



RS-232 / USB Conversion adaptor

USER'S MANUAL

Manual Number	JY997D23401D
Date	Sep 2008

This manual describes the part names, external dimensions and specifications of the product. Before use, read this manual and manuals of relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions. And, 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.

Registration
The company name and the product name to be described in this manual are the registered trademarks or trademarks of each company.

Effective Sep 2008
Specifications are subject to change without notice.
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Safety Precaution (Read these precautions before using.)

This manual classify the safety precautions into two categories:

⚠ DANGER and **⚠ CAUTION**.

⚠ DANGER	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 circumstances, procedures indicated by **⚠ CAUTION** may also be linked to serious results.
In any case, it is important to follow the directions for usage.

MOUNTING PRECAUTIONS **⚠ CAUTION**

- Use the conversion adaptor in the environment that satisfies the general specifications described in GT10 User's Manual. Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl₂, H₂S, SO₂ or NO₂), flammable gas, vibration or impacts, or exposed to high temperature, condensation, or rain and wind. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.

STARTUP/MAINTENANCE PRECAUTIONS **⚠ CAUTION**

- Do not disassemble or modify the conversion adaptor. Doing so can cause a failure, malfunction, injury or fire.
- Do not touch the conductive and electronic parts of the conversion adaptor directly. Doing so can cause a unit malfunction or failure.
- When unplugging the conversion adaptor connected to the unit, do not hold and pull the cable portion. Doing so can cause the unit or cable to be damaged or can cause a malfunction due to a cable connection fault.

DISPOSAL PRECAUTIONS **⚠ CAUTION**

- When disposing of the product, handle it as industrial waste.

TRANSPORTATION PRECAUTIONS **⚠ CAUTION**

- Make sure to transport the conversion adaptor and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of this manual, as they are precision devices. Failure to do so may cause the unit to fail. Check if the unit operates correctly after transportation.

Related Manuals

When using the conversion adaptor, prepare the following manual as well. As GT10 User's Manual and GT Designer2 Version2 Basic Operation Data Transfer Manual are sold separately, inquire at our local distributor for it. For details of a PLC to be connected, refer to the PLC user's manual respectively.

Manual name	Manual Number (Model Code)	Contents
⊙GT10 User's Manual	JY997D24701 (09R819)	Describes the GT10 hardware-relevant content such as part names, external dimensions, mounting, wiring, specifications, and introduction to option devices.
⊙GT Designer2 Version2 Basic Operation/ Data Transfer Manual	SH-080529ENG (1D7M24)	Describes methods of the GT Designer2 installation operation, basic operation for drawing and transmitting data to GOT1000 series

⊙: Indispensable manual

For the manuals relevant to GOT1000, refer to the PDF manuals stored in the screen creation software used. For details about a PLC to be connected, refer to the manuals of PLCs respectively. For the FA transparent functionality, refer to the GX Developer Version□ Operating Manual.

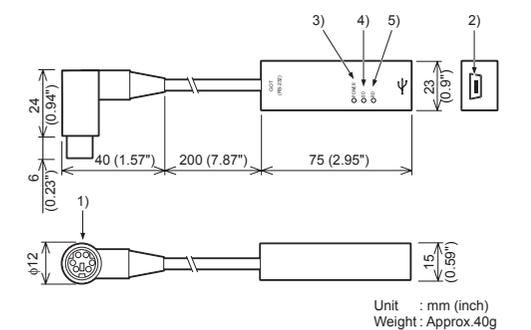
Bundled Items

Product	GT10-R2TUSB 5S RS-232/USB conversion adaptor
Included items	USB driver software (CD-ROM) User's Manual (this manual)

1. Overview

The conversion adaptor convert the GOT's RS-232 interface to USB, thereby enabling the transparent functionality to transfer and monitor the sequence program, and the project data transfer between the GT10 main unit and the PC. Use this conversion adaptor with the GT09-C30USB-5P type USB cable.

2. Part Names and External Dimensions



No.	Name	Specifications
1)	RS-232 Connector	MINI-DIN 6 Pins (male) : For connecting GOT
2)	USB Connector	USB MINI : For connecting USB cable
3)	Display LED (POWER)	Green: Lit when the power is properly supplied (Lit when connected to the PC with a USB cable)
4)	Display LED (SD)	Red: Lit while sending data (GOT → PC)
5)	Display LED (RD)	Red: Lit while receiving data (PC → GOT)

3. Specifications

3.1 Operating atmosphere

Must be free of lamp black, corrosive gas, flammable gas, or excessive amount of electroconductive dust particles and must be no direct sunlight. (Same as for saving) General specifications are the same as the GT10 main unit. For general specifications, refer to the GT10 main unit manual.

3.2 Performance Specifications

Level Conversion	Bidirectional between RS-232 and USB	
Communication Type	GOT	RS-232
	PC	USB2.0 (For full speed)
Transmission speed	115,200/ 57,600/ 38,400/ 19,200/ 9,600/ 4,800 bps	
Connector shape	To GOT	MINI DIN 6Pins (Male)
	To USB cable	USB MINI-B 5Pins (Receptacle)
Supply voltage	RS-232 side	DC5V ± 5% (from GOT)
	USB side	DC5V ± 5% (from PC)
Power consumption	RS-232 side	200mW (40mA/DC5V)
	USB side	275mW (55mA/DC5V)

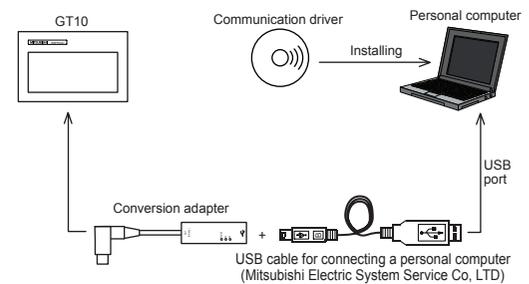
3.3 System Requirements (Communication driver)

OS	Microsoft® Windows®98, Windows®98SE Microsoft® Windows®Millennium Edition (Windows® Me) Microsoft® Windows®2000 Microsoft® Windows®XP
Software	GT Designer2 GX Developer

3.4 USB cable (sold separately)

Product name	Model name	
USB cable	GT09-C30USB-5P (3m)	Mitsubishi Electric System Service Co, LTD

4. System Configuration



5. Connecting Procedure

- Turn the GOT power off.
- Connect the RS-232 connector of the conversion adaptor to the GOT.
- Connect the USB MINI-B connector of the USB cable to the conversion adaptor.
- Connect the USB A connector of the USB cable to the personal computer.
- Turn the GOT power on.
- Make sure the display LED (POWER) lamp of the conversion adaptor is lit. (The display LED (POWER) lamp of conversion adaptor lights when power is supplied normally by the personal computer.)

6. Driver Installation

Procedure for installing the driver is explained below.

Windows® XP installation follows.

- Windows® 98, Windows® 98SE, Windows® Millennium Edition, and Windows® 2000, the installation method will vary.
- Installation of the driver is canceled during the following process, the installation is not carried out correctly.
If the installation is canceled, uninstall the driver and install again.
Please refer to Chapter 8 for instructions on uninstalling the driver.

Note: This product requires USB Driver Installation for each USB port to be connected. To use multiple USB ports, connect this product to each port, and install the driver individually. (Depending on the PC environment, Driver installation may be done automatically.)

Please install the driver with the following procedure.

- When the USB cable is connected to the personal computer, the following screen is displayed. (Installation of the software for USB driver)



Insert the included CD-ROM into the personal computer's CD-ROM drive. Click [Next >].

The installation of the USB driver software will begin.

- If using Windows® 98, Windows® 98SE, Windows® Millennium Edition, and Windows® 2000, A window to select the location of the installation files. Please select the CD-ROM drive.

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



Click [Continue Anyway].



3) The following screen is displayed.



Click [Finish].
If using Windows® 2000 or Windows® XP, proceed to step 4).

- If Windows® 98, Windows® 98SE or Windows® Millennium Edition is used, installation of the USB Serial Port software begins, and ends automatically. The CD-ROM can be removed from the personal computer at this time. The installation of the USB driver software is finished.

4) The following screen is displayed.



Click [Next >].
The installation of the USB Serial Port software will begin.

- If using Windows® 2000, a screen to select the location of the installation files is displayed. Please select the CD-ROM drive.

5) The screen of 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.
The CD-ROM (USB driver software) can be removed from the personal computer at this time.

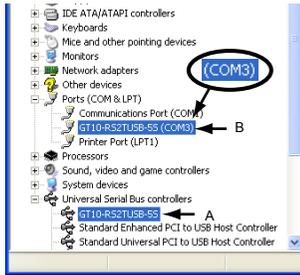
7. Installation Confirmation of Driver, Setting Software

7.1 Installation Confirmation of Driver

Procedure for confirming the installation of the driver is described below.
Windows® XP example follows.

- In Windows® XP, click [Start] → [Settings] → [Control Panel] → [Performance and Maintenance] → [System] → [Hardware] → [Device Manager (D)] and the window below will be displayed. Please confirm the COM number to which the USB driver is allocated (COM and LPT).

- If using Windows® 98, Windows® 98SE, Windows® Millennium Edition or Windows® 2000
A screen that is equivalent to the one below is displayed by clicking [My Computer] → [Control Panel] → [System] → [Device Manager] in the menu of the personal computer.



Check following:

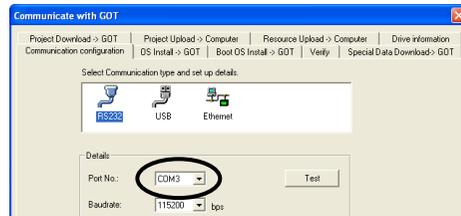
- GT10-RS2TUSB-5S is indicated at (A).
- GT10-RS2TUSB-5S (COM *) is indicated at (B).
* indicates the COM number used in Conversion adaptor.
- Install the driver again when is displayed.

Select the programming software COM number as the COM number currently assigned on the screen above.

7.2 Setting Software

7.2.1 Setting GT Designer2

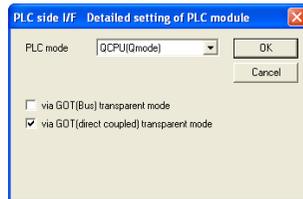
Click [Communication] → [To/From GOT...] → [Communication configuration tab] → [RS232].
Select the same COM number as the COM number of the personal computer when the setting communication port screen appears.
Click [OK].



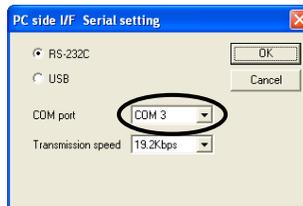
7.2.2 Setting GX Developer

• Connecting to Q/QnACPU

- 1) Click [Online] → [Transfer Setup].
- 2) Double-click [PLC module] of PLC side I/F.
- 3) Check [via GOT [direct coupled] transparent mode].

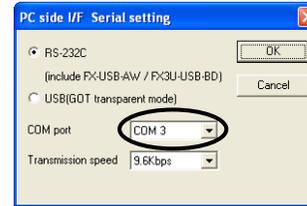


- 4) Double-click [Serial] of PC side I/F.
Check [RS-232].
Select the same COM number as the COM number of the personal computer when the setting COM number screen appears.
Click [OK].



• Connecting to FXCPU

- 1) Click [Online] → [Transfer Setup].
- 2) Double-click [Serial] of PC side I/F.
- 3) Check [RS-232C].
Select the same COM number as the COM number of the personal computer when the setting COM number screen appears.
Click [OK].



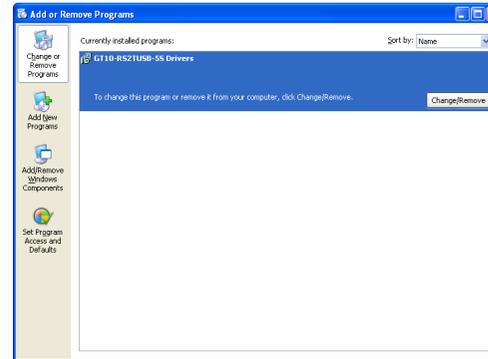
8. Method for Uninstalling Driver

The procedure for uninstalling the driver is explained below.

A Windows® XP example follows.

Please uninstall the driver by the procedure below.

- 1) Detach the USB cable from the personal computer.
On the PC display, click [Start] → [Control Panel] → [Add or Remove Programs] → [GT10-RS2TUSB-5S Drivers]. The window below appears.
- In case of Windows® Me of Windows® 98 and Windows® 98SE and Windows® Millennium Edition, 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.



Click [Change/Remove].

- 2) The following screen is displayed.



Click [Continue].

- 3) The following screen is displayed.



Click [Finish].

9. Troubleshooting

If communication cannot be established between the GOT and a PC using conversion adaptor, confirm the following status by checking display LED in conversion adaptor.

State of POWER LED	Contents
POWER LED is lit.	The DC5V power supply from the personal computer is normally supplied. In case of no communication, check the status of SD LED and RD LED.
POWER LED is not lit.	The DC 5V power supply from the personal computer is not supplied. Check the items below. • Confirm that the specified cable is used to connect the personal computer. • Check that the OS is running on the PC.

The status of SD LED and RD LED.	Contents
Blinking	Communicating correctly
SD Extinguished	<ul style="list-style-type: none"> • Confirm the personal computer and the GOT are connected properly with the specified cable. • Check that the software settings on the PC are correct. Refer to the Section7.2 Setting software. For details on software setting procedures, refer to the respective software manual. .
Blinking	Data receiving
RD Extinguished	<ul style="list-style-type: none"> • Confirm that the power is supplied to GOT. • Confirm the personal computer and the GOT are connected properly with the specified cable. • Check that the software settings on the PC are correct. Refer to the Section7.2 Setting software. For details on software setting procedures, refer to the respective software manual. .

* When the driver softwares for FX-USB-AW/FX3U-USB-BD and GT10-RS2TUSB-5S are installed, uninstalling one of these driver softwares may cause the other not to function properly. When this happens, reinstall the driver software.

* When driver installation is required after already establishing USB communication.
→ This product requires USB Driver Installation for each USB port to be connected. Connect the product to a driver-installed USB port, or install the driver to the current port.

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.

Warranty

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

⚠ For safe use

- 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 in the system.

MITSUBISHI ELECTRIC CORPORATION

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HIMEJI WORKS : 840, CHUYODA CHO, HIMEJI, JAPAN

MITSUBISHI Changes for the Better

RS-232 / USB Conversion adaptor

USER'S MANUAL

Manual Number: JY997D23401D
Date: Sep 2008

GRAPHIC OPERATION TERMINAL
GOT1000

This manual describes the part names, external dimensions and specifications of the product. Before use, read this manual and manuals of relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions. And, 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.

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

Depending on circumstances, procedures indicated by **CAUTION** may also be linked to serious results. In any case, it is important to follow the directions for usage.

MOUNTING PRECAUTIONS ⚠ CAUTION

- Use the conversion adaptor in the environment that satisfies the general specifications described in GT10 User's Manual.
- Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl₂, H₂S, SO₂ or NO₂), flammable gas, vibration or impacts, or exposed to high temperature, condensation, or rain and wind. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.

STARTUP/MAINTENANCE PRECAUTIONS ⚠ CAUTION

- Do not disassemble or modify the conversion adaptor. Doing so can cause a failure, malfunction, injury or fire.
- Do not touch the conductive and electronic parts of the conversion adaptor directly. Doing so can cause a unit malfunction or failure.
- When unplugging the conversion adaptor connected to the unit, do not hold and pull the cable portion. Doing so can cause the unit or cable to be damaged or can cause a malfunction due to a cable connection fault.

DISPOSAL PRECAUTIONS ⚠ CAUTION

- When disposing of the product, handle it as industrial waste.

TRANSPORTATION PRECAUTIONS ⚠ CAUTION

- Make sure to transport the conversion adaptor and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of this manual, as they are precision devices. Failure to do so may cause the unit to fail. Check if the unit operates correctly after transportation.

Related Manuals
When using the conversion adaptor, prepare the following manual as well. As GT10 User's Manual and GT Designer2 Version2 Basic Operation Data Transfer Manual are sold separately, inquire at our local distributor for it. For details of a PLC to be connected, refer to the PLC user's manual respectively.

Manual name	Manual Number (Model Code)	Contents
⊙GT10 User's Manual	JY997D24701 (09R819)	Describes the GT10 hardware-relevant content such as part names, external dimensions, mounting, wiring, specifications, and introduction to option devices.
⊙GT Designer2 Version2 Basic Operation Data Transfer Manual	SH-080529ENG (1D7M24)	Describes methods of the GT Designer2 installation operation, basic operation for drawing and transmitting data to GOT1000 series

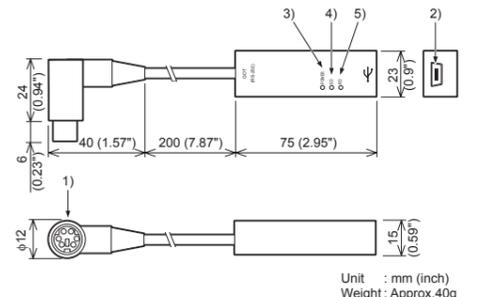
⊙: Indispensable manual
For the manuals relevant to GOT1000, refer to the PDF manuals stored in the screen creation software used. For details about a PLC to be connected, refer to the manuals of PLCs respectively. For the FA transparent functionality, refer to the GX Developer Version□ Operating Manual.

Bundled Items

Product	GT10-R2USB 5S RS-232/USB conversion adaptor
Included items	USB driver software (CD-ROM) User's Manual (this manual)

1. Overview
The conversion adaptor convert the GOT's RS-232 interface to USB, thereby enabling the transparent functionality to transfer and monitor the sequence program, and the project data transfer between the GT10 main unit and the PC. Use this conversion adaptor with the GT09-C30USB-5P type USB cable.

2. Part Names and External Dimensions



No.	Name	Specifications
1)	RS-232 Connector	MINI-DIN 6 Pins (male) : For connecting GOT
2)	USB Connector	USB MINI : For connecting USB cable
3)	Display LED (POWER)	Green: Lit when the power is properly supplied (Lit when connected to the PC with a USB cable)
4)	Display LED (SD)	Red: Lit while sending data (GOT → PC)
5)	Display LED (RD)	Red: Lit while receiving data (PC → GOT)

3. Specifications

3.1 Operating atmosphere
Must be free of lamp black, corrosive gas, flammable gas, or excessive amount of electroconductive dust particles and must be no direct sunlight. (Same as for saving) General specifications are the same as the GT10 main unit. For general specifications, refer to the GT10 main unit manual.

3.2 Performance Specifications

Level Conversion	Bidirectional between RS-232 and USB	
Communication Type	GOT	RS-232
PC	USB2.0 (For full speed)	
Transmission speed	115,200/ 57,600/ 38,400/ 19,200/ 9,600/ 4,800 bps	
Connector shape	To GOT	MINI DIN 6Pins (Male)
To USB cable	USB MINI-B 5Pins (Receptacle)	
Supply voltage	RS-232 side	DC5V ± 5% (from GOT)
USB side	DC5V ± 5% (from PC)	
Power consumption	RS-232 side	200mW (40mA/DC5V)
USB side	275mW (55mA/DC5V)	

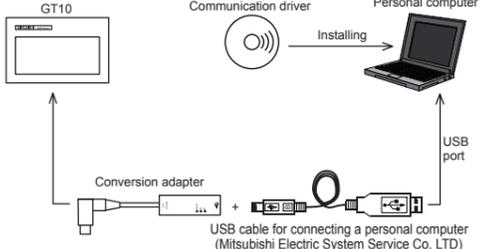
3.3 System Requirements (Communication driver)

OS	Microsoft® Windows®98, Windows®98SE Microsoft® Windows®Millennium Edition (Windows® Me) Microsoft® Windows®2000 Microsoft® Windows®XP
Software	GT Designer2 GX Developer

3.4 USB cable (sold separately)

Product name	Model name	
USB cable	GT09-C30USB-5P (3m)	Mitsubishi Electric System Service Co, LTD

4. System Configuration



5. Connecting Procedure

- Turn the GOT power off.
- Connect the RS-232 connector of the conversion adaptor to the GOT.
- Connect the USB MINI-B connector of the USB cable to the conversion adaptor.
- Connect the USB A connector of the USB cable to the personal computer.
- Turn the GOT power on.
- Make sure the display LED (POWER) lamp of the conversion adaptor is lit. (The display LED (POWER) lamp of conversion adaptor lights when power is supplied normally by the personal computer.)

6. Driver Installation

Procedure for installing the driver is explained below. Windows® XP installation follows.
• Windows® 98, Windows® 98SE, Windows® Millennium Edition, and Windows® 2000, the installation method will vary. Installation of the driver is canceled during the following process, the installation is not carried out correctly. If the installation is canceled, uninstall the driver and install again. Please refer to Chapter 8 for instructions on uninstalling the driver.

Note: This product requires USB Driver Installation for each USB port to be connected. To use multiple USB ports, connect this product to each port, and install the driver individually. (Depending on the PC environment, Driver installation may be done automatically.)



Insert the included CD-ROM into the personal computer's CD-ROM drive. Click [Next >].
The installation of the USB driver software will begin.
- If using Windows® 98, Windows® 98SE, Windows® Millennium Edition, and Windows® 2000, A window to select the location of the installation files. Please select the CD-ROM drive.
2) The following screen is displayed. (Only in Windows® XP)



Click [Continue Anyway].

3) The following screen is displayed.



Click [Finish].
If using Windows® 2000 or Windows® XP, proceed to step 4).
- If Windows® 98, Windows® 98SE or Windows® Millennium Edition is used, installation of the USB Serial Port software begins, and ends automatically. The CD-ROM can be removed from the personal computer at this time. The installation of the USB driver software is finished.

4) The following screen is displayed.



Click [Next >].
The installation of the USB Serial Port software will begin.
- If using Windows® 2000, a screen to select the location of the installation files is displayed. Please select the CD-ROM drive.

5) The screen of 2) is displayed. (Only in Windows® XP)
Click [Continue Anyway].

6) The following screen is displayed.



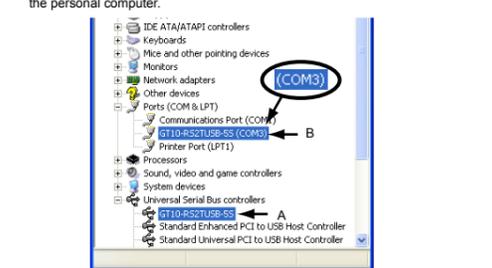
Click [Finish].
The installation of the USB Serial Port software will finish. The CD-ROM (USB driver software) can be removed from the personal computer at this time.

7. Installation Confirmation of Driver, Setting Software

7.1 Installation Confirmation of Driver

Procedure for confirming the installation of the driver is described below. Windows® XP example follows.
• In Windows® XP, click [Start] → [Settings] → [Control Panel] → [Performance and Maintenance] → [System] → [Hardware] → [Device Manager (D)] and the window below will be displayed. Please confirm the COM number to which the USB driver is allocated (COM and LPT).

• If using Windows® 98, Windows® 98SE, Windows® Millennium Edition or Windows® 2000
A screen that is equivalent to the one below is displayed by clicking [My Computer] → [Control Panel] → [System] → [Device Manager] in the menu of the personal computer.

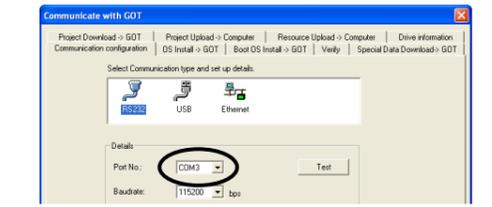


Check following:
- GT10-RS2USB-5S is indicated at A).
- GT10-RS2USB-5S (COM 3) is indicated at B).
* Indicates the COM number used in conversion adaptor.
- Install the driver again when ⚠ is displayed.
Select the programming software COM number as the COM number currently assigned on the screen above.

7.2 Setting Software

7.2.1 Setting GT Designer2

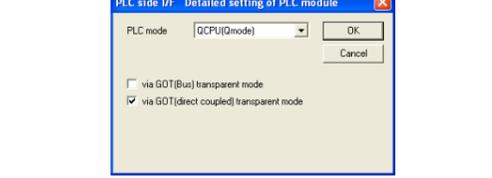
Click [Communication] → [To/From GOT...] → [Communication configuration tab] → [RS232].
Select the same COM number as the COM number of the personal computer when the setting communication port screen appears.
Click [OK].



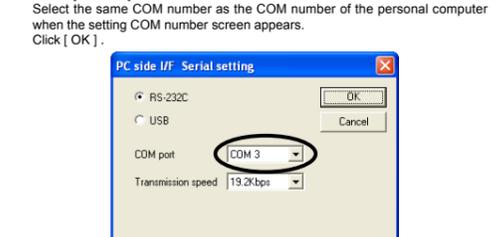
7.2.2 Setting GX Developer

• Connecting to Q/QnACPU

- Click [Online] → [Transfer Setup].
- Double-click [PLC module] of PLC side I/F.
- Check [via GOT [direct coupled] transparent mode].

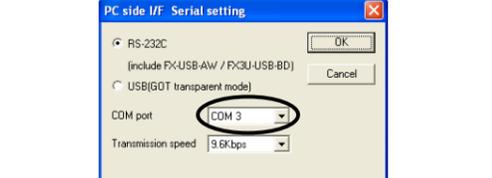


4) Double-click [Serial] of PC side I/F.
Check [RS-232].
Select the same COM number as the COM number of the personal computer when the setting COM number screen appears.
Click [OK].



• Connecting to FXCPU

- Click [Online] → [Transfer Setup].
- Double-click [Serial] of PC side I/F.
- Check [RS-232C].
Select the same COM number as the COM number of the personal computer when the setting COM number screen appears.
Click [OK].

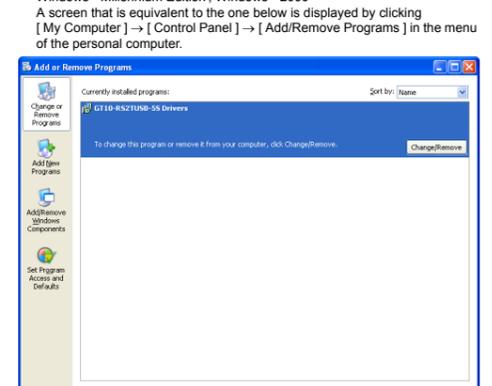


8. Method for Uninstalling Driver

The procedure for uninstalling the driver is explained below. A Windows® XP example follows.
Please uninstall the driver by the procedure below.

- Detach the USB cable from the personal computer.
On the PC display, click [Start] → [Control Panel] → [Add or Remove Programs] → [GT10-RS2USB-5S Drivers]. The window below appears..

- In case of Windows® Me of Windows® 98 and Windows® 98SE and Windows® Millennium Edition, 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.



Click [Change/Remove].
2) The following screen is displayed.



Click [Continue].

3) The following screen is displayed.



Click [Finish].

9. Troubleshooting

If communication cannot be established between the GOT and a PC using conversion adaptor, confirm the following status by checking display LED in conversion adaptor.

State of POWER LED	Contents
POWER LED is lit.	The DC5V power supply from the personal computer is normally supplied. In case of no communication, check the status of SD LED and RD LED.
POWER LED is not lit.	The DC 5V power supply from the personal computer is not supplied. Check the items below. • Confirm that the specified cable is used to connect the personal computer. • Check that the OS is running on the PC.

The status of SD LED and RD LED.	Contents
Blinking	Communicating correctly
SD Extinguished	• Confirm the personal computer and the GOT are connected properly with the specified cable. • Check that the software settings on the PC are correct. Refer to the Section7.2 Setting software. For details on software setting procedures, refer to the respective software manual. .
Blinking	Data receiving
RD Extinguished	• Confirm that the power is supplied to GOT. • Confirm the personal computer and the GOT are connected properly with the specified cable. • Check that the software settings on the PC are correct. Refer to the Section7.2 Setting software. For details on software setting procedures, refer to the respective software manual. .

* When the driver softwares for FX-USB-AW/FX3U-USB-BD and GT10-RS2USB-5S are installed, uninstalling one of these driver softwares may cause the other not to function properly. When this happens, reinstall the driver software.
* When driver installation is required after already establishing USB communication. → This product requires USB Driver Installation for each USB port to be connected. Connect the product to a driver-installed USB port, or install the driver to the current port.

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.

Warranty
Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

For safe use

- 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 in the system.