Unknown device", whose "Hardware ID" is "USB\VID_06D3&PID_1800" on the <<Details>> tab of the properties screen, is the update target.

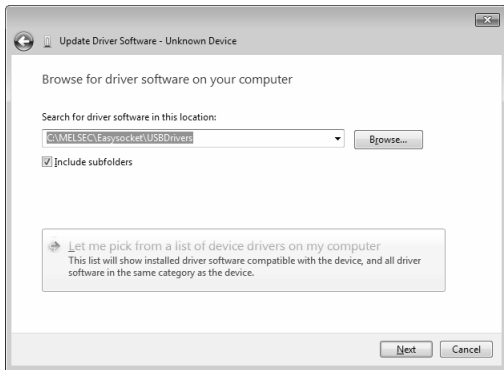


6) The screen shown on the left appears. Select "Browse my computer for driver software".



(To the next page)

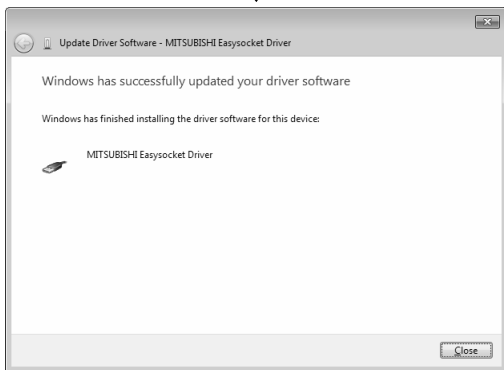
(From the previous page)



7) The screen shown on the left appears. Specify the installation location of GX Developer, "Easysocket\USBdrivers". Then, click the **Next>** button. The left screen is an example when C:\MELSEC\Easysocket\USBdrivers is specified. If multiple MELSOFT products have been installed, specify the installation location of the first installed product.



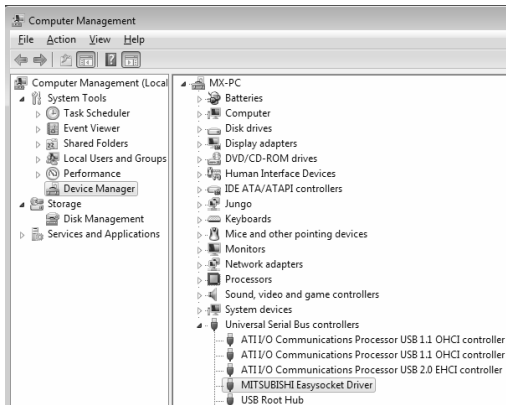
8) The screen shown on the left appears. Select the **Install** button.



9) The screen shown on the left appears. Click the **Close** button.

(To the next page)

(From the previous page)



10) "MITSUBISHI Easysocket Driver" is registered under "Universal Serial Bus controllers".



(Completion)

3.4 Updating the USB Driver

In Windows Vista® or later, if installing MELSOFT that is incompatible with each operating system before installing each operating system compatible MELSOFT, updating the USB driver is required.

Update the USB driver after installing each operating system-compatible MELSOFT.

The USB driver has the following two types:

- USB driver for programmable controller connection
- USB driver for GOT connection (used for the GOT transparent mode.)

(1) Procedure for updating the USB driver for programmable controller connection

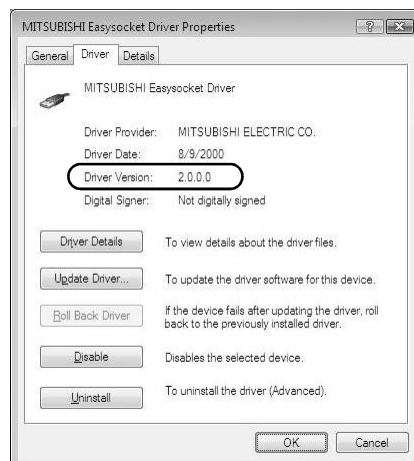
(a) Checking method

Whether an update of the USB driver is required or not can be checked by its version.

Start the Windows Device Manager while the personal computer is connected to the programmable controller with USB, right-click "MITSUBISHI Easysocket Driver", and select [Properties].

Update is necessary if the version shown in the <<Driver>> tab of the properties screen is the following.

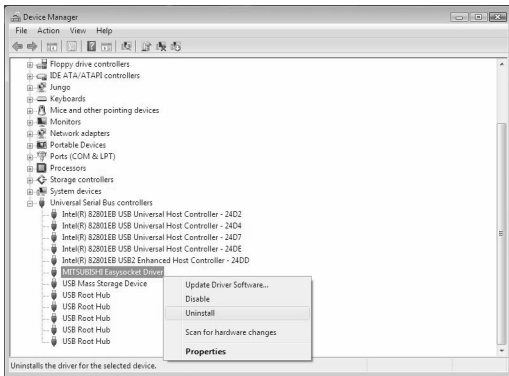
- Windows Vista® is used : "2.0.0.0" or earlier
- Windows® 7 is used : "3.0.0.0" or earlier
- Windows® 8 is used : "4.0.0.0" or earlier



(b) Procedure for update

1) Connect the programmable controller to the personal computer with USB cable.

2) Start the Windows Device Manager, right-click "MITSUBISHI Easysocket Driver" as shown left, and select [Uninstall].



3) The warning dialog box as shown on the left appears. Check the "Delete the driver software for this device" check box, and click the [OK] button.



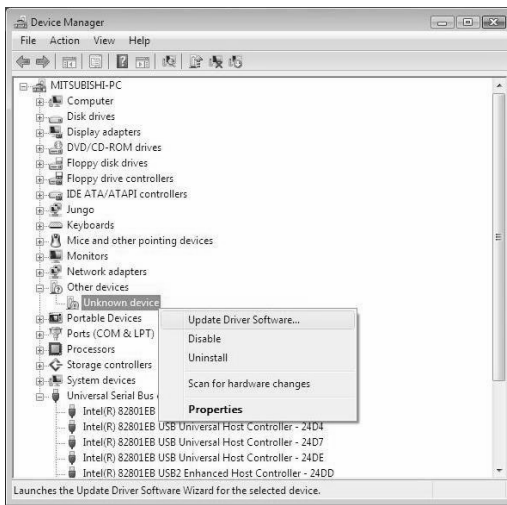
4) Disconnect the USB cable and reconnect it to the same USB port after 5 seconds.

When using Windows Vista®, the following screen is displayed. Select "Ask me again later".



(To the next page)

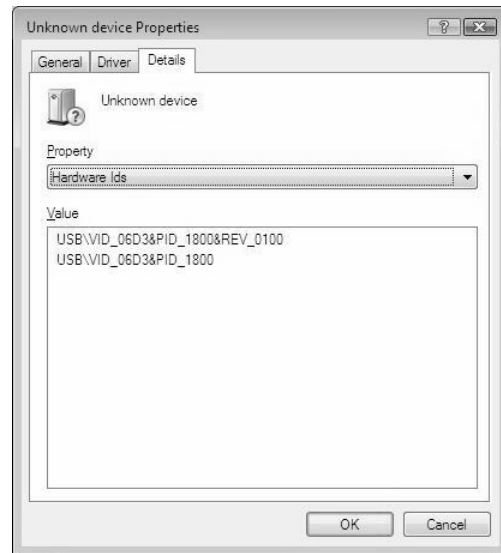
(From the previous page)



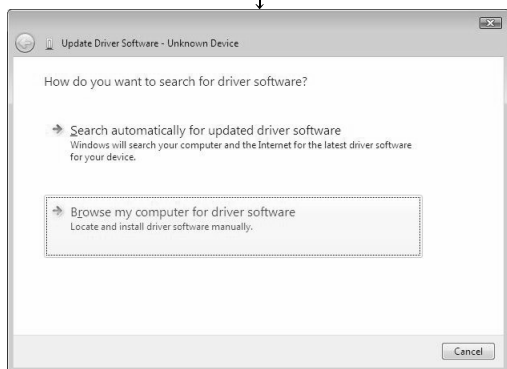
5) Right-click "Unknown device" in the Windows Device Manager as shown left, and select [Update Driver Software...].

REMARKS

If multiple 'unknown devices' exist therefore cannot be specified, right-click "Unknown device" as shown left and select [Properties]. The "Unknown device", whose "Hardware Ids" is "USB\VID_06D3&PID_1800" on the "Details" tab of the properties screen, is the update target.



6) The left screen appears. Select "Browse my computer for driver software".



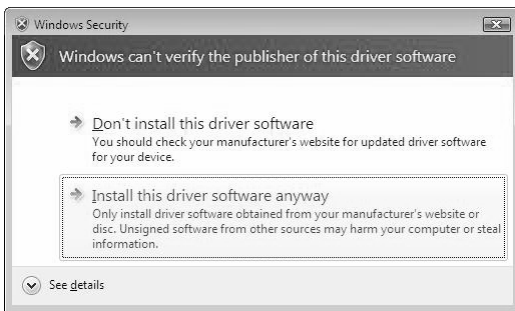
(To the next page)

(From the previous page)



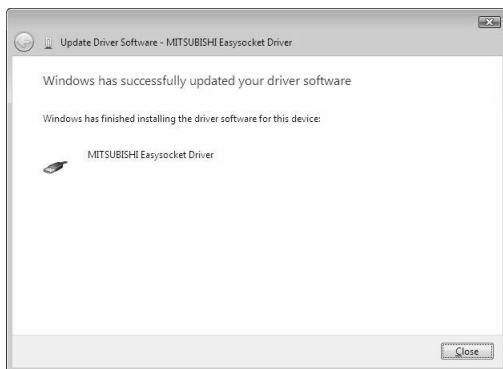
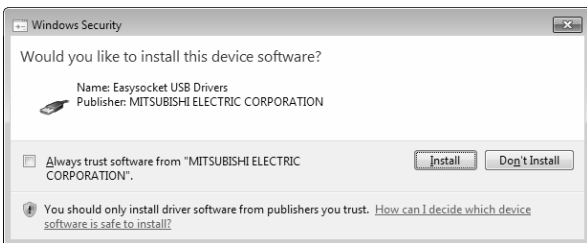
7) The screen shown on the left appears. Set installed location of GX Developer, "Easysocket\USBDrivers". Then, click the **Next>** button.
The left screen is an example when C:\MELSEC\Easysocket\USBDrivers is set. If multiple MELSOFT products have been installed, refer to the installation location of the first installed product.

<Windows Vista® >



8) The left Windows confirmation dialog box appears. Click "Install this driver software anyway" or the **Install** button.

<Windows® 7 or later>



9) The screen shown on the left appears. Click the **Close** button. The update is complete.

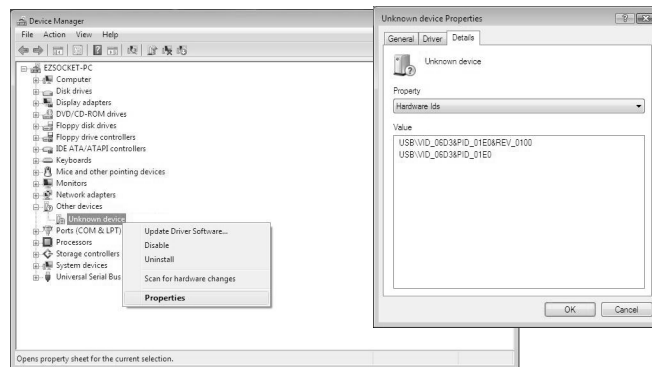
(Completion)



(2) Procedure for updating the USB driver for GOT connection
 (a) Checking method

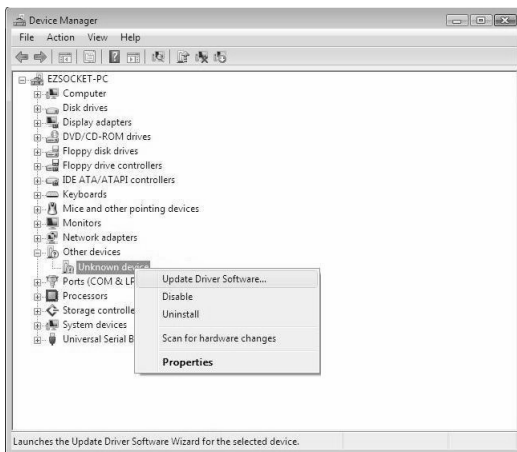
Reset the power on the GOT and start the Windows Device Manager while the personal computer is connected to the GOT with USB. If "MITSUBISHI GOT1000 USB Controller" is not displayed under "Universal Serial Bus controllers", but "Unknown device" is displayed under "Other devices", the device needs to be updated.

The "Unknown device", whose "Hardware Ids" is "USB\VID_06D3&PID_01E0" on the "Details" tab of the properties screen, is the update target.



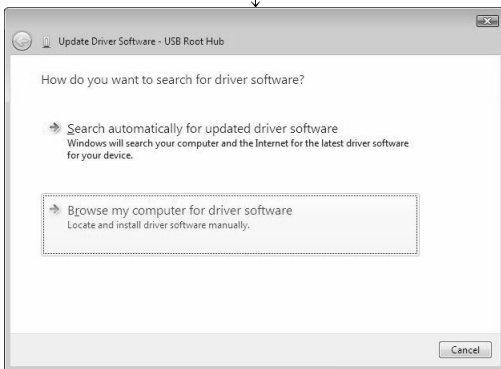
(b) Procedure for update

- 1) Connect the GOT to the personal computer with USB cable.
- 2) Start the Windows Device Manager, right-click "Unknown device" as shown left, and select [Update Driver Software...].



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(From the previous page)

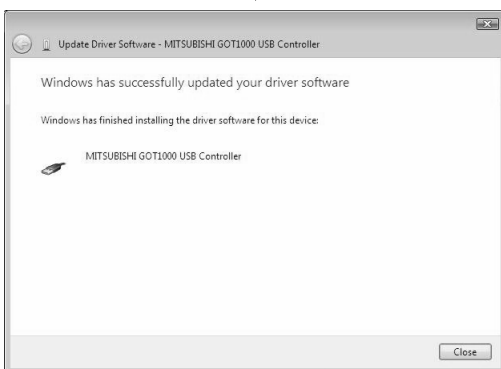


3) The screen shown on the left appears. Select "Browse my computer for driver software".



4) The screen shown on the left appears. Set the installed location "EZSocket\EZSocketGOT\Drivers" and click the **Next** button.

The left screen is an example when C:\MELSEC\EZSocket\EZSocketGOT\Drivers is set. If multiple MELSOFT products have been installed, refer to the installation location of the first installed product.



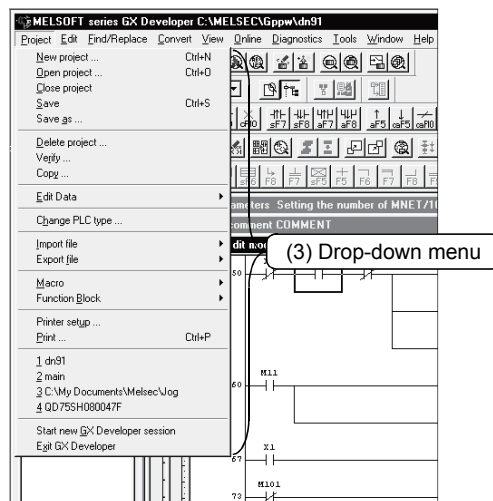
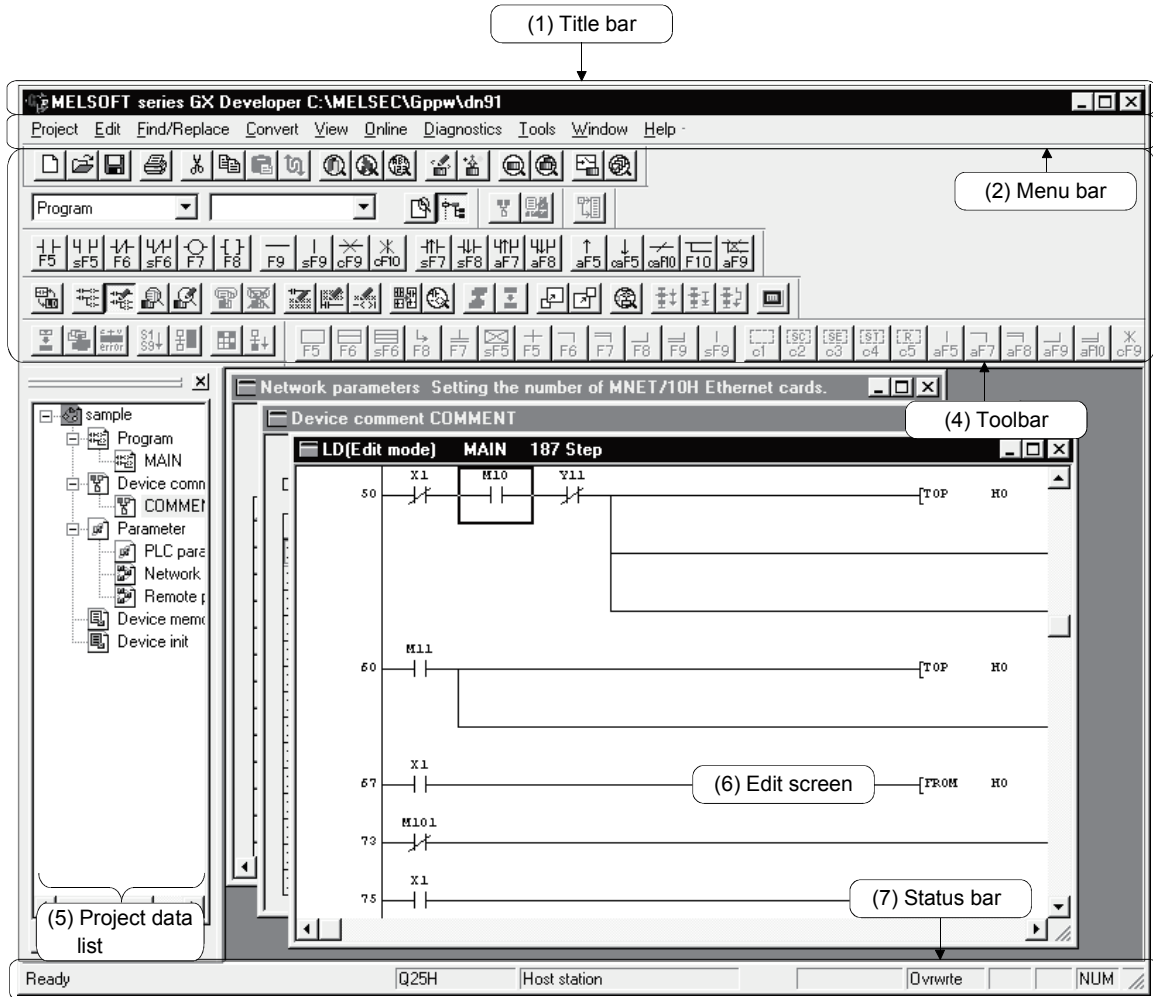
5) The screen shown on the left appears. Click the **Close** button. This completes the update of driver software.

(Completion)

4. USING GX Developer

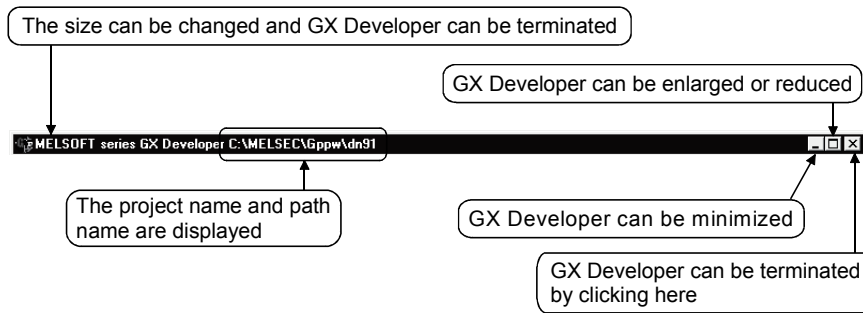
4.1 GX Developer Edit Window and Various Tools

This section describes the GX Developer window configuration and various tools.



(1) Title bar

Indicates the name of the open project

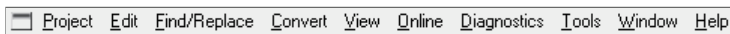


To close multiple windows at once, select [Windows] → [Close all windows].

(2) Menu bar

Displays the names of GX Developer menus.

If a desired menu is selected, the drop-down menu is displayed so that various functions can be used.

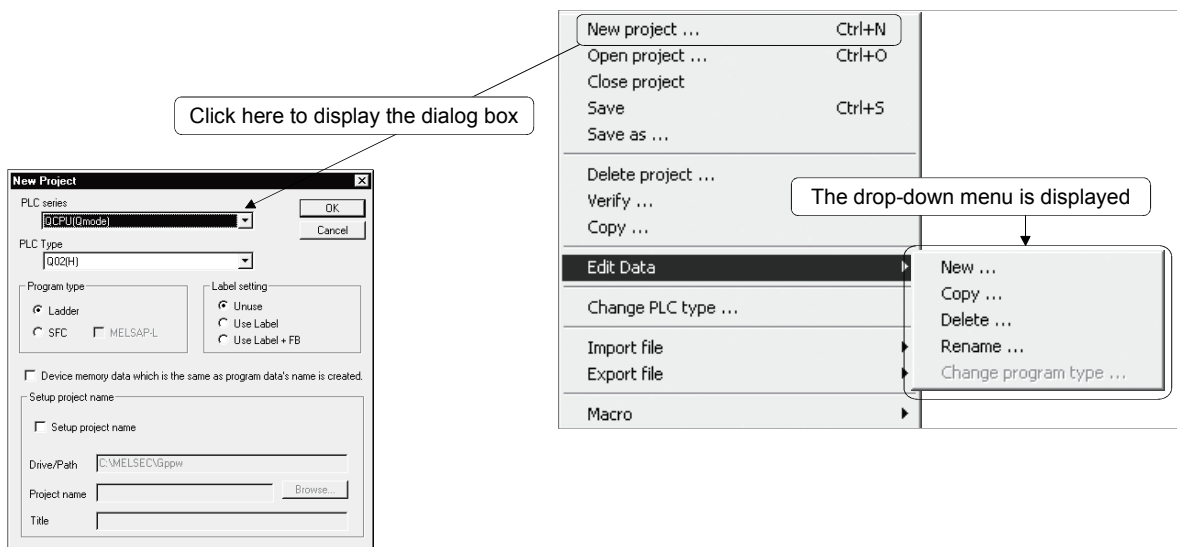


(3) Drop-down menu

Displays the names of GX Developer functions.

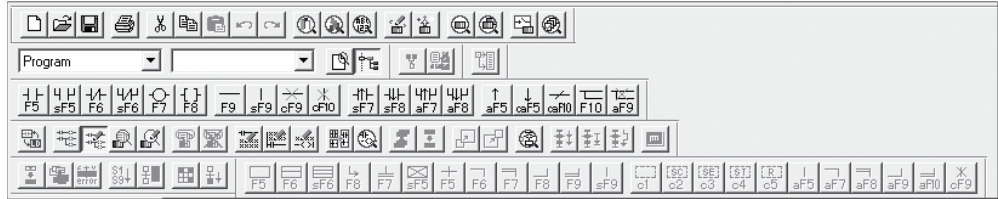
When "▶" is displayed at the rightmost end of the menu item, the drop-down menu of the selected item is displayed.

When "..." is displayed next to a function name, a setup dialog box is displayed by selecting the item.



(4) Toolbar

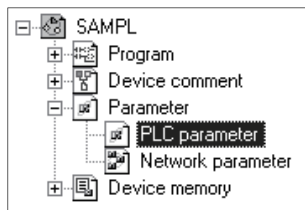
Displays the buttons for the frequently used functions assigned on the menu bar.



(5) Project data list

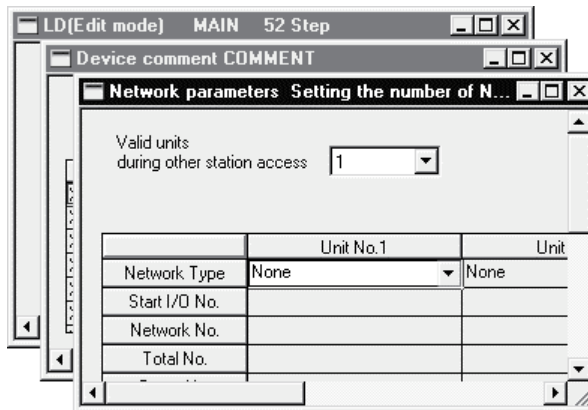
Lists project data by class.

The circuit creation dialog box and other dialog boxes can be directly called.



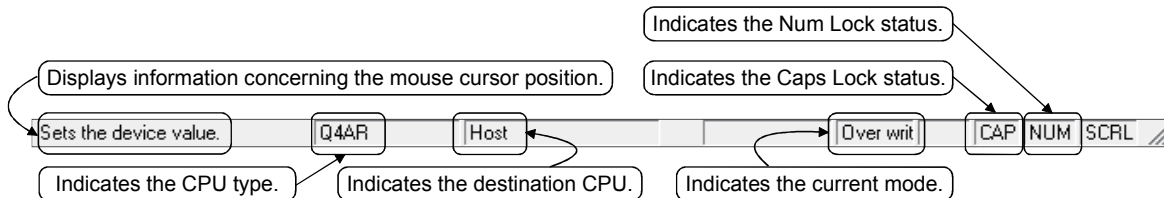
(6) Edit window

Displays the circuit creation dialog box and comment creation dialog box to make settings for circuits, comments, and parameters.



(7) Status bar

Displays the GX Developer status information.

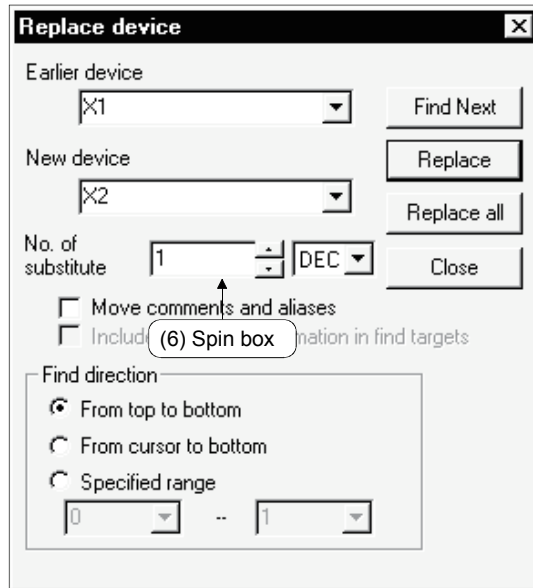
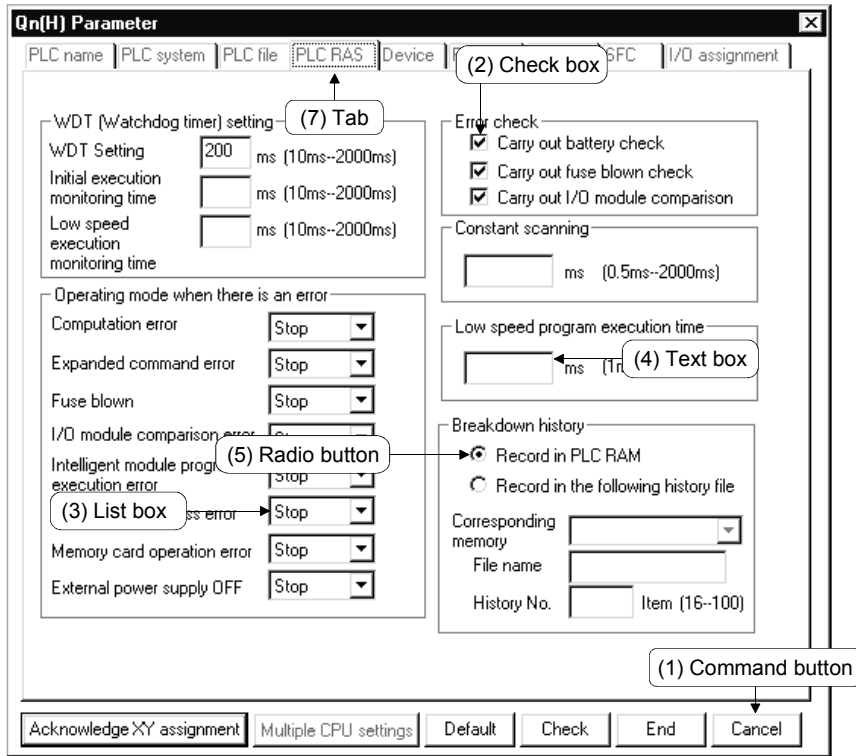


(8) Displaying a handy menu

Work efficiency can be increased by clicking the right mouse button to display a menu of items related to the current work.

When you are editing a circuit or comment, you can select [Cut], [Copy], [Paste] or [Find Device] from this menu.

4.2 Dialog Box Basic Operations



(1) Command button

Buttons such as and .

Click the button to execute the item.

(2) Check box

Click a checkbox to select and execute an item.

(3) List box

Click to drop-down the list of the items, then click a desired item to select.

(4) Text box

Enter characters with the keyboard.

The text box may permit only numeric values or letters.

(5) Radio button

Click for the item to be selected.

(6) Spin box

Spin boxes may permit direct value input or selection of a value by clicking .

When inputting a value directly, click and enter a numeric value with the keyboard.

When clicking for selecting a value, clicking increments the value and clicking decrements the value.

(7) Tab

For tab switching, click the desired tab in the property pages dialog box.

APPENDICES

APPENDIX 1 Questions and Answers about Personal Computers

This section provides basic information in question & answer style Please see the following information as necessary.

- Q1. What happens when the monitor with a resolution of 800x600 pixels or lower is used?
- A1. The icon near the edges of the screen may not be displayed entirely, so that the operations cannot be performed using that icon.
Read the manual and set the dedicated resolution high enough to display the entire icon.
- Q2. What is the operating environment?
- A2. It refers to a combination of hardware equipment needed to fully utilize GX Developer, GX Simulator, etc., and basic operating software (Refer to Section 2.2).
- Q3. Is the MELSOFT software package available under Microsoft® Windows® 3.1 operating system?
- A3. The MELSOFT software package is not available under Windows® 3.1.
- Q4. What happens when the CPU is Pentium® 133MHz or slower?
- A4. When the clock speed of the CPU is slower than 133MHz, it takes longer for operations such as screen display.

APPENDIX 2 Notes on GX Developer

This section lists the questions and answers to assist you in solving the problems encountered during GX Developer operation.

Q1. Each circuit diagram is enclosed in white lines during circuit editing depending on the type of video card installed in the personal computer (card storing the characters, figures, and pictures to be displayed on the monitor as data). How can these white lines be deleted?

A1. Make necessary settings from the Windows® 95/ Windows® 98/ Windows® Me/ Windows NT® Workstation 4.0/ Windows® 2000 "Control Panel".

Operating procedure

(1) Open "Control Panel".



(2) Open "System".



(3) Click the "Performance" tab.



(4) Click the "Graphics" button.



(5) Set "Hardware acceleration" to the entry (second entry) next to "None".



Q2. What action should be taken for the message "Can not allocate Share memory" or "Initialization failed" displayed at the start of the GX Developer software package?

A2. Restart the GX Developer software package or restart Windows® 95/ Windows® 98/ Windows® Me/ Windows NT® Workstation 4.0/ Windows® 2000 and start the GX Developer software package again.

Q3. Why does it take time to display the dialog box after starting setup.exe on Section 3.1.2?

A3. It takes time when the memory-resident program (such as Virus checker) is running.

- Q4 What points are to be noted in installing Anti-virus Software (commercially available software package) on the personal computer.
- A4 (a) At the start of Anti-virus Software
Because it takes time for initialization at the start of Anti-virus Software, other applications in "StartUp" group may not be started.
In addition, it may take time to accept the subsequent operations after storage into the task tray.
These phenomena vary depending on the specifications of the operating environment (CPU, memory, etc.).
It is well known that this problem occurs frequently when the CPU is Pentium® 100 MHz or lower.
- (b) Effects on the system
When Anti-virus Software is already started, system load increases because Anti-virus Software checks the files.
For this reason, it may take extra time for starting the application depending on the operating environment.
These phenomena vary depending on the operating environment specifications (CPU, memory, etc.).
It is well known that this problem occurs frequently when the CPU is Pentium® 100 MHz or lower.
- (c) Effects on applications
When applications cannot be started or run normally after Anti-virus Software has been installed, check the operations of the applications according to the following procedure:
- 1) Uninstall Anti-virus Software and restart the system to check the operations of the applications.
If the same problem recurs, the cause of the problem is not Anti-virus Software.
In such a case, contact our application support engineers.
 - 2) When the applications run normally after Anti-virus Software has been uninstalled, install Anti-virus Software again and change the monitor setting to "Custom Monitor." In addition, change the selection of the checkboxes for Extension Designation or Monitor Function.
- * When the system does not work well after the step 1) has been performed, install Windows® 95/ Windows® 98/ Windows NT® Workstation 4.0 and/or applications again.

- Q5. When a program is read from a floppy disk, it cannot be read from the floppy disk so long as the disk is write protected. Why not?
- A5. Because multiple GX Developer can be started, access to files in the same floppy disk may occur simultaneously. In such a case, an access flag is written to a floppy disk at the time of floppy disk access to prevent the files in the disk from being accessed from another GX Developer. Namely, no files can be read in this system so long as the floppy disk is write protected.

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SPREAD

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GX Developer Version 8

Operating Manual (Startup)

MODEL	GXDEV8-O-IN-E
MODEL CODE	13JU40
SH(NA)-080372E-O(1307)KWIX	



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