



MELSOFT

Engineering Software

Help For Data Transfer Tool

-DataTransfer-E



SAFETY PRECAUTIONS

Always read the precautions before using this product.

Also read this manual and the relevant manuals mentioned in this manual carefully, and use the product properly while paying full attention to safety.

Note that the precautions in this manual apply only to this product.


The safety precautions are divided into the following levels: warnings and cautions.



Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.



Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Note that failure to observe  CAUTION may lead to a serious accident depending on the circumstances.

Make sure to observe both warnings and cautions to ensure personal safety.

Ensure that this manual is easily accessible to all users of this product.

[DESIGN PRECAUTIONS]

WARNING

- Before performing the test operation, read this manual carefully to understand the operation procedure.
Not doing so may cause an accident due to an incorrect output or malfunction.
- To maintain the security (confidentiality, integrity, and availability) of the GOT and the system against unauthorized access, DoS*¹ attacks, computer viruses, and other cyberattacks from unreliable networks and devices via network, take appropriate measures such as firewalls, virtual private networks (VPNs), and antivirus solutions.

Mitsubishi Electric shall have no responsibility or liability for any problems involving GOT trouble and system trouble by unauthorized access, DoS attacks, computer viruses, and other cyberattacks.

*1 DoS: A denial-of-service (DoS) attack disrupts services by overloading systems or exploiting vulnerabilities, resulting in a denial-of-service (DoS) state.

MEMO

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INTRODUCTION

Thank you for choosing Mitsubishi Electric Graphic Operation Terminal (GOT).

Before using the product, read this manual carefully and make sure you understand the functions and performance of the GOT for correct use.

☞ Manuals for GT Works3

☞ Abbreviations, Generic Terms, and Model Icons

Manuals for GT Works3

The electronic manuals related to this product are installed together with the screen design software.

If you need the printed manuals, consult your local sales office.

Manuals for GT Designer3 (GOT2000)

Point

e-Manual refers to the Mitsubishi Electric FA electronic book manuals that can be browsed using a dedicated tool.

e-Manual has the following features:

- Required information can be cross-searched in multiple manuals.
- Other manuals can be accessed from the links in the manual.
- Hardware specifications of each part can be found from the product figures.
- Pages that users often browse can be bookmarked.
- Sample programs can be copied to the engineering tool.

■ Screen design software-related manuals

Manual name	Manual number (Model code)	Format
GT Works3 Installation Instructions	-	PDF
GT Designer3 (GOT2000) Screen Design Manual	SH-081220ENG (1D7ML9)	PDF e-Manual
GT Converter2 Version3 Operating Manual for GT Works3	SH-080862ENG	PDF e-Manual

■ Connection manuals









Manual name	Manual number (Model code)	Format
GOT2000 Series Connection Manual (Mitsubishi Electric Products) For GT Works3 Version1	SH-081197ENG (1D7MJ8)	PDF e-Manual














Abbreviations, Generic Terms, and Model Icons

The following shows the abbreviations, generic terms, and meanings of icons used in this manual.



GOT

■GOT2000 series

Abbreviations and generic terms			Description	Meaning of icon	
				Available	Unavailable
GT27	GT27-X	GT2715-X	GT2715-XTBA, GT2715-XTBD		-
	GT27-S	GT2712-S	GT2712-STBA, GT2712-STWA, GT2712-STBD, GT2712-STWD		
		GT2710-S	GT2710-STBA, GT2710-STBD		
		GT2708-S	GT2708-STBA, GT2708-STBD		
	GT27-V	GT2710-V	GT2710-VTBA, GT2710-VTWA, GT2710-VTBD, GT2710-VTWD		
		GT2708-V	GT2708-VTBA, GT2708-VTBD		
		GT2705-V	GT2705-VTBD		
GT25	All GT25 models			-	
GT25-W	GT2512-WX	GT2512-WXTBD, GT2512-WXTSD		-	
	GT2510-WX	GT2510-WXTBD, GT2510-WXTSD			
	GT2507-W	GT2507-WTBD, GT2507-WTSD			
	GT2507T-W	GT2507T-WTSD			
GT25-S	GT2512-S	GT2512-STBA, GT2512-STBD		-	
	GT2512F-S	GT2512F-STNA, GT2512F-STND			
GT25-V	GT2510-V	GT2510-VTBA, GT2510-VTWA, GT2510-VTBD, GT2510-VTWD		-	
	GT2510F-V	GT2510F-VTNA, GT2510F-VTND			
	GT2508-V	GT2508-VTBA, GT2508-VTWA, GT2508-VTBD, GT2508-VTWD			
	GT2508F-V	GT2508F-VTNA, GT2508F-VTND			
GT25HS-V Handy GOT	GT2506HS-V	GT2506HS-VTBD		-	
	GT2505HS-V	GT2505HS-VTBD		-	
GT23	GT23-V	GT2310-V	GT2310-VTBA, GT2310-VTBD		-
		GT2308-V	GT2308-VTBA, GT2308-VTBD		

Abbreviations and generic terms		Description	Meaning of icon	
			Available	Unavailable
GT21		All GT21 models		-
GT21-W	GT2107-W	GT2107-WTBD, GT2107-WTSD		-
GT21-Q	GT2105-Q	GT2105-QTBDS, GT2105-QMBDS		-
GT21-R	GT2104-R	GT2104-RTBD		-
GT21-P	GT2104-P	GT2104-PMBD		-
		GT2104-PMBDS		-
		GT2104-PMBDS2		-
		GT2104-PMBLS		-
	GT2103-P	GT2103-PMBD		-
		GT2103-PMBDS		-
		GT2103-PMBDS2		-
		GT2103-PMBLS		-
GT SoftGOT2000		GT SoftGOT2000 Version1		-

■GOT SIMPLE series

Abbreviations and generic terms		Description	Meaning of icon	
			Available	Unavailable
GS25		GS2512-WXTBD		-
GS21	GS21-W-N	GS2110-WTBD-N, GS2107-WTBD-N		-
	GS21-W	GS2110-WTBD, GS2107-WTBD		

Software

■Software related to GOT

Abbreviations and generic terms	Description
GT Works3	SW1DND-GTWK3-J, SW1DND-GTWK3-E, SW1DND-GTWK3-C
GT Designer3 Version1	Screen design software GT Designer3 for GOT2000 and GOT1000 series
GT Designer3	Screen design software for GOT2000 series included in GT Works3
GT Designer3 (GOT2000)	

MEMO

1 PRODUCT OVERVIEW

Installing this product on a personal computer enables the following operations without using GT Designer3.

- Writing package data or resource data from the personal computer to the connected GOT
- Reading package data or resource data from the connected GOT to the personal computer
- Converting resource data into a Unicode text file or a CSV file

Data Transfer Tool operations can be performed on the operation screen or using the command line or interface function.

This enables the functions of Data Transfer Tool to be incorporated into user-created applications.

For the details of the operations below, refer to the following.

☞ Page 21 OPERATION ON THE SCREEN

☞ Page 41 OPERATION WITH COMMAND LINE

☞ Page 53 OPERATION USING INTERFACE FUNCTION

1.1 Types of Transferable Data

Two types of data, package data and resource data, can be transferred between the personal computer and the GOT.

Package data

The following package data can be transferred between the personal computer and the GOT.

- ***** .GTXS








Precautions

■Project data converted with GT Converter2

To use project data converted with GT Converter2, open the project with GT Designer3 and save the project data as package data.

Resource data

The following shows the resource data that can be transferred between Data Transfer Tool and the GOT.
Files of 0 MB or more than 256 MB cannot be written to the GOT.

File name*1	Write	Read	Description	Supported models
AAMxxxx.csv	○	○	Alarm log file.	 SoftGOT2000
AAMxxxx.txt	○	○	The file is used for the user alarm observation or the system alarm observation.	
AAMxxxx.G2A	×	○		
ARPxxxx.csv	○	○	Recipe file.	SoftGOT2000
ARPxxxx.txt	○	○	The file is used for the recipe function.	
ARPxxxx.G2P	○	○		
LOGxxx.csv	○	○	Logging file.	SoftGOT2000
LOGxxx.txt	○	○	The file is used for the logging function.	
LOGxxx.G2L	×	○		
OPELOGYYYYMMDD_xxxx.csv	○	○	Only available to GT2107-W for GT21.	SoftGOT2000
OPELOGYYYYMMDD_xxxx.txt	○	○	Only available to GS21-W-N for GS21.	
OPELOGYYYYMMDD_xxxx.G2O	×	○	Operation log file. The file is used for the operation log.	
SYSBK_YYMMDDHHMMSS.G2S	○	○	Backup file of the data in the SRAM user area. The file is used for the SRAM management.	 SoftGOT2000
#####.G2R	○	○	Report file. This file is used for the file print function.	 SoftGOT2000
#####.gpf2	○	○	Graphical waveform data file. The file is used for the drive recorder.	SoftGOT2000
#####.amo2	○	○	File of the data at the occurrence of an alarm. The file is used for the drive recorder.	
SNAPxxxx.bmp	○	○	Image file. The file is used for the parts display or the parts movement.	
SNAPxxxx.jpg	○	○	Image file. The file is used for the parts display, the parts movement, or the document display.	 SoftGOT2000
#####.jpeg	○	○		 SoftGOT2000
#####.png	○	○	Image file. The file is used for the parts display or the parts movement.	 SoftGOT2000
#####.gif	○	○	Image file.	 SoftGOT2000
#####.3gp	○	○	Video file.	
#####.mp4	○	○		
#####.mov	○	○		
#####.rm	○	○		
#####.divx	○	○		
#####.flv	○	○		
#####.f4v	○	○		
#####.pdf	○	○	PDF file.	

File name* ¹	Write	Read	Description	Supported models
#####.wav	<input type="radio"/>	<input type="radio"/>	Sound file. The file is used for the sound output function.	
#####.wma	<input type="radio"/>	<input type="radio"/>	Sound file.	
#####.mp3	<input type="radio"/>	<input type="radio"/>		
#####.m4a	<input type="radio"/>	<input type="radio"/>		
#####.wmv	<input type="radio"/>	<input type="radio"/>		
#####.f4a	<input type="radio"/>	<input type="radio"/>		
#####.swf	<input type="radio"/>	<input type="radio"/>	Flash file.	
#####.ttf	<input type="radio"/>	<input type="radio"/>	Font file.	
#####.ttc	<input type="radio"/>	<input type="radio"/>		
#####.htm	<input type="radio"/>	<input type="radio"/>	HTML file.	
#####.html	<input type="radio"/>	<input type="radio"/>		
#####.xml	<input type="radio"/>	<input type="radio"/>	XML file.	
#####.xsl	<input type="radio"/>	<input type="radio"/>	XSL file.	
#####.chm	<input type="radio"/>	<input type="radio"/>	Help file.	
#####.js	<input type="radio"/>	<input type="radio"/>	JavaScript file.	
#####.css	<input type="radio"/>	<input type="radio"/>	Cascading Style Sheet.	
#####.doc	<input type="radio"/>	<input type="radio"/>	Microsoft Word file.	
#####.docx	<input type="radio"/>	<input type="radio"/>		
#####.docm	<input type="radio"/>	<input type="radio"/>		
#####.xls	<input type="radio"/>	<input type="radio"/>	Microsoft Excel file.	
#####.xlsx	<input type="radio"/>	<input type="radio"/>		
#####.xlsm	<input type="radio"/>	<input type="radio"/>		
#####.ppt	<input type="radio"/>	<input type="radio"/>	Microsoft PowerPoint file.	
#####.pptx	<input type="radio"/>	<input type="radio"/>		
#####.pptm	<input type="radio"/>	<input type="radio"/>		
#####.json	<input type="radio"/>	<input type="radio"/>	JavaScript Object Notation.	

*1 The file name is set by default.
The name can be changed by the user.
"xxxxx" indicates the serial number of a file.

1.2 Resource Data to be Converted

Data Transfer Tool enables conversion of the following resource data to a CSV file or a Unicode text file.

- Recipe data (G2P)
- Operation log data (G2O)
- Logging data (G2L)
- Alarm data (G2A)

Mutual conversion is possible for recipe data (G2P).

1.3 Operating Environment

The following shows the operating environment for Data Transfer Tool.

Item	Description
Model	Personal computer that Windows runs on
OS (English, Simplified Chinese, Traditional Chinese, Korean, German, or Italian version) ^{*1*2*3*4*5*6*7}	<ul style="list-style-type: none"> • Microsoft Windows 11 Education (64 bit) • Microsoft Windows 11 Enterprise (64 bit) • Microsoft Windows 11 Pro (64 bit) • Microsoft Windows 11 Home (64 bit) • Microsoft Windows 10 Enterprise (32 bit, 64 bit) • Microsoft Windows 10 Pro (32 bit, 64 bit) • Microsoft Windows 10 Home (32 bit, 64 bit) • Microsoft Windows 10 IoT Enterprise 2016 LTSC (64 bit) (English OPK, or English OPK with a language pack for localization)
CPU	<ul style="list-style-type: none"> • Windows 11: 64 bit-compatible processor with dual-core or more or System on a Chip (SoC)^{*8} • Windows 10: Intel Core 2 Duo Processor 2.0 GHz or more recommended^{*8}
Memory	<ul style="list-style-type: none"> • For Windows 11: 4 GB or more recommended • For 64-bit Windows 10: 2 GB or more recommended • For 32-bit Windows 10: 1 GB or more recommended
Display	Resolution XGA (1024 × 768 dots) or more
Hard disk space	For installation: 750 MB or more
Display color	High Color (65536 colors) or more
Others	Mouse, keyboard, printer, and DVD drive

- *1 Administrator authority is required for installing and using Data Transfer Tool.
- *2 The following functions are not supported.
 - Activating the application with Windows compatibility mode
 - Fast user switching
 - Change your desktop themes (fonts)
 - Remote desktop
 - Setting the size other than [Smaller - 100%] for the characters and images on the screen
- *3 Operation is not supported in an environment with the text cursor indicator turned on.
- *4 The touch feature is not supported.
- *5 A virtual environment such as Hyper-V is not supported.
- *6 Tablet mode is not supported.
- *7 Unified Write Filter is not supported.
- *8 ARM64 and ARM32 are not supported.

2 SYSTEM CONFIGURATION

The following describes types of connection between the GOT and the personal computer in which Data Transfer Tool is installed, and information on cables used for each connection type.

Two connection types are available: direct connection between the personal computer and the GOT and connection via programmable controllers.

☞ Page 16 Direct Connection with the GOT

☞ Page 17 Connection with the GOT via Programmable Controllers

2

Precautions

■Transferring data while communication is in progress between GT Designer3 and the GOT

While communication is in progress between GT Designer3 and the GOT, transferring data may not be available.

To transfer data, make sure that GT Designer3 is not communicating.

■Transferring data while the FA transparent function is used

While the controller programming software communicates with a controller by using the FA transparent function, transferring data may not be available.

To transfer data, make sure that the FA transparent function is not in use.

2.1 Direct Connection with the GOT

Connect the personal computer and the GOT directly using a cable.

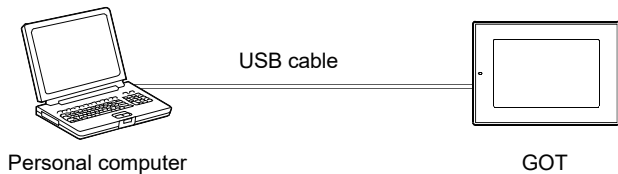
The personal computer is connected with the GOT using a USB cable or an Ethernet cable.

USB cable connection



Connect the personal computer and the GOT using a USB cable.

The following table shows applicable USB cables.



Product	Model	Manufacturer
USB cable	GT09-C20USB-5P (A ↔ mini B type)	Mitsubishi Electric System & Service Co., Ltd.
	GT09-C30USB-5P (A ↔ mini B type)	

Ethernet connection

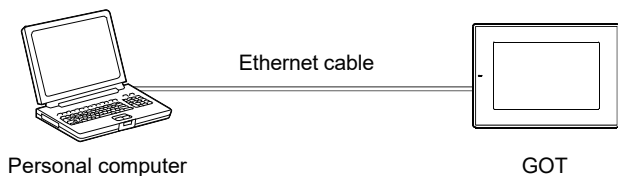


Applicable models of GT21 are GT2107-W, GT2104-RTBD, GT2104-PMBD, and GT2103-PMBD.

The personal computer is connected with the GOT on the Ethernet network.

The following table shows applicable Ethernet cables.

Using the wireless LAN communication unit allows wireless communication through a wireless LAN access point.



Product*1	Model	Manufacturer
Shielded twisted pair cable (STP)	-	-
Unshielded twisted pair cable (UTP)		
Category 3, 4, and 5		

*1 The destination connected with the twisted pair cable varies with the configuration of the applicable Ethernet network system. Connect to the applicable Ethernet module, hub, transceiver, wireless LAN adapter (NZ2WL-JPA or NZ2WL-JPS), or other system equipment according to the applicable Ethernet network system. Use cables, connectors, and hubs that meet the IEEE802.3 10BASE-T/100BASE-TX standard. For target devices which a wireless LAN adapter can be connected and how to set a wireless LAN adapter, refer to the manual of a wireless LAN adapter to be used.

2.2 Connection with the GOT via Programmable Controllers

The personal computer is connected with the GOT via programmable controllers that are connected to the same Ethernet network, CC-Link IE TSN, or CC-Link IE Field Network as the GOT. GT23 does not support the CC-Link IE TSN and CC-Link IE Field Network connections.

The following table shows applicable programmable controllers and Ethernet modules.

Programmable controller	Ethernet module
RCPU	RJ71EN71
QCPU	QJ71E71
LCPU	LJ71E71

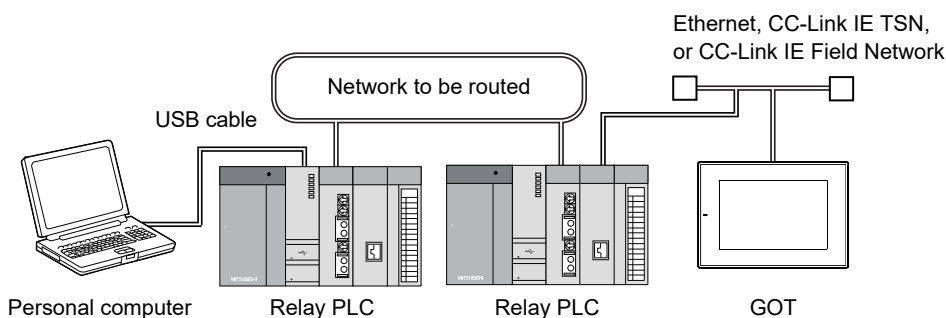
For connection via programmable controllers, three connection methods are available: USB cable connection, RS-232 cable connection, and Ethernet connection.

USB cable connection



Connect the personal computer and a programmable controller with a USB cable to enable communication with the GOT via programmable controllers.

The following table shows applicable USB cables.



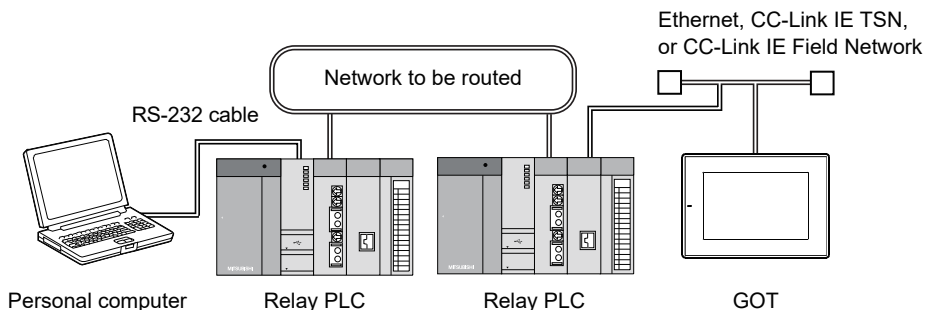
Product	Model	Manufacturer
USB cable	GT09-C20USB-5P (A ↔ mini B type)	Mitsubishi Electric System & Service Co., Ltd.
USB cable	GT09-C30USB-5P (A ↔ mini B type)	Mitsubishi Electric System & Service Co., Ltd.

RS-232 cable connection

GT27 GT25 GT23 GT21 SoftGOT2000 GS25 GS21

Connect the personal computer and a programmable controller with an RS-232 cable to enable communication with the GOT via programmable controllers.

The following table shows the applicable RS-232 cable.



Product	Model	Manufacturer
RS-232 cable	GT01-C30R2-9S (9-pin female ↔ 9-pin female)	Mitsubishi Electric Corporation

Ethernet cable connection

Connect the personal computer and a programmable controller with an Ethernet cable (sometimes through a hub) to enable communication with the GOT via programmable controllers.

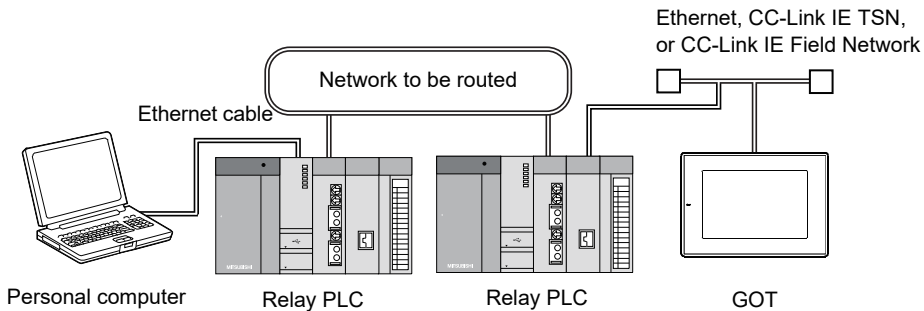
Two connection methods are available: Ethernet port direct connection and connection via a hub.

Ethernet port direct connection

GT27 GT25 GT23 GT21 SoftGOT2000 GS25 GS21

Connect the personal computer and a programmable controller with an Ethernet cable to enable communication with the GOT via programmable controllers.

The following table shows applicable Ethernet cables.



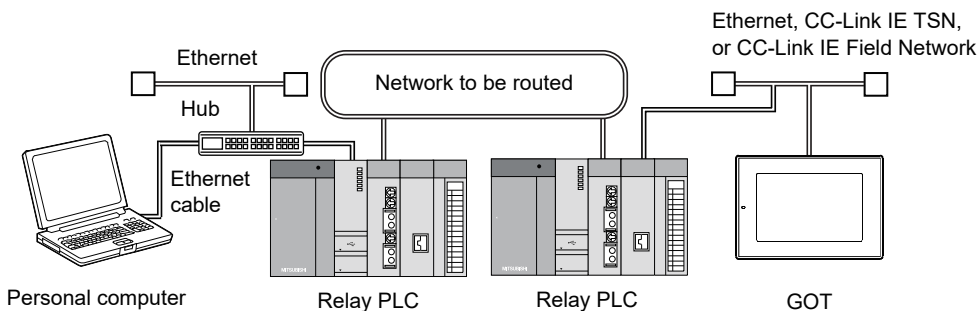
Product	Model	Manufacturer
Shielded twisted pair cable (STP) Unshielded twisted pair cable (UTP) Category 3, 4, and 5	-	-

Connection via a hub

GT27 GT25 GT23 GT21 SoftGOT2000 GS25 GS21

Connect the personal computer and a programmable controller with an Ethernet cable through a hub to communicate with the GOT via programmable controllers.

The following table shows applicable Ethernet cables.



Product ^{*1}	Model	Manufacturer
Shielded twisted pair cable (STP) Unshielded twisted pair cable (UTP) Category 3, 4, and 5	-	-

*1 The destination connected with the twisted pair cable varies with the configuration of the applicable Ethernet network system.

Connect to the applicable Ethernet module, hub, transceiver, wireless LAN adapter (NZ2WL-JPA or NZ2WL-JPS), or other system equipment according to the applicable Ethernet network system.

Use cables, connectors, and hubs that meet the IEEE802.3 10BASE-T/100BASE-TX standard.

For target devices which a wireless LAN adapter can be connected and how to set a wireless LAN adapter, refer to the manual of a wireless LAN adapter to be used.

3 OPERATION ON THE SCREEN

The following describes how to transfer package data or convert resource data on the screen and how to configure settings in the relevant screens.

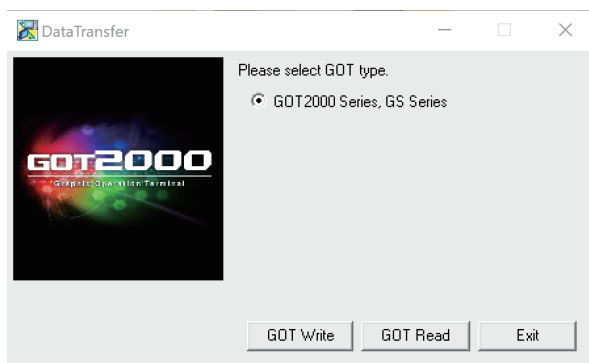
Settings required for data transfer are also described to enable communication between the personal computer and the GOT.

3.1 Starting and Operating Data Transfer Tool

The following describes the procedure to start Data Transfer Tool and operations available on the start screen.

1. Perform either of the following operations.
 - From the Windows start menu, click [MELSOFT] → [DataTransfer].
 - Double-click the [DataTransfer] icon.

Start Data Transfer Tool to display the start screen.



2. Perform the operation according to your purpose.

Refer to the following for each operation.

- ☞ Page 21 Writing package data into the GOT
- ☞ Page 22 Writing resource data into the GOT
- ☞ Page 22 Reading package data or resource data from the GOT
- ☞ Page 22 Converting resource data

When communication settings are not configured between the personal computer and the GOT, configure the settings.

- ☞ Page 24 [Communication Configuration] Dialog

Writing package data into the GOT

1. Click the [GOT Write] button.

The [Open] dialog appears.

2. Select a package file and click the [Open] button.

The [GOT Write] tab screen appears.

3. Configure the settings.

- ☞ Page 31 [GOT Write] Tab Screen

To reselect package data, select [Menu] → [Open Package].

Writing resource data into the GOT

1. Click the [GOT Write] button.

The [Open] dialog appears.

2. Perform either of the following operations and close the [Open] dialog.
 - Click the [Cancel] button.
 - Click the [×] button on the title bar.

The [GOT Read] tab screen appears.

3. Click the [GOT Write] tab to display the [GOT Write] tab screen.

4. Configure the settings.

 Page 31 [GOT Write] Tab Screen

Reading package data or resource data from the GOT

1. Click the [GOT Read] button to display the [GOT Read] tab screen.

2. Configure the settings.

 Page 35 [GOT Read] Tab Screen


Converting resource data

1. Click the [GOT Read] button to display the [GOT Read] tab screen.

2. Select [Menu] on the menu bar and click [Resource Converter].

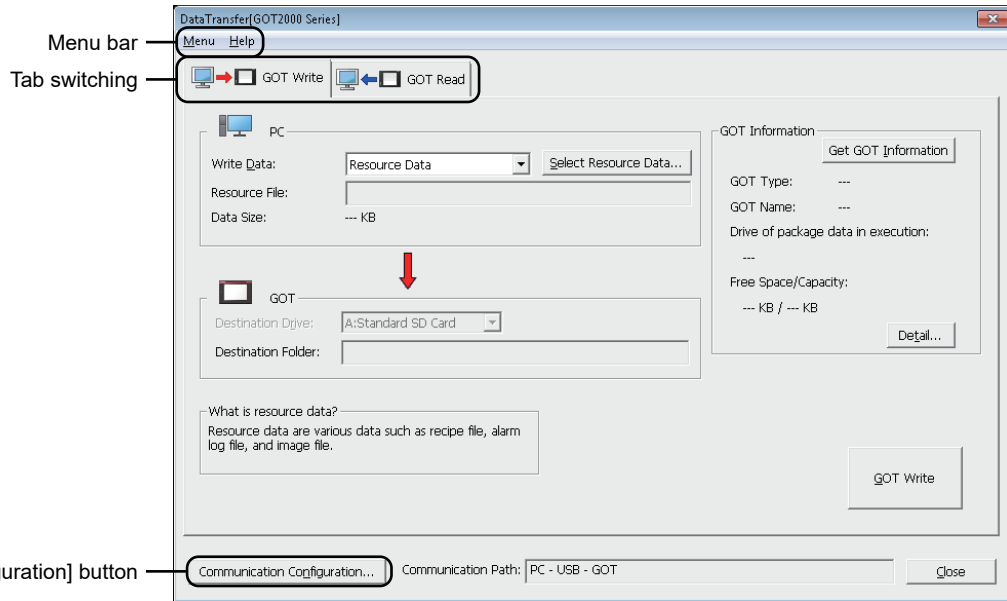
The [ResourceConverter] dialog appears.

3. Configure the settings.

 Page 38 [ResourceConverter] Dialog

3.2 Screen Overview

The following shows the screen overview for Data Transfer Tool.



[Communication Configuration] button

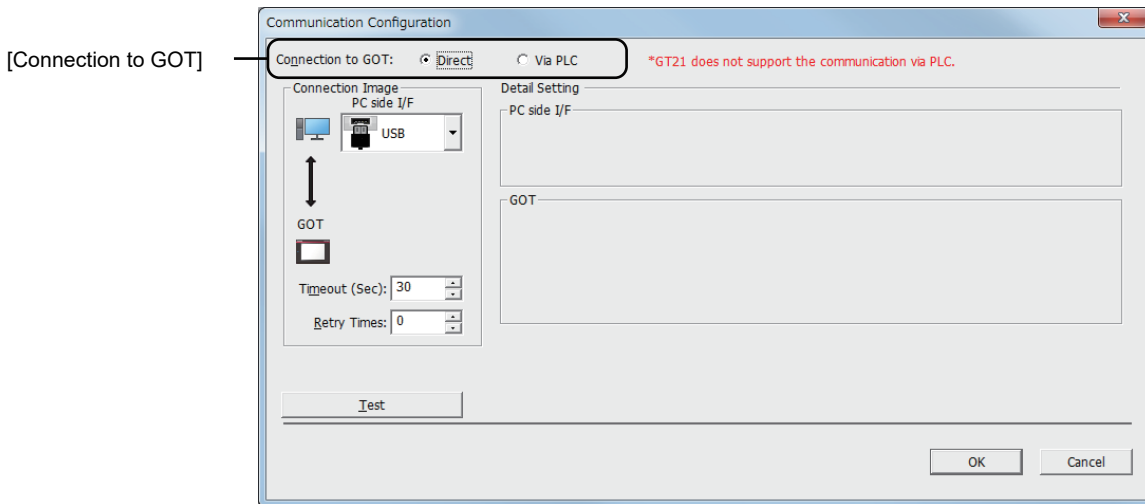
Item	Description	
Menu bar	[Menu]	<p>The following operation menus are available.</p> <ul style="list-style-type: none"> • [Open Package] Select the package data to be written to the GOT. Clicking the menu displays the [Open] dialog. Select the target package data to be written. • [Resource Converter] Select the menu to convert resource data. Clicking the menu displays the [ResourceConverter] dialog. ☞ Page 38 [ResourceConverter] Dialog • [Exit] Exit Data Transfer Tool.
	[Help]	<ul style="list-style-type: none"> • [Help] Help For Data Transfer Tool opens. • [About Data Transfer] Version information on Data Transfer Tool is displayed.
Tab switching	<p>Clicking each tab switches the display between the [GOT Write] tab screen and the [GOT Read] tab screen. For the settings in each tab, refer to the following.</p> <ul style="list-style-type: none"> ☞ Page 31 [GOT Write] Tab Screen ☞ Page 35 [GOT Read] Tab Screen 	
[Communication Configuration] button	<p>Configure settings to enable communication between the personal computer and the GOT. Click the [Communication Configuration] button to display the [Communication Configuration] dialog. ☞ Page 24 [Communication Configuration] Dialog</p>	

3.3 [Communication Configuration] Dialog

Configure settings to enable communication between the personal computer and the GOT.
 Before executing data transfer, make sure that settings are configured in the [Communication Configuration] dialog.

The settings differ according to the connection method between the personal computer and the GOT.

Connection method	Setting
Connecting the personal computer and the GOT directly	Select [Direct] for [Connection to GOT] in the [Communication Configuration] dialog. ☞ Page 24 Direct connection with the GOT
Connecting the personal computer and the GOT via programmable controllers	Select [Via PLC] for [Connection to GOT] in the [Communication Configuration] dialog. ☞ Page 26 Connection with the GOT via programmable controllers

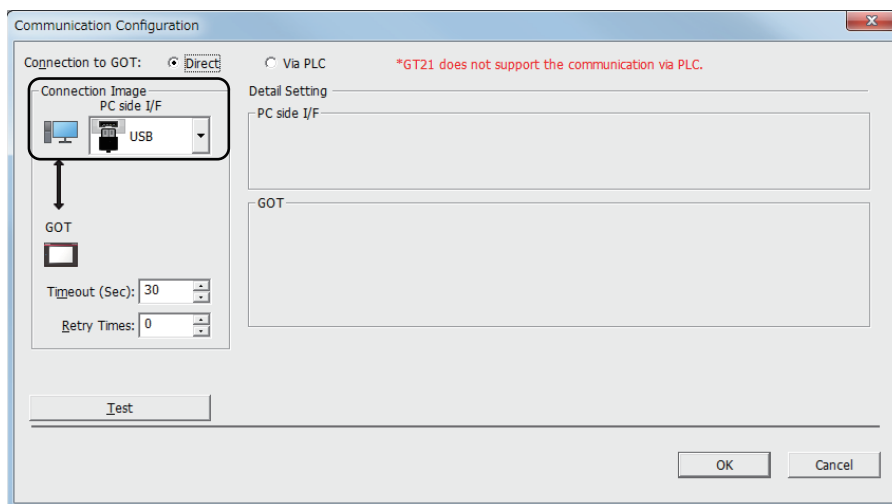


Direct connection with the GOT

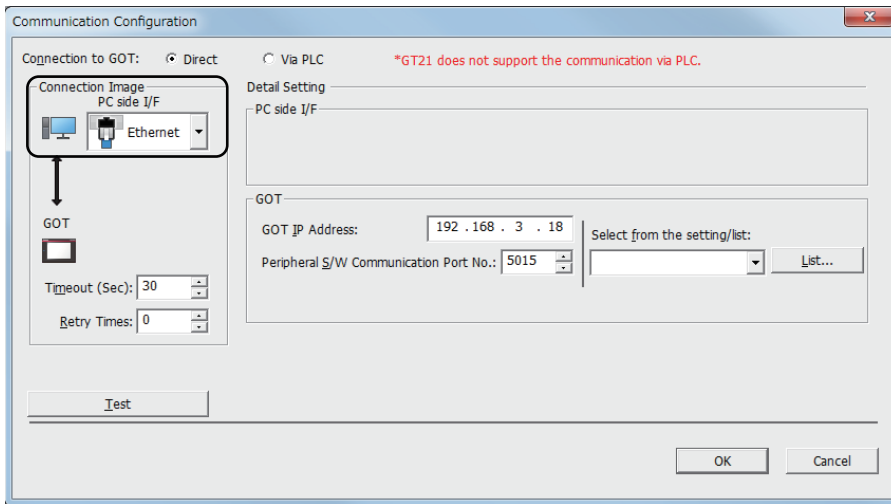
The following describes setting screens for direct connection between the personal computer and the GOT with a USB cable or an Ethernet cable.

Setting items are different depending on the setting of [Connection Image] under [PC side I/F] in the [Communication Configuration] dialog.

- When [USB] is selected



- When [Ethernet] is selected



Item	Description
[Connection to GOT]	Select the connection method between the personal computer and the GOT. To connect the GOT directly, select [Direct].
[Connection Image]	Set the interface to be used for the connection between the personal computer and the GOT.
[PC side I/F]	Select the type of the interface of the personal computer. Setting range: USB, Ethernet
[Timeout (Sec)]	Set the timeout period for the initial communication between Data Transfer Tool and the GOT. Setting range: 1 to 9999 seconds If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.
[Retry Times]	Set the number of retries when a timeout occurs. Setting range: 1 to 5
[GOT]	Configure settings when [PC side I/F] is set to [Ethernet]. Set the IP address and the communication port of the GOT to be connected. They can be manually entered in [GOT IP Address] and [Peripheral S/W Communication Port No.]. The connected GOT can be also selected from the registered GOT information in [Select from the setting/list].
[GOT IP Address]	Set the IP address of the GOT. Setting range: 0.0.0.0 to 255.255.255.255
[Peripheral S/W Communication Port No.]	Set the port No. used for the communication with Data Transfer Tool. Setting range: 1024 to 65534
[Select from setting/list]	Select the GOT to be connected from the list of registered GOT information. GOT information can be set in the [GOT Setting List] dialog that is displayed by clicking the [List] button.
[List] button	Opens the [GOT Setting List] dialog. Set the GOT name and IP address for selecting the GOT IP address with [Select from the setting/list]. Page 29 [GOT Setting List] dialog
[Test] button	Performs the communication test between the personal computer and the GOT.
[OK] button	When settings are changed, the changed data is reflected. When the [OK] button is not clicked, the set data is not reflected. The saved data will be retained until the data is changed next time.
[Cancel] button	When settings are changed, the [Communication configuration] dialog is closed without reflecting the changed data.

Connection with the GOT via programmable controllers

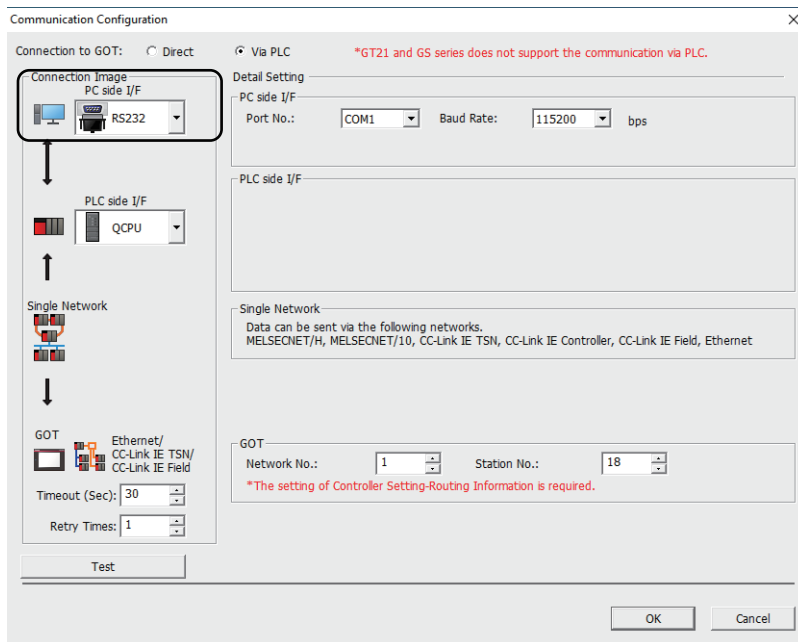
The following describes setting screens to connect the personal computer with the GOT via programmable controllers. To configure settings, connection setting information of programmable controllers to be routed is required. Refer to the following manual and check the information in advance.

 GOT2000 Series Connection Manual (Mitsubishi Electric Products)

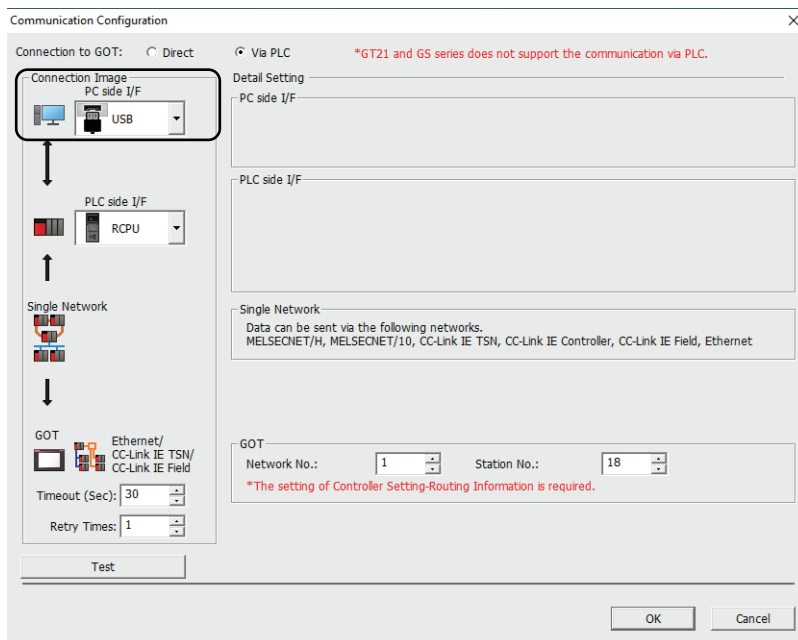
Setting items are different depending on the setting of [Connection Image] under [PC side I/F] in the [Communication Configuration] dialog.

When [PC side I/F] is set to [Ethernet], setting items are different depending on whether the connected programmable controller is a CPU module or an Ethernet interface module.

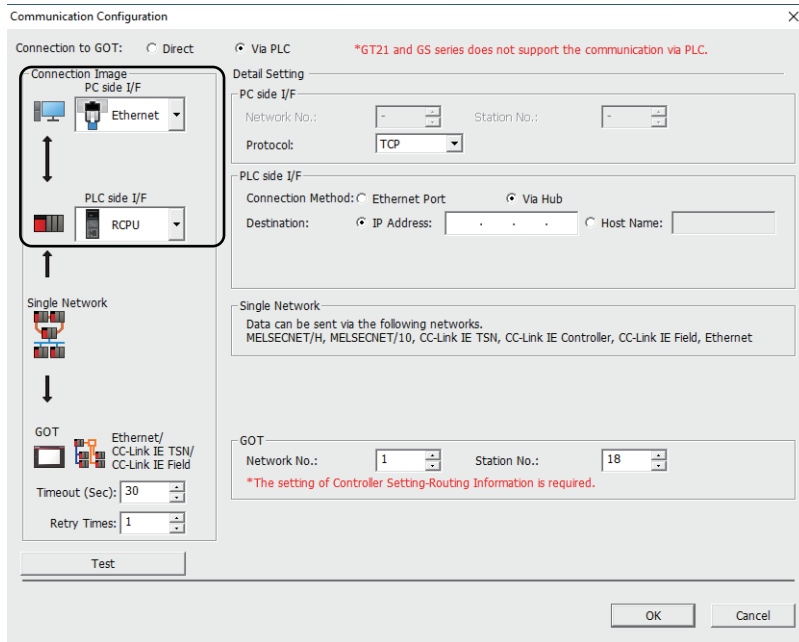
- When [RS232] is selected



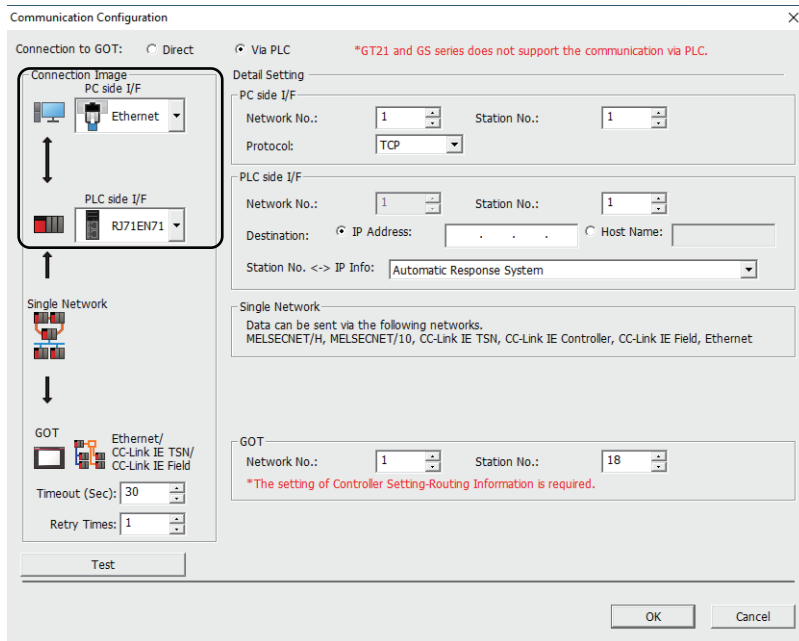
- When [USB] is selected



• When [Ethernet] is selected (CPU module connection)



• When [Ethernet] is selected (Ethernet interface module connection)

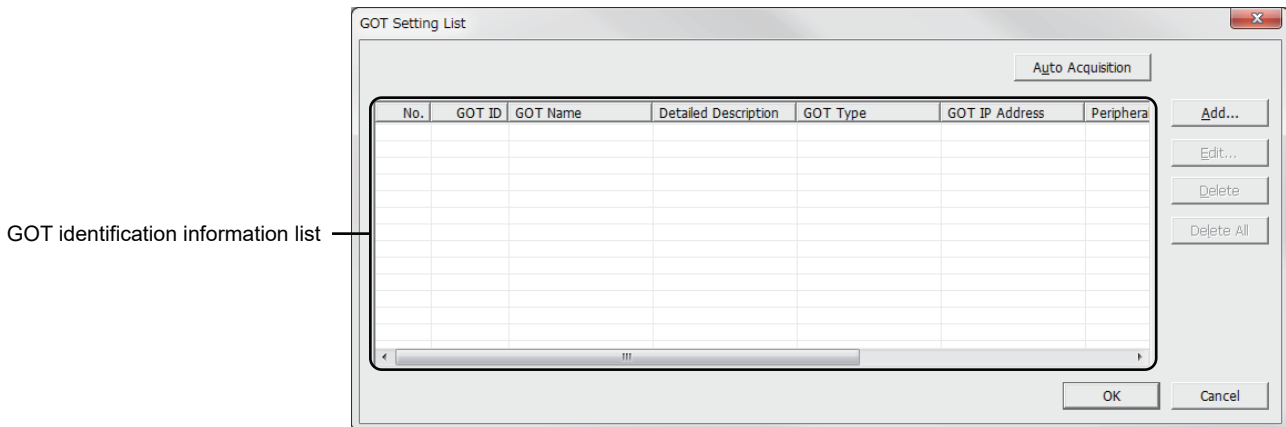


Item	Description										
[Connection to GOT]	Select the connection method between the personal computer and the GOT. Select [Via PLC] for connection via programmable controllers.										
[Connection Image]	Set the interface to be used or the device to be routed for the connection of the personal computer and the GOT. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>[PC side I/F]</td> <td>Select the type of the interface of the personal computer. Setting range: RS232, USB, Ethernet</td> </tr> <tr> <td>[PLC side I/F]</td> <td>Select the CPU module or Ethernet interface module to be routed.</td> </tr> <tr> <td>[Ethernet/CC-Link IE TSN/CC-Link IE Field]</td> <td>Routed network which the GOT is connected</td> </tr> <tr> <td>[Timeout (Sec)]</td> <td>Set the timeout period for the initial communication between Data Transfer Tool and the GOT. Setting range: 1 to 9999 seconds If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.</td> </tr> <tr> <td>[Retry Times]</td> <td>Set the number of retries when a timeout occurs. Setting range: 0 to 5</td> </tr> </table>	[PC side I/F]	Select the type of the interface of the personal computer. Setting range: RS232, USB, Ethernet	[PLC side I/F]	Select the CPU module or Ethernet interface module to be routed.	[Ethernet/CC-Link IE TSN/CC-Link IE Field]	Routed network which the GOT is connected	[Timeout (Sec)]	Set the timeout period for the initial communication between Data Transfer Tool and the GOT. Setting range: 1 to 9999 seconds If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.	[Retry Times]	Set the number of retries when a timeout occurs. Setting range: 0 to 5
[PC side I/F]	Select the type of the interface of the personal computer. Setting range: RS232, USB, Ethernet										
[PLC side I/F]	Select the CPU module or Ethernet interface module to be routed.										
[Ethernet/CC-Link IE TSN/CC-Link IE Field]	Routed network which the GOT is connected										
[Timeout (Sec)]	Set the timeout period for the initial communication between Data Transfer Tool and the GOT. Setting range: 1 to 9999 seconds If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.										
[Retry Times]	Set the number of retries when a timeout occurs. Setting range: 0 to 5										

Item	Description	
[PC side I/F]	[Port No.]	Set the communication port of the personal computer when [PC side I/F] is set to [RS232]. The setting range varies according to the PC to be used.
	[Baud Rate]	Set the transmission speed between the personal computer and the programmable controller when [PC side I/F] is set to [RS232]. Setting range: 115200, 57600, 38400, 19200, 9600
	[Network No.]	Set the number when [PC side I/F] is set to [Ethernet] and [PLC side I/F] is set to [RJ71EN71], [QJ71E71], or [LJ71E71]. Set the network No. of the Ethernet network to which the PC is connected. Setting range: 1 to 239
	[Station No.]	Set the number when [PC side I/F] is set to [Ethernet] and [PLC side I/F] is set to [RJ71EN71], [QJ71E71], or [LJ71E71]. Set the station No. of the PC. To connect the PC and the Ethernet interface module, set the station No. which does not overlap in the same network. The following shows the setting range. <ul style="list-style-type: none"> • When [PLC side I/F] is set to [RJ71EN71]: 1 to 120 • When [PLC side I/F] is set to [QJ71E71] or [LJ71E71]: 1 to 64
	[Protocol]	Select the communication protocol to be used in the communication between the PC and the programmable controller. Setting range: TCP, UDP
[PLC side I/F]	[Connection Method]	Setting is required when [PLC side I/F] is set to [RCPU], [QCPU], or [LCPU]. Set the connection method between the PC and the programmable controller. Setting range: Ethernet Port, Via Hub
	[Destination]	Setting is required when [PLC side I/F] is set to [RCPU], [QCPU], or [LCPU] and [Connection Method] is set to [Via Hub]. Set the IP address or the host name of the destination programmable controller. <ul style="list-style-type: none"> • IP Address Specify the destination programmable controller by the IP address. After the selection, set the IP address of the destination programmable controller. • Host name Specify the destination programmable controller by the host name. Set the host name using up to 64 characters. A one-byte character is counted as one character, and a two-byte character is counted as two characters.
	[Network No.]	When [PLC side I/F] is set to [RJ71EN71], [QJ71E71], or [LJ71E71], the network No. of PC side I/F is displayed.
	[Station No.]	When [PLC side I/F] is set to [RJ71EN71], [QJ71E71], or [LJ71E71], the station No. of the programmable controller is displayed. The following shows the setting range. <ul style="list-style-type: none"> • When [PLC side I/F] is set to [RJ71EN71]: 1 to 120 • When [PLC side I/F] is set to [QJ71E71] or [LJ71E71]: 1 to 64
	[Station No.<->IP Info]	Setting is required when [PLC side I/F] is set to [RJ71EN71], [QJ71E71], or [LJ71E71]. In the communication between the destination programmable controller and other programmable controllers, set the method to relate the network No., the station No., and the IP address of the destination programmable controller of the communication. Set this item according to the network parameter of the destination programmable controller. Setting range: Automatic Response System, IP Address Calculation/Table Conversion/Combination System
[GOT]	[Network No.]	Set the network number of the network to which the GOT is connected. Setting range: 1 to 239
	[Station No.]	Set the station No. of the GOT. Setting range: 1 to 120
[Test] button	Performs the communication test between the personal computer and the GOT.	
[OK] button	When settings are changed, the changed data is reflected. When the [OK] button is not clicked, the set data is not reflected. The saved data will be retained until the data is changed next time.	
[Cancel] button	When settings are changed, the [Communication configuration] dialog is closed without reflecting the changed data.	

[GOT Setting List] dialog

By registering connectable GOTs in the list in advance, you can select the GOT to be connected from the list. When you select the GOT to be connected, the GOT information set in this dialog is displayed in the list of [Select from setting/list] in the [Communication Configuration] dialog, thereby eliminating the need of manual entry of IP address, port No., and other details to set GOT information.



Item	Description
[Auto Acquisition] button	Acquires the GOT identification information via the Ethernet automatically from the GOT on the same network as the personal computer.
GOT identification information list	List of the GOT identification information saved in a project. The information can be added, edited, or deleted with the operation button.
[Add] button	Adds the GOT individual information in the list of the GOT identification information. Input the GOT individual information in the [GOT Setting] dialog. ☞ Page 30 [GOT Setting] dialog
[Edit] button	Edits the GOT identification information which is being selected in the list of the GOT identification information list. Input the GOT individual information in the [GOT Setting] dialog. ☞ Page 30 [GOT Setting] dialog
[Delete] button	Deletes the GOT identification information that is being selected in the list of the GOT setting.
[Delete All] button	Deletes all the GOT identification information registered to a project.

[GOT Setting] dialog

Edit GOT identification information to be registered to the project.

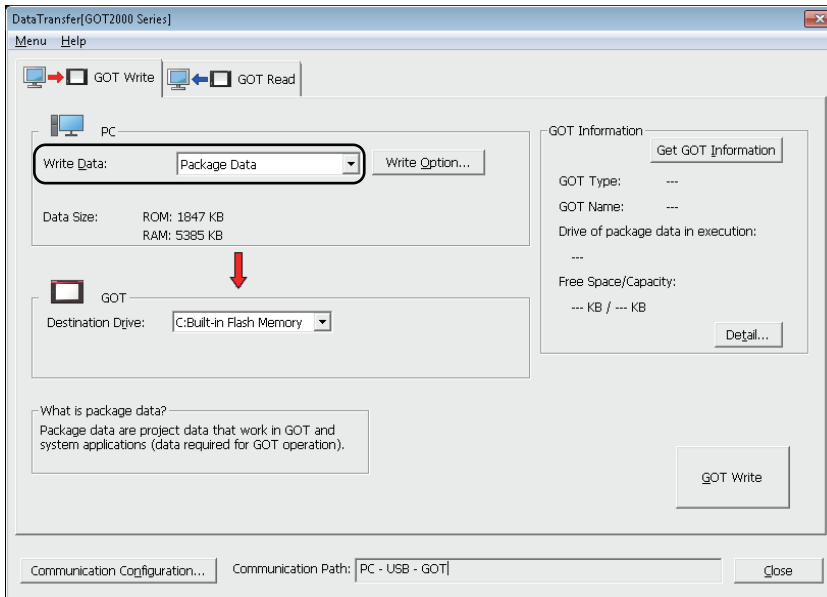
Settings edited in this dialog are displayed in the [GOT Setting List] dialog.

Item	Description
[GOT ID]	Set an ID number to identify the GOT. Setting range: 0 to 32767 When GOT ID is not used, specify [0].
[GOT Name]	Set the name to identify the GOT. Up 32 characters can be used for [GOT Name].
[Detailed Description]	Write the description of the GOT. Up 512 characters can be used for [Detailed Description]. A new line cannot be used in a sentence.
[GOT Type]	Set the GOT type. The following shows the setting range. <ul style="list-style-type: none"> • GT27**-X (1024 × 768) • GT27**-S (800 × 600) • GT27**-V (640 × 480) • GT2705-V (640 × 480) • GT25**-WX (1280 × 800) • GT25**-W (800 × 480) • GT25**-S (800 × 600) • GT25**-V (640 × 480) • GT2505-V (640 × 480) • GT23**-V (640 × 480) • GT2107-W (800 × 480) • GT2105-Q (320 × 240) • GT2104-R (480 × 272) • GT2104-P (384 × 128) • GT2103-P (320 × 128) • GS25**-WX (1280 × 800) • GS21**-W-N (800 × 480) • GS21**-W (800 × 480)
[GOT IP Address]	Set the IP address of the GOT. Setting range: 0.0.0.0 to 255.255.255.255
[I/F]	Select a connecting means. Setting range: Ethernet Standard Port, Ethernet Standard Port 1, Ethernet Standard Port 2, Ethernet Extended Port, Wireless LAN
[Peripheral S/W Communication Port No.]	Set the port No. used for the communication with Data Transfer Tool. Setting range: 1024 to 65534
[Subnet Mask]	Set the subnet mask of the GOT. Setting range: 0.0.0.0 to 255.255.255.255
[Default Gateway]	Set the default gateway of the GOT. Setting range: 0.0.0.0 to 255.255.255.255

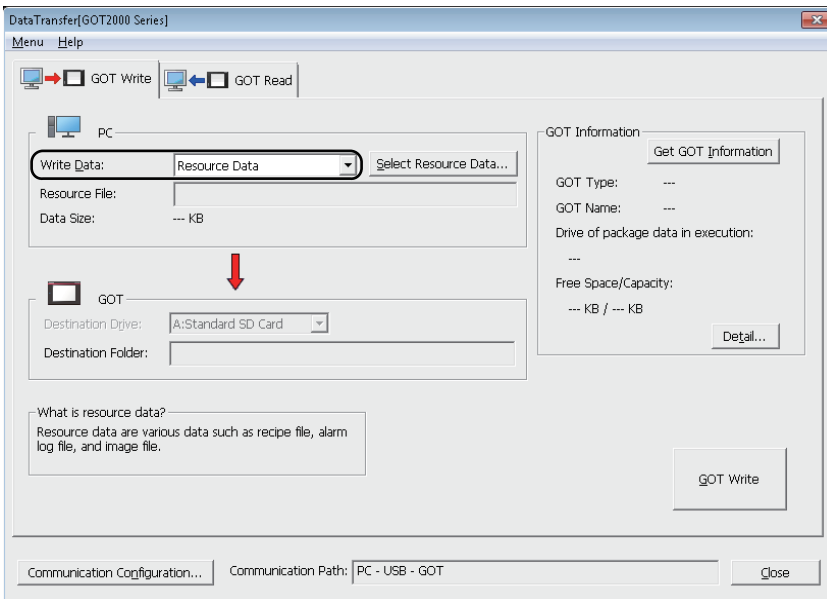
3.4 [GOT Write] Tab Screen

This setting screen is used when data is written from the personal computer to the connected GOT.
Required settings differ depending whether the data to be written is package data or resource data.

- For package data



- For resource data



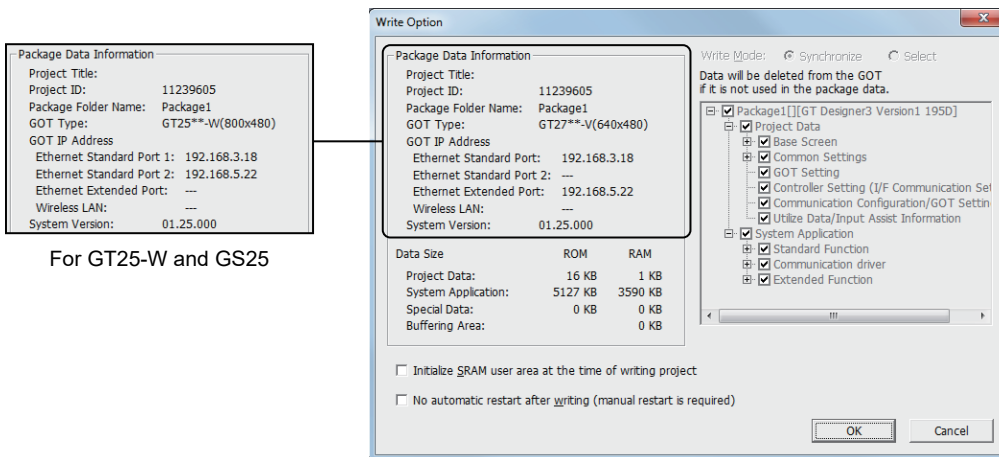
Item	Description
[Write Data]	Select the type of the data to be written to the GOT.
[Write Option] button	Settings are required only when [Package Data] is selected for [Write Data]. Check the settings for writing data to the GOT and configure the settings for operations such as initialization of SRAM user area in the GOT and restarting the GOT after the writing. ☞ Page 32 [Write Option] dialog
[Select Resource Data] button	Settings are required when [Resource Data] is selected for [Write Data]. Set the resource data to be written to the GOT, and set the write destination drive. ☞ Page 33 [Select Resource Data] dialog For the writable resource data, refer to the following. ☞ Page 9 Types of Transferable Data
[Resource File]	The resource file selected in the [Select Resource Data] dialog is displayed.
[Data Size]	Size of the package data or resource data file.

Item	Description
[Destination Drive]	For package data, select the write destination drive of the package data. For resource data, the write destination drive for the resource data selected in the [Select Resource Data] dialog is displayed.
[Destination Folder]	The write destination folder for the resource data selected in the [Select Resource Data] dialog is displayed.
[Get GOT information] button	Acquires the information from the connected GOT, including the GOT type and the free space of the specified drive, and displays the information on the screen.
[Detail] button	Displays the [GOT Information - Detail] dialog. The name of the connected GOT, the memory capacity, and other details can be checked. ☞ Page 34 [GOT Information - Detail] dialog
[GOT Write] button	Starts the data writing to the GOT.
[Communication Configuration] button	Displays the [Communication Configuration] dialog. Configure settings for communication between the personal computer and the GOT. ☞ Page 24 [Communication Configuration] Dialog
[Communication Path]	Communication route between the personal computer and the GOT

[Write Option] dialog

Check the settings for writing data to the GOT and configure the settings for operations such as initialization of SRAM user area in the GOT and restarting the GOT after the writing.

The dialog display differs depending on the connected GOT model.



For GT25-W and GS25

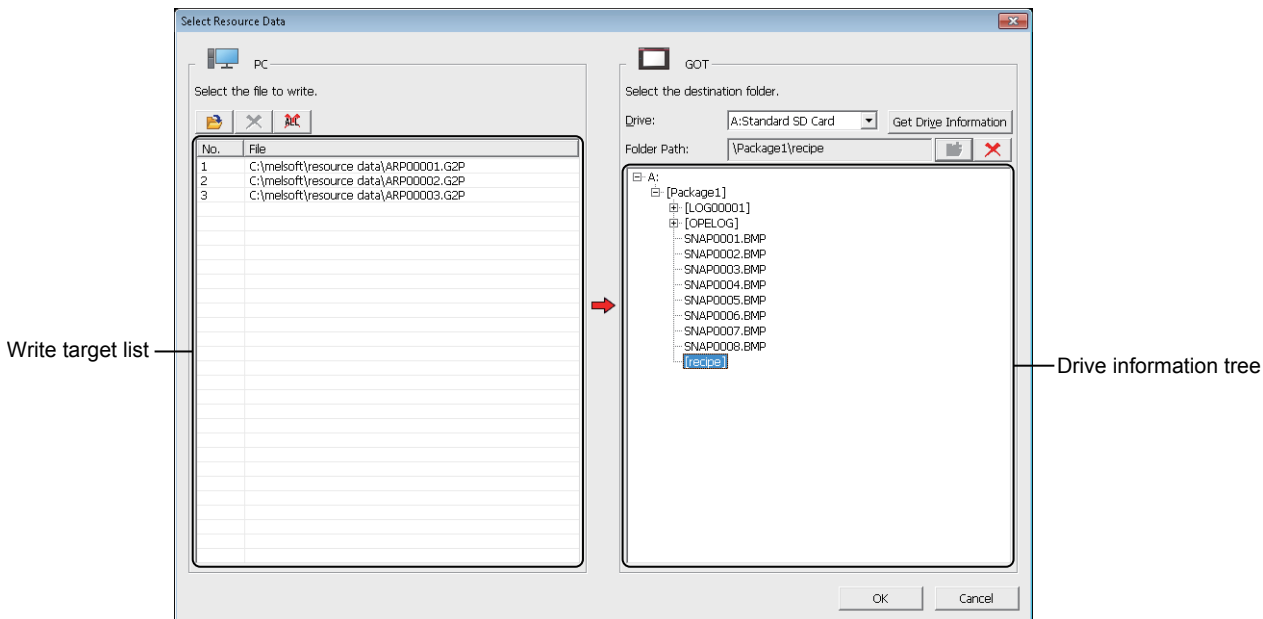
For the models other than GT25-W and GS25







Item	Description
[Write Mode]	The setting is fixed to [Synchronize] and cannot be changed. Only the required data is written according to the difference from the package data which has already been written to the GOT. The data not used in the package data in the GOT is deleted.
Package data tree	Displays the data which is included in the package data in a tree. The data cannot be changed.
[Initialize SRAM user area when writing project data/OS]	Not available to GT21 and GS21. Initializes the SRAM user area when the package data is written to the GOT.
[Not restart automatically after writing (required to restart manually)]	Select this item not to restart the GOT automatically after the package data is written. When this item is selected, the GOT needs to be restarted manually after writing the package data.

[Select Resource Data] dialog

Set the resource data to be written to the GOT, and set the write destination drive.

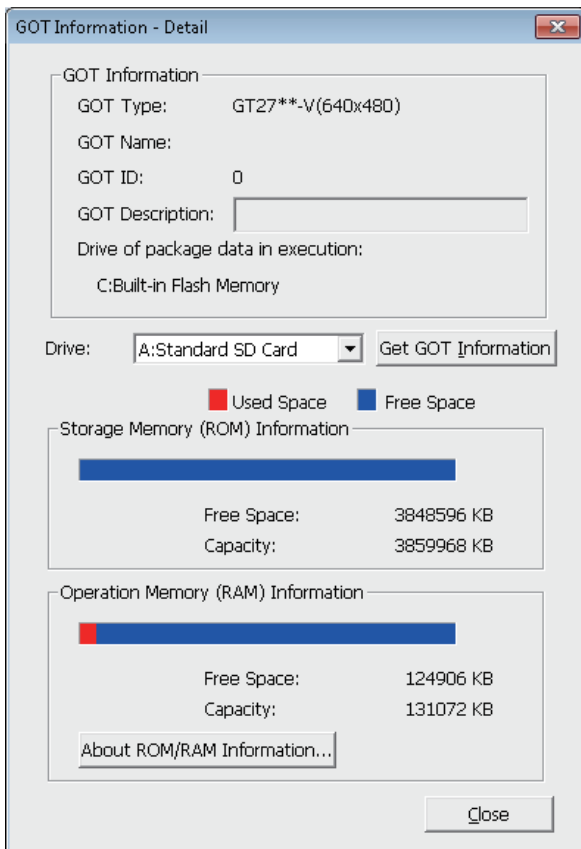
Multiple resource data files can be selected.



Item	Description
	Displays the [Open] dialog. Select a resource data file to be written to the GOT.
	Deletes a selected resource data file from the write target list.
	Deletes all resource data files from the write target list.
Write target list	Lists the resource data files to be written to the GOT.
[Drive]	Select the destination drive to which the resource data is written. The following shows the items to be selected. <ul style="list-style-type: none"> • [A:Standard SD Card] • [B:USB Drive] (GT27, GT25, GT23, and GS25) • [E:USB Drive] (GT27, GT25, GT23, GT2107-W, and GS25) • [F:USB Drive] (GT27, GT25, GT23, and GS25) • [G: USB Drive] (GT27, GT25, GT23, and GS25) For the available drives by GOT model, refer to the following.  GT Designer3 (GOT2000) Screen Design Manual
Drive information tree	Displays the folders and files in the drive that is selected for [Drive] in the tree view. The folder selected in the tree is set as the write destination folder.
[Get Drive Information] button	Reads the contents of a specified drive from the GOT. The read data is displayed in the drive information tree.
[Folder Path]	Path to the write destination folder for the resource data The path to the folder selected in the drive information tree is displayed.
	Adds a new folder under the drive or folder selected in the drive information tree. The new folder name is displayed in red. The new folder is created upon completion of resource data writing.
	Deletes a newly-added folder that is selected in the drive information tree.

[GOT Information - Detail] dialog

The dialog shows the name of the connected GOT, the memory capacity, and other details.



Item	Description
[GOT Type]	GOT type
[GOT Name]	Name to identify the GOT
[GOT ID]	ID number to identify the GOT
[GOT Description]	Detail description of the GOT
[Drive of package data in execution]	Drive that stores the package data being used in the GOT
[Drive]	Select the drive of the GOT to display the detail information.
[Get GOT information] button	Acquires the information from the connected GOT, including the GOT type and the free space of the specified drive, and displays the information on the screen.
[Storage memory (ROM) Information]	Free space and capacity of the GOT storage memory (ROM)
[Operation Memory (RAM) Information]	Free space and capacity of the GOT operation memory (RAM)
[About ROM/RAM information] button	Displays explanations of ROM and RAM in the GOT.

Point

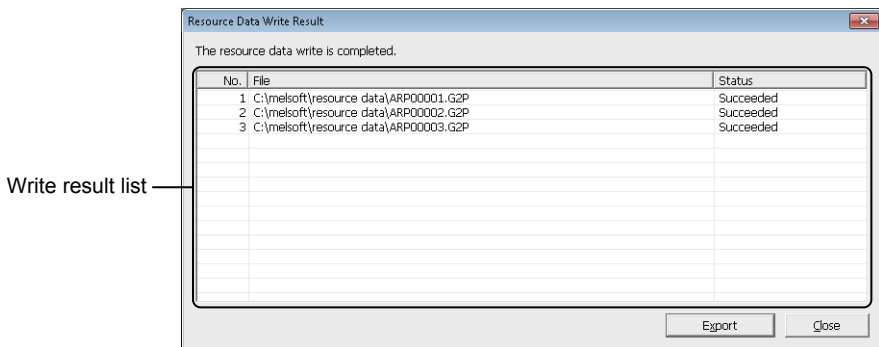
The system applications and project data in the storage memory (ROM) are expanded to the operation memory (RAM) to run the GOT.

If the expanded data size exceeds the capacity of the operation memory (RAM), reduce the data size by deleting unnecessary project data or system applications, or other methods.

[Resource Data Write Result] dialog

This dialog appears only after resource data writing is performed.

The result of resource data writing is displayed.



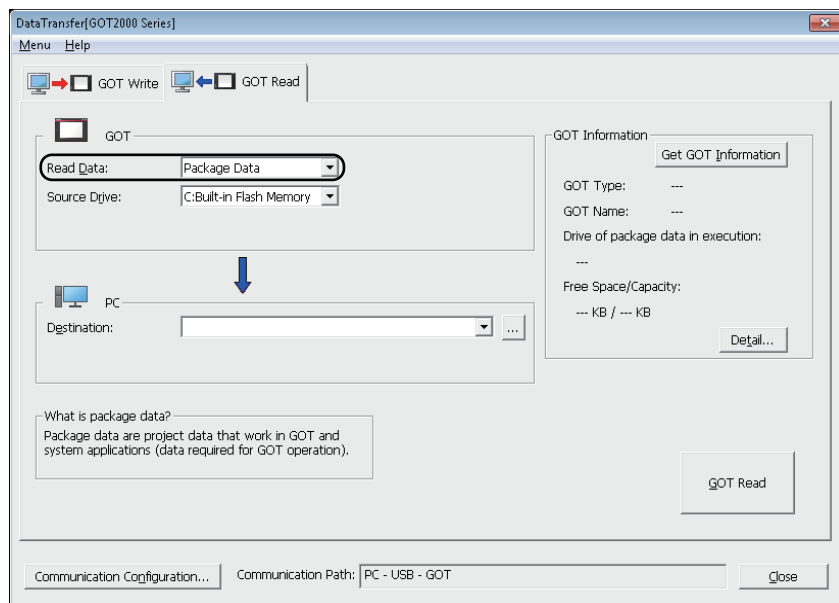
Item	Description
Write result list	Result of resource data writing
	[No.] File number
	[File] Resource data file
	[Status] The result of writing ([Succeeded] or [Failed]) is displayed.
[Export] button	Displays the [Save As] dialog. Save the write result to a file.

3.5 [GOT Read] Tab Screen

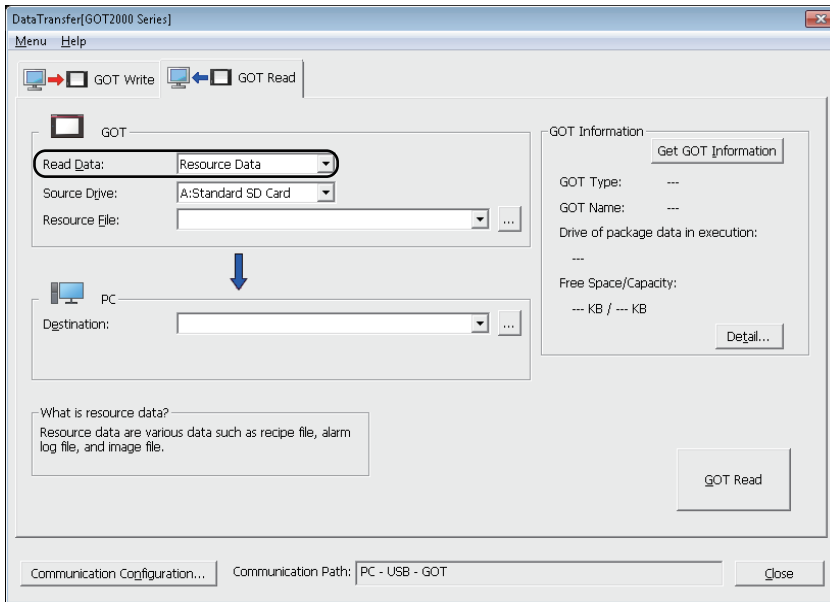
This screen is used to configure settings for reading package data or resource data from the connected GOT.

The setting items differ depending on the data to be read.

- For package data



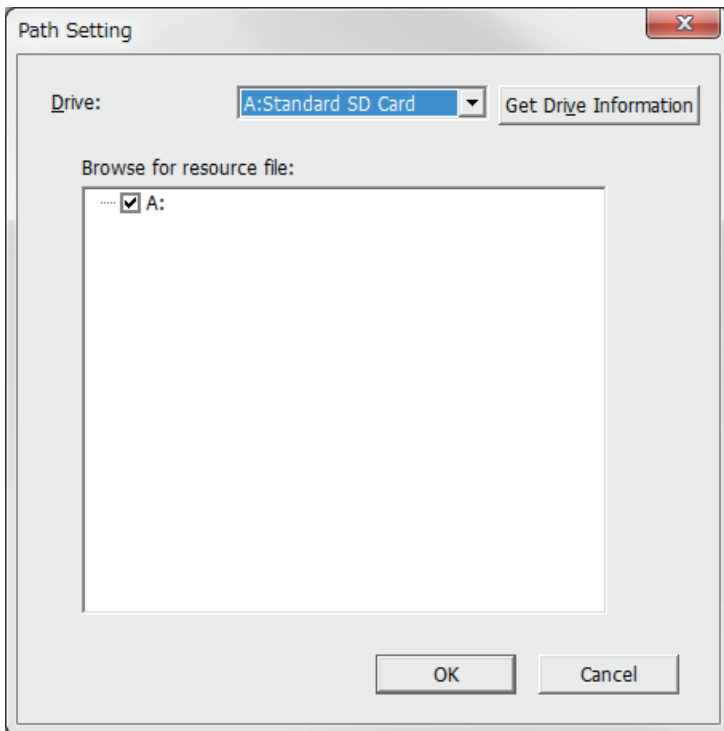
- For resource data



Item	Description
[Read Data]	Select the type of the data that is read from the GOT.
[Source Drive]	Select the drive that the data is read. When selecting an invalid drive for the GOT and clicking the [GOT Read] button, an error message is displayed.
[Resource File]	Specify the source drive of the connected GOT and the resource file to be read. Click the [...] button to display the [Path Setting] dialog. ☞ Page 37 [Path Setting] dialog For the readable resource data, refer to the following. ☞ Page 10 Resource data
[Destination]	Set the storage location for the read data. Up to five records specified in the past are held and displayed in the list.
[Get GOT information] button	Acquires the information from the connected GOT, including the GOT type and the free space of the specified drive, and displays the information on the screen.
[Detail] button	Displays the [GOT Information - Detail] dialog. The dialog shows the name of the connected GOT, the memory capacity, and other details. ☞ Page 34 [GOT Information - Detail] dialog
[GOT Read] button	Reads the data from the specified drive. When the storage capacity for the read data is insufficient, the reading is stopped.
[Communication Configuration] button	Displays the [Communication Configuration] dialog. Configure settings to enable communication between the personal computer and the GOT. ☞ Page 24 [Communication Configuration] Dialog
[Communication Path]	Communication route between the personal computer and the GOT

[Path Setting] dialog

Specify the source drive of the connected GOT and the resource file to be read.



Item	Description
[Drive]	Select the read source drive.
[Get Drive Information] button	Acquires the drive information of the read source drive.
[Browse for resource file]	Displays the file configuration of the read source drive in a tree. Select the resource file to be read from the tree.

3.6 [ResourceConverter] Dialog

This screen is used to convert the file format of resource data.

Select [Menu] on the Data Transfer Tool menu bar and click [Resource Converter] to display the [ResourceConverter] dialog.

For resource data that can be converted, refer to the following.

☞ Page 12 Resource Data to be Converted

Precautions

■Precautions for converting a recipe file

When a Unicode text file or a CSV file is converted into a G2P file, the original G2P file which is used to create the Unicode text file or the CSV file is required.

Store the original G2P file in the same path where the Unicode text file or the CSV file to be converted.

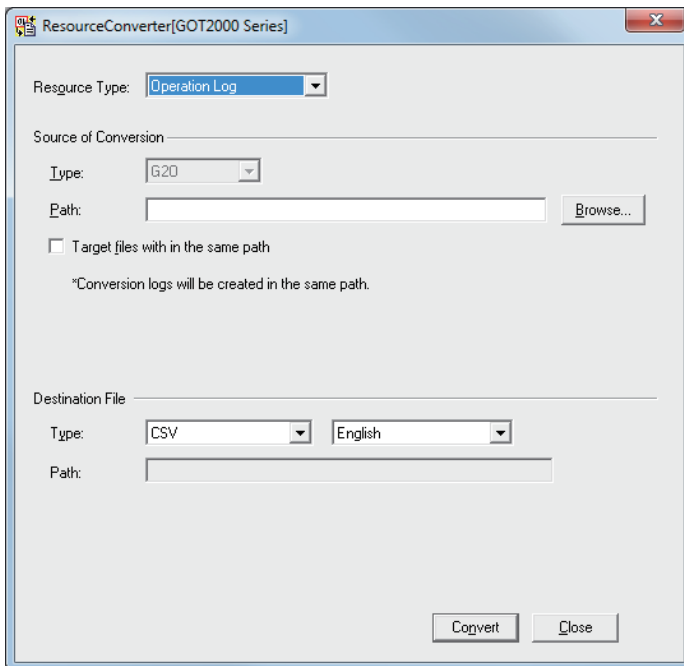
■Precautions for converting an alarm log file

When converting an alarm log file, the project data which is used to create the alarm log file is required.

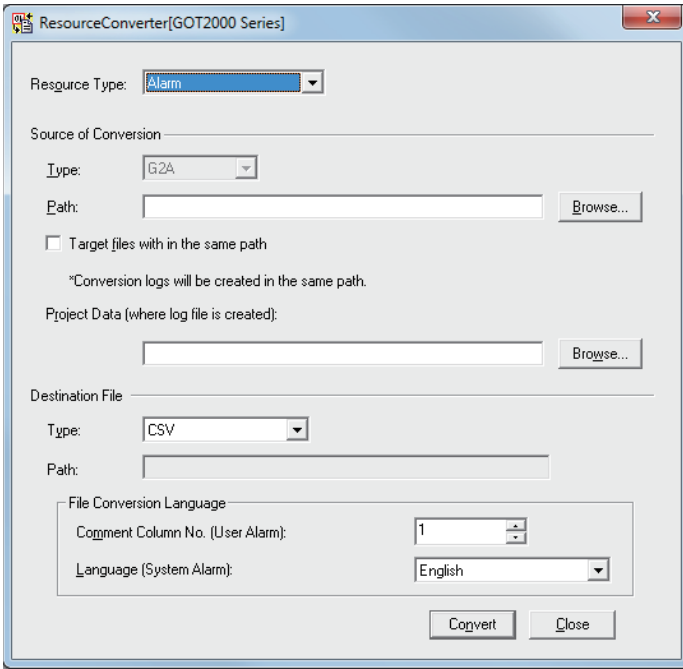
When there is no project data, read one from the GOT.

Setting items in the [ResourceConverter] dialog differ depending on the type of data to be converted.

- For Operation Log



• For Alarm



Item	Description
[Resource Type]	Select the resource type (Recipe, Operation Log, Logging, or Alarm) to be converted.
[Source of Conversion]	Set the conversion source file.
[Type]	Select the type of the conversion source file. The type of the selectable file varies according to the resource data type selected with [Resource Type]. <ul style="list-style-type: none"> • For recipe: CSV, Unicode Text, G2P • For operation log: G2O • For logging: G2L • For alarm: G2A
[Path]	Specify the path of the conversion source file. The save destination path can be also set by the [Browse] button.
[Target files with in the same path]	If the checkbox is checked, all the files in the same path (only selected files in [Type]) can be targeted. When executing a file conversion with this checkbox checked, the conversion log is created automatically for the specified path. With the conversion log, the full path of the converted file, the conversion result (OK or NG), and the file creation date and time can be checked.
[Project Data (where log file is created)]	Set this item when [Alarm] is selected in [Resource Type]. Select the format of the project data and set the project data which is used to create the alarm log file. The save destination path can be set by the [Browse] button also.

Item	Description	
[Destination File]	Set the converted file.	
	[Type]	<p>Select the type of the converted file.</p> <p>The type of the selectable file varies according to the resource data type selected with [Resource Type].</p> <ul style="list-style-type: none"> • For recipe: CSV, Unicode Text, G2P • For operation log: CSV, Unicode Text • For logging: CSV, Unicode Text • For alarm: CSV, Unicode Text <p>When selecting [Operation Log] in [Resource Type], select the language to be used in the converted file.</p> <p>The selectable language varies according to the type of the converted file.</p> <ul style="list-style-type: none"> • CSV: Japanese or English • Unicode Text: Japanese, English, Chinese (Simplified), Chinese (Traditional), or Korean
	[Path]	<p>Displays the output destination (the same path as that of the converted file) of the converted file.</p>
	[File Conversion Language]	<p>Set this item when [Alarm] is selected in [Resource Type].</p> <ul style="list-style-type: none"> • [Comment Column No. (User Alarm)]: <p>Set the comment column No. which is used to convert an alarm log file (user alarm). (1 to 30)</p> <ul style="list-style-type: none"> • [Language (System Alarm)]: <p>Select a language of the converted file when converting an alarm log file (system alarm).</p> <p>The selectable language varies according to the type of the converted file.</p> <ul style="list-style-type: none"> ◇ CSV: Japanese or English ◇ Unicode Text: Japanese, English, Chinese (Simplified), Chinese (Traditional), or Korean
[Convert] button	Converts the sound file.	

4 OPERATION WITH COMMAND LINE

The following describes commands used to transfer package data or convert resource data.

The following table shows symbols used in the format of commands.

Symbol	Description
/	Indicates that the command is an option.
[]	Indicates that the command can be omitted.
...	Indicates that the command can specify multiple options and arguments in a row.

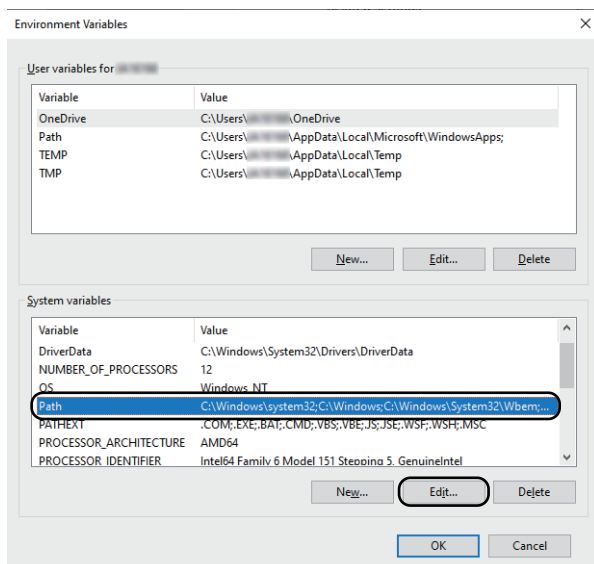
Setting environment variables

To execute operation by inputting a command name directly in the command prompt, the folder of Data Transfer Tool must be set for the environment variables (PATH) of Windows.

For details of the environment variables, refer to the manual or Help of Windows.

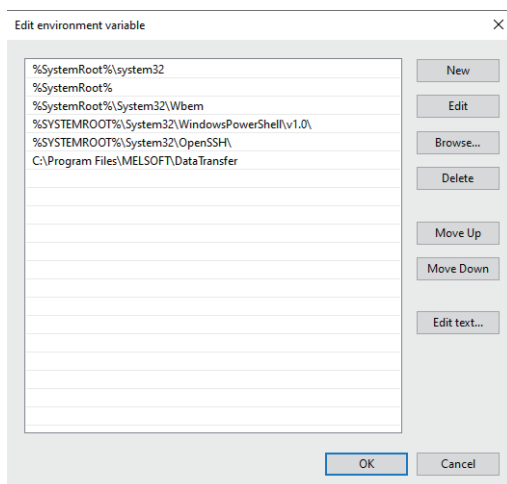
The following shows an example of setting environment variables. (For Windows 10)

1. Click [Start] → [Windows System] → [Control Panel].
2. In [Control Panel], select [System and Security] → [System].
3. Select [Advanced system settings] and click the [Environment Variables] button.
4. Select [Path] from [System variables] and click [Edit].



5. Click the [New] button, and enter the path to an executable file.

Example) C:\Program Files\MELSOFT\DataTransfer



6. Click the [OK] button in each dialog in the following order.

- [Edit environment variable] dialog → [Environment Variables] dialog → [System Properties] dialog

Starting the command prompt

Perform either of the following operations to start the command prompt. (For Windows 10)

- Select [Start] → [Windows System] → [Command Prompt] from the menu.
- Enter "cmd" in the search box on Windows, and run a search.
- Press the [Windows] key and the [R] key, and enter "cmd" in the [Run] dialog to run the command prompt.

4.1 Data Transfer

The following shows the data transfer operations that can be executed with the command line.
Data cannot be transferred from multiple threads and processes.

Function	Command	Reference
Setting for communication with GOT	GOT direct connection	☞ Page 43 Setting for communication with GOT
	Via PLC	
	Via PLC Ethernet module	
Communication test	DtComm2000 /commtest	☞ Page 45 Communication test
Obtaining the drive information	DtComm2000 /getdriveinfo	☞ Page 46 Obtaining the drive information
Writing the package data	DtComm2000 /download	☞ Page 47 Writing the package data
Reading the package data	DtComm2000 /upload	☞ Page 48 Reading the package data
Writing the resource data	DtComm2000 /resourcedown	☞ Page 49 Writing the resource data
Reading the resource data	DtComm2000 /resourceup	☞ Page 50 Reading the resource data
Displaying the command help	DtComm2000 /help	☞ Page 50 Displaying the command help
	DtComm2000 /?	

Setting for communication with GOT

Format

■GOT direct connection

```
DtComm2000 /commconfig [/Type comm_type] [/Ip got_ip] [/Port got_port] [/Timeout timeout] [/Retry retry]
```

■Via PLC

```
DtComm2000 /commconfigPlc [/Plc plc] [/Type comm_type] [/CPort cport] [/Baudrate baudrate] [/Protocol pc_protocol]
[/PlcConnectType plc_connect_type] [/PlcConnectFormatplc_connect_format] [/PlcIpplc_ip] [/PlcHost plc_host] [/GotNetwork got_network]
[/GotStation got_station] [/Timeout timeout] [/Retry retry]
```

■Via PLC Ethernet module

```
DtComm2000 /commconfigEthernetUnit [/Plc plc] [/Protocol pc_protocol] [/PcNetwork pc_network] [/PcStation pc_station] [/UnitStation unit_station]
[/UnitConnectFormat unit_connect_format] [/UnitIP unit_ip] [/UnitHost unit_host] [/UnitStationIpInfo unit_station_ip_info] [/GotNetwork got_network]
[/GotStation got_station] [/Timeout timeout] [/Retry retry]
```

Option

Option	Variable name	Description
/Type	comm_type	Specifies the connection method. GOT direct connection: USB, Ethernet Via PLC: RS232, USB, Ethernet
/CPort	cport	Specifies the communication port (COM1 to COM63). Available only when the connection method is specified to [RS232].
/Baudrate	baudrate	Specifies the transfer speed (baud rate) (9600, 19200, 38400, 57600, 115200). Available only when the connection method is specified to [RS232].
/Ip	got_ip	Specifies the IP address (0.0.0.0 to 255.255.255.255). An IP address can also be specified with a registered name. Available only when the connection method is specified to [Ethernet].
/Port	got_port	Specifies the port number of the GOT. (1024 to 65534) Available only when the connection method is specified to [Ethernet].
/Plc	plc	Specifies the PLC side interface. Via PLC: RCP, QCPU, LCP Via Ethernet module: RJ71EN71, QJ71E71, LJ71E71
/Protocol	pc_protocol	Specifies the communication protocol used in the communication between the personal computer and the programmable controller. (TCP, UDP) Available only when the connection method is specified to [Ethernet].
/PlcConnectType	plc_connect_type	Specifies the method of connecting the PLC side interface. (EthernetPort or ViaHub) Available only when the connection method is specified to [Ethernet].

Option	Variable name	Description
/PlcConnectFormat	plc_connect_format	Specifies the destination of the PLC side interface. (IP, HostName) Available only when the connection method is specified to [Ethernet].
/PlcIp	plc_ip	Specifies the IP address of the PLC side interface (0.0.0.0 to 255.255.255.255). Available only when the connection method is specified to [Ethernet].
/PlcHost	plc_host	Specifies the host name of the destination programmable controller. One-byte character: 0 to 64 characters Two-byte character: 0 to 32 characters Available only when the connection method is specified to [Ethernet].
/GotNetwork	got_network	Specifies the network No. of the network to which the GOT is connected. (1 to 239)
/GotStation	got_station	Specifies the station No. of the GOT. (1 to 120)
/Timeout	timeout	Specifies the timeout time (second). (1 to 9999) If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.
/Retry	retry	Specifies the retry time at the timeout. (0 to 5)
/PcNetwork	pc_network	Specifies the network No. of the Ethernet network to which the personal computer is connected when the Ethernet module is selected as the PLC side interface. (1 to 239) Available only when the connection method is specified to [Ethernet].
/PcStation	pc_station	Specifies the station No. of the personal computer when the Ethernet module is selected as the PLC side interface. (1 to 120) Available only when the connection method is specified to [Ethernet].
/UnitStation	unit_station	Specifies the station No. of the Ethernet module when the Ethernet module is selected as the PLC side interface. QJ71E71, LJ71E71: 1 to 64 RJ71EN71: 1 to 120 Available only when the connection method is specified to [Ethernet].
/UnitConnectFormat	unit_connect_format	Specifies the destination of the Ethernet module when the Ethernet module is selected as the PLC side interface. (IP, HostName) Available only when the connection method is specified to [Ethernet].
/UnitIp	unit_ip	Specifies the IP address of the Ethernet module when the Ethernet module is selected as the PLC side interface. (0.0.0.0 to 255.255.255.255) Available only when the connection method is specified to [Ethernet].
/UnitHost	unit_host	Specifies the host name of the Ethernet module when the Ethernet module is selected as the PLC side interface. One-byte character: 0 to 64 characters Two-byte character: 0 to 32 characters Available only when the connection method is specified to [Ethernet].
/UnitStationIPInfo	unit_station_ip_info	Specifies the method to relate the network No., station No., and IP address of the destination programmable controller in the communication between the destination programmable controller and other programmable controllers. Specify the method according to the network parameter of the destination programmable controller. (AutoResponseSystem or Others) For the following network parameters, specify "Others". <ul style="list-style-type: none"> • IP Address Calculation System • Table Conversion System • Combination System

Input example

(Example) When the connection method is changed to "USB" and the connection timeout time is changed to "35 seconds" in the communication setting

```
DtComm2000 /commconfig /Type USB /Timeout 35
```

Communication test

Format

DtComm2000 /commtest [/RemotePass remote_password]

Option

Option	Variable name	Description
/RemotePass	remote_password	Specifies the remote password set for the Ethernet module. When this option is omitted, the password is not specified.

Obtaining the drive information

Format

```
DtComm2000 /getdriveinfo [/Drv got_drive_name] [/RemotePass remote_password]
```

Option

Option	Variable name	Description
/Drv	got_drive_name	Specifies the GOT drive for obtaining information. (A, B, C, D, E, F, G) When this option is omitted, the C drive is specified.
/RemotePass	remote_password	Specifies the remote password set for the Ethernet module. When this option is omitted, the password is not specified.

Input example

(Example) Obtaining the drive information from the A drive in the GOT.

```
DtComm2000 /getdriveinfo /Drv A
```


Writing the package data

Format

```
DtComm2000 /download [/Drv got_drive_name] [/InitSRAM] [/NotReboot] [/PrjUsername project_username] [/PrjPassword project_password]  
[/Pass got_password] [/RemotePass remote_password] package_filename
```

Option

Option	Variable name	Description
/Drv	got_drive_name	Specifies the GOT drive where the package data is written. (A, B, C, E, F, G) When this option is omitted, the C drive is specified.
/InitSRAM	-	Writes the package data after the SRAM user area of the destination drive is initialized. When this option is omitted, the package data is written without the initialization of the SRAM user area.
/NotReboot	-	Does not restart the GOT after the package data is written. When this option is omitted, the GOT is restarted after the package data is written.
/PrjUsername	project_username	Specifies the user name set for the project of the package data to be written. When this option is omitted, the user name is not specified.
/PrjPassword	project_password	Specifies the password set for the project of the package data to be written. When this option is omitted, the password is not specified.
/Pass	got_password	Specifies the data transfer/utility password set with GT Designer3. When this option is omitted, the password is not specified.
/RemotePass	remote_password	Specifies the remote password set for the Ethernet module. When this option is omitted, the password is not specified.
-	package_filename	Specifies the file name of the package data to be written with an absolute path/a relative path and an extension (".GTXS").

Input example

(Example) When the package data (TEST.GTXS) is written to the C drive of the GOT

```
DtComm2000 /download /Drv C TEST.GTXS
```

Reading the package data

Format

```
DtComm2000 /upload [/Drv got_drive_name] [/Pass got_password] [/RemotePass remote_password] [package_filename]
```

Option

Option	Variable name	Description
/Drv	got_drive_name	Specifies the GOT drive that stores the package data to be read. (A, B, C, E, F, G) When this option is omitted, the C drive is specified.
/Pass	got_password	Specifies the data transfer/utility password set with GT Designer3. When this option is omitted, the password is not specified.
/RemotePass	remote_password	Specifies the remote password set for the Ethernet module. When this option is omitted, the password is not specified.
-	package_filename	Specifies the file name of the package data to be read with an absolute path/a relative path and an extension (".GTXS"). When this option is omitted, the data is read as "G2PRJCT.GTXS" to the current directory. If a file that has the same name as the file read from the connected GOT exists in the personal computer, the existing file is overwritten.

Input example

(Example) When the package data is read from the C drive of the GOT and stored as "TEST.GTXS" in C:\TEST_DIR in the personal computer

```
DtComm2000 /upload /Drv C C:\TEST_DIR\TEST.GTXS
```

Writing the resource data

Format

DtComm2000 /resourcedown [/Drv got_drive_name] [/Dest down_folder] [/Pass got_password] [/RemotePass remote_password] filename...

Option

Option	Variable name	Description
/Drv	got_drive_name	Specifies a GOT drive (A, B, E, F, or G) as the write destination for the resource data. When this option is omitted, the C drive is specified. Note that the resource data cannot be written to the C drive. Specify any other drive.
/Dest	down_folder	Specifies the write destination folder for the resource data. When this option is omitted, the root directory of the specified GOT drive is specified.
/Pass	got_password	Specifies the data transfer/utility password set with GT Designer3. When this option is omitted, the password is not specified.
/RemotePass	remote_password	Specifies the remote password set for the Ethernet module. When this option is omitted, the password is not specified.
-	filename	Specifies the file name or path of the resource data to be written. When a file name is specified alone, the relevant file in the current directory is specified. If the name of the file to be written from the personal computer is the same as that of an existing file in the GOT, the existing file is overwritten.

Input example

(Example) Writing the resource data (ARP00001.G2P) to the "recipe" folder in the A drive of the GOT

DtComm2000 /resourcedown /Drv A /Dest \recipe C:\ARP00001.G2P

Reading the resource data

Format

```
DtComm2000 /resourceup [/Drv got_drive_name] [/Dest up_folder] [/Pass got_password] [/RemotePass remote_password] filename ...
```

Option

Option	Variable name	Description
/Drv	got_drive_name	Specifies the GOT drive that has resource data to be read. (A, B, C, D, E, F, G) When this option is omitted, the C drive is specified.
/Dest	up_folder	Specifies the destination for the read resource data. When this option is omitted, resource data are read to the current directory.
/Pass	got_password	Specifies the data transfer/utility password set with GT Designer3. When this option is omitted, the password is not specified.
/RemotePass	remote_password	Specifies the remote password set for the Ethernet module. When this option is omitted, the password is not specified.
-	filename	Specifies the file name or path of the resource data to be read. Multiple file names or paths of the resource data to be read can be specified. If "all" is specified, all resource data for the specified drive are read. If a file name for a resource data includes a space, the resource data cannot be read with the file name specified. When reading the resource data, specify "all". If a file that has the same name as the file read from the connected GOT exists in the personal computer, the existing file is overwritten.

Input example

Example: Reading resource data (ARP00001.G2P) from the A drive in the GOT and storing data to C:\TEST_DIR in the personal computer.

```
DtComm2000 /resourceup /Drv A /Dest C:\TEST_DIR ARP00001.G2P
```

Displaying the command help

Format

```
DtComm2000 /help  
DtComm2000 /?
```

4.2 Resource Data Conversion

The following describes resource data conversion using the command line.

Converting resource data

The format varies according to the type of the converted resource data.

Precautions

When converting data, note the following.

■Precautions for converting a recipe file

When a Unicode text file or a CSV file is converted into a G2P file, the original G2P file which is used to create the Unicode text file or the CSV file is required.

Store the original G2P file in the same path where the Unicode text file or the CSV file to be converted.

■Precautions for converting an alarm log file

When converting an alarm log file, the project data which is used to create the alarm log file is required.

When there is no project data, read one from the GOT.

Format

Resource data type	Format
Recipe, Logging	rcconv2000 filename [target_extension] [/m]
Operation log	rcconv2000 filename [target_extension] [language_type] [/m]
Alarm	rcconv2000 filename projectfilename [user:username] [pw:password] [target_extension] [column_no] [language_type] [/m]

Option

Option	Description
filename	Specifies the source resource data file with an absolute path/a relative path and a file name (including extension).
projectfilename	Specifies the file of the project data used to create the alarm log file to be converted with an absolute path/a relative path and a project file name including an extension (GTXS).
user:username	Specifies this option when security is set in the project data specified with "projectfilename". Enter the specified user name after "user:".
pw:password	Specifies this option when security is set in the project data specified with "projectfilename". Enter the specified password after "pw:".
target_extension	Specifies the extension of the converted file. The type of the file that can be specified varies according to the source resource data type. <ul style="list-style-type: none">• For recipe: CSV, TXT, G2P• For operation log: CSV, TXT• For logging: CSV, TXT• For alarm: CSV, TXT When this option is omitted, the extension is specified as listed below according to the type of the conversion source file. <ul style="list-style-type: none">• G2P, G2O, G2L, G2A: CSV• CSV, TXT: G2P
column_no	Specifies the comment column No. which is used to convert the alarm log file (user alarm). When this option is omitted, 1 is specified.
language_type	Specifies the output language for the operation log and alarms. Available only when the operation log file or alarm log file (system alarm) is converted. The language that can be specified varies according to the type of the converted file. For CSV <ul style="list-style-type: none">• Japanese: JPN• English: ENG For TXT <ul style="list-style-type: none">• Japanese: JPN• English: ENG• Chinese (Simplified): CHS• Chinese (Traditional): CHT• Korean: KOR When this option is omitted, Japanese (JPN) is specified.

Option	Description
/m	Targets all files (only the extension specified with "target_exteision") in the same path for the conversion. A conversion log is automatically created in the specified path. With the conversion log, the full path of the converted file, the conversion result (OK or NG), and the file creation date and time can be checked.

Input example

Example: When the resource data (ARP00001.G2P) in C:\TEST_DIR\Package1 of the personal computer is converted to a CSV file

```
rcconv2000 C:\TEST_DIR\Package1\ARP00001.G2P CSV
```

Displaying the command help

Format

```
rcconv2000 /help  
rcconv2000 /?
```

5 OPERATION USING INTERFACE FUNCTION

The interface function is a function that can be used with Microsoft Visual C++.

By using the interface function, the data transfer and the resource data conversion can be executed between the GOT and a personal computer with the user-created application.










5.1 Applicable Development Environment

To use the interface function, the following development environment and files are required.

What to prepare	Description
Development environment	Microsoft Visual Studio 2008
File required for interface function	<p>To use the interface function, the following files that are stored in the DVD [Disk4] folder of GT Works3 are required.</p> <div data-bbox="507 654 1279 907" data-label="Diagram"><pre>graph TD; Disk4 --> DataTransfer; DataTransfer --> DtUserDLL; DtUserDLL --> DtUser2000_dll[DtUser2000.dll]; DtUserDLL --> DtUser2000_lib[DtUser2000.lib]; DtUserDLL --> DtFunc2000_h[DtFunc2000.h];</pre></div> <p>To use an application that uses the interface function, store "DtUser2000.dll" in the folder where the application is stored or in a folder with a path specified.</p>

5.2 Data Transfer


The following table shows interface functions used to use the data transfer function with the user-created application. Data cannot be transferred from multiple threads and processes.

Function	Interface function	Reference
Changing settings for direct connection with the GOT	long DT2000_CommConfig()	 Page 55 Changing settings for direct connection with the GOT
Changing settings for communication via PLC	long DT2000_CommConfigPlc()	 Page 56 Changing settings for communication via PLC
Changing settings for communication via Ethernet module	long DT2000_CommConfigEthernetUnit()	 Page 57 Changing settings for communication via Ethernet module
Communication test	long DT2000_CommTest()	 Page 58 Communication test
Obtaining data of the error that occurred in the previous communication	long DT2000_GetLastCommError()	 Page 59 Obtaining data of the error that occurred in the previous communication
Writing the package data	long DT2000_Download()	 Page 60 Writing the package data
Reading the package data	long DT2000_Upload()	 Page 61 Reading the package data
Writing the resource data	long DT2000_ResourceDown()	 Page 62 Writing the resource data
Reading the resource data	long DT2000_ResourceUP()	 Page 63 Reading the resource data

Changing settings for direct connection with the GOT

Format

IResult = DT2000_CommConfig(type, cport, baudrate, got_ip, got_port, timeout_direct, retry_direct);

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
type	const wchar_t*	Specifies the connection method. (USB, Ethernet)	Input
got_ip	const wchar_t*	Specifies the IP address of the GOT. (0.0.0.0 to 255.255.255.255) Available only when the connection method is specified to [Ethernet].	Input
got_port	const wchar_t*	Specifies the port number of the GOT. (1024 to 65534) Available only when the connection method is specified to [Ethernet].	Input
timeout_direct	const wchar_t*	Specifies the timeout time (second). (1 to 9999) If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.	Input
retry_direct	const wchar_t*	Specifies the retry time at the timeout. (0 to 5)	Input

Precautions

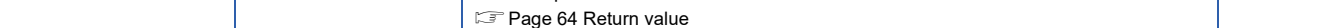
If an invalid value is specified, an error occurs.

If "NULL" or a null character string is specified, the communication setting does not change.

Changing settings for communication via PLC

Format

IResult = DT2000_CommConfigPlc(type, plc, cport, baudrate, pc_protocol, plc_connect_type, plc_connect_format, plc_ip, plc_host, got_network, got_station, timeout, retry);

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
type	const wchar_t*	Specifies the connection method. (RS232, USB, Ethernet)	Input
plc	const wchar_t*	Specifies the PLC side interface (RCPU, QCPU, LCPU).	Input
cport	const wchar_t*	Specifies the communication port (COM1 to COM63). Available only when the connection method is specified to [RS232].	Input
baudrate	const wchar_t*	Specifies the transfer speed (baud rate) (9600, 19200, 38400, 57600, 115200). Available only when the connection method is specified to [RS232].	Input
pc_protocol	const wchar_t*	Specifies the communication protocol used in the communication between the personal computer and the programmable controller. (TCP, UDP) Available only when the connection method is specified to [Ethernet].	Input
plc_connect_type	const wchar_t*	Specifies the connection method of the PLC side interface. (EthernetPort or ViaHub) Available only when the connection method is specified to [Ethernet].	Input
plc_connect_format	const wchar_t*	Specifies the destination of the PLC side interface. (Ip, HostName) Available only when the connection method is specified to [Ethernet].	Input
plc_ip	const wchar_t*	Specifies the IP address of the PLC Ethernet module. (0.0.0.0 to 255.255.255.255) Available only when the connection method is specified to [Ethernet].	Input
plc_host	const wchar_t*	Specifies the host name of the PLC Ethernet module. (Up to 64 characters) Available only when the connection method is specified to [Ethernet].	Input
got_network	const wchar_t*	Specifies the network No. (1 to 239) of the network to which the GOT is connected.	Input
got_station	const wchar_t*	Specifies the station No. (0 to 120) of the GOT.	Input
timeout	const wchar_t*	Specifies the timeout time (1 to 9999) (second). If you set a time less than 30 seconds, a communication error may occur. Set 30 seconds or more.	Input
retry	const wchar_t*	Specifies the retry time (0 to 5) at the timeout.	Input

Precautions

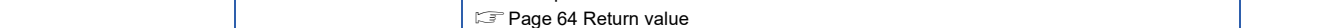
If an invalid value is specified, an error occurs.

If "NULL" or a null character string is specified, the communication setting does not change.

Changing settings for communication via Ethernet module

Format

IResult = DT2000_CommConfigEthernetUnit(plc, pc_protocol, pc_unit_network, pc_unit_station, unit_station, unit_connect_format, unit_ip, unit_host, unit_staion_ip_info, got_network, got_station, timeout, retry);

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
plc	const wchar_t*	Specifies the PLC side interface (RJ71EN71, QJ71E71, LJ71E71).	Input
pc_protocol	const wchar_t*	Specifies the communication protocol used in the communication between the personal computer and the programmable controller. (TCP, UDP)	Input
pc_unit_network	const wchar_t*	Specifies the network No. (1 to 239) of the network to which the personal computer is connected.	Input
pc_unit_station	const wchar_t*	Specifies the station No. (0 to 120) of the PC side interface.	Input
unit_station	const wchar_t*	Specifies the station No. (1 to 120) of the PLC side interface.	Input
unit_connect_format	const wchar_t*	Specifies the destination of the PLC side interface. (Ip, HostName)	Input
unit_ip	const wchar_t*	Specifies the IP address of the PLC Ethernet module. (0.0.0.0 to 255.255.255.255)	Input
unit_host_name	const wchar_t*	Specifies the host name of the PLC Ethernet module. (Up to 64 characters)	Input
unit_staion_ip_info	const wchar_t*	Specifies the method to relate the network No., station No., and IP address of the destination programmable controller in the communication between the destination programmable controller and other programmable controllers. Set this item according to the network parameter of the destination programmable controller. (autoResponseSystem, Others)	Input
got_network	const wchar_t*	Specifies the network No. (1 to 239) of the network to which the GOT is connected.	Input
got_station	const wchar_t*	Specifies the station No. (0 to 120) of the GOT.	Input
timeout	const wchar_t*	Specifies the timeout time (1 to 9999) (second).	Input
retry	const wchar_t*	Specifies the retry time (0 to 5) at the timeout.	Input

Precautions


If an invalid value is specified, an error occurs.

If "NULL" or a null character string is specified, the communication setting does not change.

Communication test

Format

```
IResult = DT2000_CommTest(remote_password);
```

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
remote_password	const wchar_t*	Remote password set for the Ethernet module	Input

Precautions

When a password is not set, specify "NULL" or a null character string for "remote_password".

Obtaining data of the error that occurred in the previous communication

Format

```
IResult = DT2000_GetLastCommError();
```

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. <ul style="list-style-type: none">• When the communication error occurred in the previous communication: Communication error number of the error (error code)• When no communication error in the previous communication is obtained: 0• When an error other than the communication error occurred in the previous communication: 0	Output

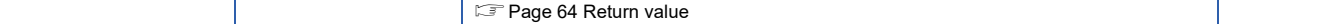
Precautions

The communication error is initialized when the next communication is executed.

Writing the package data

Format

```
IResult = DT2000_Download(package_filename, got_drive_name, init_sram, notreboot, project_username, project_password, remote_password, got_password);
```

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
package_filename	const wchar_t*	Specifies the file name of the package data to be written.	Input
got_drive_name	const wchar_t*	Specifies the drive (A, B, C, E, F, or G) of the GOT to which the package data is written.	Input
init_sram	long	Specifies whether the SRAM user area of the destination drive is initialized or not. (Not initialized: 0, Initialized: 1)	Input
notreboot	long	Specifies whether the GOT is restarted after the package data is written. (GOT restarted: 0, GOT not restarted: 1)	Input
project_username	const wchar_t*	Specifies the user name set for the project of the package data to be written.	Input
project_password	const wchar_t*	Specifies the password set for the project of the package data to be written.	Input
remote_password	const wchar_t*	Specifies the remote password set for the Ethernet module.	Input
got_password	const wchar_t*	Specifies the password set for data transfer.	Input

Precautions


When a project security is not set, specify "NULL" or null character strings for "project_username" and "project_password".

When a password is not set, specify "NULL" or null character strings for "remote_password" and "got_password".

Reading the package data

Format

```
IResult = DT2000_Upload(package_filename, got_drive_name, remote_password, got_password);
```

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
package_filename	const wchar_t*	Specifies the file name of the package data to be read. If a file that has the same name as the file read from the connected GOT exists in the personal computer, the existing file is overwritten.	Input
got_drive_name	const wchar_t*	Specifies the drive (A, B, C, E, F, or G) of the GOT from which the package data is read.	Input
remote_password	const wchar_t*	Specifies the remote password set for the Ethernet module.	Input
got_password	const wchar_t*	Specifies the password set for data transfer.	Input

Precautions


Arguments must not be omitted.

When a password is not set, specify "NULL" or null character strings for "remote_password" and "got_password".

Writing the resource data

Format

IResult = DT2000_ResourceDown (filenames, got_drive_name, down_folder, remote_password, got_password);

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
filenames	const wchar_t*	Specifies the file name or path of the resource data to be written. When a file name is specified alone, the relevant file in the current directory is specified. Enclose a file name or path in double quotation marks (") in the following conditions. <ul style="list-style-type: none">• A file name or path includes a space character.• Multiple file names are specified. If a file that has the same name as the file to be written from the personal computer exists in the GOT, the existing file is overwritten.	Input
got_drive_name	const wchar_t*	Specifies a GOT drive (A, B, E, F, or G) as the write destination for the resource data.	Input
down_folder	const wchar_t*	Specifies the write destination folder for the resource data.	Input
remote_password	const wchar_t*	Specifies the remote password set for the Ethernet module.	Input
got_password	const wchar_t*	Specifies the password set for data transfer.	Input


Precautions

When a password is not set, specify "NULL" or null character strings for "remote_password" and "got_password".

Reading the resource data

Format

```
IResult = DT2000_ResourceUp(up_folder, filenames, got_drive_name, remote_password, got_password);
```

Variable name	Variable type	Description	I/O
IResult	long	Displays the return value. Successful completion: 0 Error completion: Other than 0  Page 64 Return value	Output
up_folder	const wchar_t*	Specifies the storage location for the read resource data.	Input
filenames	const wchar_t*	Specifies the file name or path of the resource data to be read. If a file name for a resource data includes a space, the resource data cannot be read with the file name specified. When reading the resource data, specify "all". If a file that has the same name as the file read from the connected GOT exists in the personal computer, the existing file is overwritten.	Input
got_drive_name	const wchar_t*	Specifies the drive (A, B, C, D, E, F, or G) of the GOT from which the resource data is read.	Input
remote_password	const wchar_t*	Specifies the remote password set for the Ethernet module.	Input
got_password	const wchar_t*	Specifies the password set for data transfer.	Input


Precautions

Arguments must not be omitted.

When a password is not set, specify "NULL" or null character strings for "remote_password" and "got_password".





Return value

The following shows the return values and descriptions of the interface function.

Return value	Error and cause	Corrective action
0	The data transfer ends normally.	-
2	The specified drive name, file name, transfer file, user name, password, and security key are invalid due to the following causes. (1) Nonexistent or inaccessible files are specified. (2) The specified path does not exist. (3) The invalid file is specified. (4) The project data is invalid. (5) The user-name or password of the project data is invalid. (6) The project cannot be opened with the security key registered to the personal computer.	Check the specified description.
5	The specified transfer setting is invalid due to the following causes. (1) The invalid transfer setting (such as GOT drive) is specified. (2) The number of characters set to the password is out of the setting range. Maximum number of characters: 32	Check if the option is specified correctly.
6	The specified data does not exist in the GOT.	Check the data in the GOT and which drive is specified.
7	The function fails to save the file. The storage location has a read-only file.	Check the destination file.
8	The communication setting is invalid due to the following causes. (1) The communication setting file does not exist. (2) The communication setting file is invalid.	Specify the communication setting and then execute the data transfer.
21	The communication port is not open due to the following causes. (1) The personal computer is not connected to the GOT properly. (2) The communication setting is incorrect.	Check if the GOT is connected to the personal computer properly and the communication settings are correct.
22	A communication error occurs.	Obtain the error number using the following function and check the error with the list of error messages. DT2000_GetLastCommError()  Page 71 ERROR MESSAGES FOR DATA TRANSFER
23	The password is incorrect.	Check the password for data transfer or the remote password.
24	Data Transfer Tool cannot access the specified drive.	Check if the specified drive exists or a memory card is inserted in the specified drive.
40	The data transfer is in progress in the other processes and threads.	Check if the data transfer is not executed in the other processes and threads.
50	When "DtUser2000.dll" is used, Data Transfer Tool is not installed.	Check if Data Transfer Tool is installed.

5.3 Resource Data Conversion


The following table shows interface functions used to use the resource data conversion function with the user-created application.

Function	Interface function	Reference
Converting a recipe file	int ConvertFile2000_Recipe()	 Page 65 Converting a recipe file
Converting an operation log file	int ConvertFile2000_OPELOG()	 Page 66 Converting an operation log file
Converting a logging file	int ConvertFile2000_LOGGING()	 Page 67 Converting a logging file
Converting an alarm log file	int ConvertFile2000_Alarm()	 Page 68 Converting an alarm log file

Converting a recipe file

Format

```
IReturn = ConvertFile2000_Recipe(p_OriginalConversionFile, p_AfterFileType);
```

Variable name	Variable type	Description	I/O
IReturn	int	Return value Successful completion: 0 Error completion: Other than 0  Page 69 Return value	Output
p_OriginalConversionFile	const wchar_t*	Resource data to be converted (absolute path)	Input
p_AfterFileType	const wchar_t*	Extension of the file after conversion (CSV file: CSV, Unicode Text file: TXT, Binary file: G2P)	Input

Explanation

The function converts the resource data specified with "p_OriginalConversionFile" to the file with the extension specified with "p_AfterFileType" to return the conversion result.

Precautions

Arguments must not be omitted.


When a Unicode text file or a CSV file is converted into a G2P file, the original G2P file which is used to create the Unicode text file or the CSV file is required.

Store the original G2P file in the same path where the Unicode text file or the CSV file to be converted.

Converting an operation log file

Format

```
IReturn = ConvertFile2000_OPELOG(p_OriginalConversionFile, p_AfterFileType, p_LanguageTypeAfterConvert);
```

Variable name	Variable type	Description	I/O
IReturn	int	Return value Successful completion: 0 Error completion: Other than 0  Page 69 Return value	Output
p_OriginalConversionFile	const wchar_t*	Resource data to be converted (absolute path)	Input
p_AfterFileType	const wchar_t*	Extension of the file after conversion (CSV file: CSV, Unicode Text file: TXT)	Input
p_LanguageTypeAfterConvert	const wchar_t*	Output language of operation log (The language that can be specified varies according to the type of the converted file.) • For CSV Japanese: JPN English: ENG • For Unicode Text Japanese: JPN English: ENG Chinese (Simplified): CHS Chinese (Traditional): CHT Korean: KOR When this option is omitted or "NULL" is specified, Japanese (JPN) is specified.	Input

Explanation

The function converts the resource data specified with "p_OriginalConversionFile" to the file with the extension specified with "p_AfterFileType" and outputs the language specified with "p_LanguageTypeAfterConvert" to return the conversion result.


Precautions

If "NULL" is specified for "p_LanguageTypeAfterConvert", the file cannot be converted.

Converting a logging file

Format

```
IReturn = ConvertFile2000_LOGGING(p_OriginalConversionFile, p_AfterFileType);
```

Variable name	Variable type	Description	I/O
IReturn	int	Return value Successful completion: 0 Error completion: Other than 0  Page 69 Return value	Output
p_OriginalConversionFile	const wchar_t*	Resource data to be converted (absolute path)	Input
p_AfterFileType	const wchar_t*	Extension of the file after conversion (CSV file: CSV, Unicode Text file: TXT)	Input

Explanation

The function converts the resource data specified with "p_OriginalConversionFile" to the file with the extension specified with "p_AfterFileType" to return the conversion result.


Precautions

Arguments must not be omitted.

Converting an alarm log file

Format

IReturn = ConvertFile2000_Alarm(p_OriginalConversionFile, p_ProjectFile, p_AfterFileType, p_LanguageTypeAfterConvert, p_ColumnNoAfterConvert, p_TargetInSamePath, p_ProjectUser, p_ProjectPassword);

Variable name	Variable type	Description	I/O
IReturn	int	Return value Successful completion: 0 Error completion: Other than 0  Page 69 Return value	Output
p_OriginalConversionFile	const wchar_t*	Resource data to be converted (absolute path)	Input
p_ProjectFile	const wchar_t*	Project data which is used to create resource data to be converted (absolute path)	Input
p_AfterFileType	const wchar_t*	Extension of the file after conversion (CSV file: CSV, Unicode Text file: TXT)	Input
p_LanguageTypeAfterConvert	const wchar_t*	Language of the converted file when the alarm log file (system alarm) is converted The language that can be specified varies according to the type of the converted file. • For CSV Japanese: JPN English: ENG • For Unicode Text Japanese: JPN English: ENG Chinese (Simplified): CHS Chinese (Traditional): CHT Korean: KOR When this option is omitted or "NULL" is specified, Japanese (JPN) is specified.	Input
p_ColumnNoAfterConvert	char	Comment column No. (1 to 30) which is used to convert an alarm log file (user alarm)	Input
p_TargetInSamePath	char	Selects whether to specify the resource data in the same path as the resource data to be converted as the conversion target or not. (No: 0, Yes: 1)	Input
p_ProjectUser	const wchar_t*	User name set in the project data	Input
p_ProjectPassword	const wchar_t*	Password set in the project data	Input

Explanation

The function converts the resource data specified with "p_OriginalConversionFile" to the file with the extension specified with "p_AfterFileType".

For a system alarm, the function outputs and returns the conversion result in the language specified with "p_LanguageTypeAfterConvert".

For a user alarm, the function outputs and returns the conversion result in the comment No. specified with "p_ColumnNoAfterConvert".

When the conversion target is the resource data in the same path, the conversion log is created on the specified path.

Precautions

If "NULL" is specified for "p_LanguageTypeAfterConvert", the file cannot be converted.

When converting an alarm log file, the project data which is used to create the alarm log file is required.

When there is no project data, read one from the GOT.

Return value

Return value	Error and cause	Corrective action
0	The resource data conversion ends normally.	—
1	A Unicode text file or a CSV file is converted into a G2P file. Since device comments are not included as the conversion target, the comments are not converted.	To convert device comments, a G2P file that includes device comments as the conversion target is required.
-1	The file cannot be converted because the file is invalid. The file may be damaged.	Check the source file to be converted.
-2	The source file to be converted does not exist in the specified path.	Check if the source file exists in the specified path.
-3	The source file cannot be converted to the file with the specified extension. The specified extension is incorrect.	Check if the source file corresponds to the converted file with the specified extension.
-4	The source language cannot be converted to the specified language. The specified output language is incorrect.	Check the specified output language.
-5	The original G2P file required for the conversion from the Unicode text file or the CSV file to a G2P file does not exist in the same path as the source file.	Check if the original G2P file exists in the same path as the source file.
-6	The file required for the conversion of the operation log file or alarm log file does not exist in the install destination folder of Data Transfer Tool.	Check if the following files exist in the install destination folder of Data Transfer Tool. Sap2000, G2SYSLANGINFO.INI
-7	The "zlib.dll" file or "rc_conv.dll" file does not exist in the install destination folder of Data Transfer Tool.	Check if the "zlib.dll" file or "rc_conv.dll" file exists in the install destination folder of Data Transfer Tool.
-8	The specified project data does not exist or is broken.	Check the specified project data.
-9	The specified user name or password is different from the project data setting, or a password is not specified.	Check the user name and password set in the specified project data.
-10	The specified project data has the following problems. <ul style="list-style-type: none"> • The required advanced user alarm observation setting does not exist in the project data. • The required comment group setting does not exist in the project data. • The required comment column No. setting does not exist in the project data. 	Specify the project data which is used to create an advanced alarm log file data to be converted.
-11	If a file in the same path is the target when the advanced alarm file (advanced user alarm) is converted, there are following problems. <ul style="list-style-type: none"> • The converted file cannot be written. • The conversion log cannot be created. 	Check the writing authority of the specified folder.
-12	The function required for converting the advanced alarm log file (advanced user alarm) is not installed.	Reinstall Data Transfer Tool.
-13	This project data cannot be opened with the security key registered to the personal computer.	Import a security key that can be used for GT Designer3.

6 ERROR MESSAGES FOR DATA TRANSFER

The following shows the error messages displayed when transferring the data.

When errors cannot be solved with the following corrective actions or the causes of errors cannot be identified, please consult your local sales office.

Error code	Error message	Description	Corrective action
8010005	An error occurred. The file in the p.c. cannot be written.	Failed to write to the file in the personal computer.	Check that the drive to which the file is written can be written or has enough available space in the disk capacity.
80110003	An error occurred. Please check Port No.	The set port No. is out of the range.	Check the port No.
80110004	An error occurred. Time out error	Communication time error	Check the communication cable and the power of the device.
80110006	An error occurred. The GOT is being accessed by another application.	The GOT is being accessed by another application.	Wait until another application ends.
80110007	An error occurred. Quality of communication signal error. Please check communication settings.	Error by the quality of the communication line	Decrease the baud rate and perform the communication.
80110008	An error occurred. Please check Baud rate.	The controller does not support the set baud rate.	Check the baud rate which the controller supports.
801fa303	An error occurred. GOT restricts the communication with Ethernet. Unable to communicate with GOT via Ethernet.	Communication via an Ethernet network is not allowed.	Disable the Ethernet Access Control (GS454) and the Processing Security Control via Wireless LAN (GS1840).
80112401	An error occurred. Unable to communicate with GOT via Ethernet. The possible causes are shown below. (1) The basic system application is not written to the GOT (2) The GOT is not turned on. (3) Communication Settings are not properly set. (4) GOT IP address is not properly set. (5) Incorrect wiring.	The GOT does not exist on the network.	Check the following. <ul style="list-style-type: none"> • The basic system application is written to the GOT. • The GOT is powered on. • The communication settings are set correctly. • [GOT IP Address] is set correctly in the [Communication Configuration] dialog. • The wiring is correct.
80112402	An error occurred. Unable to communicate with GOT via Ethernet. The possible causes are shown below. (1) The GOT is communicating with another computer. (2) GOT IP address is not properly set. (3) GOT Port No. is not properly set.	Socket line open error (Failed to generate a socket.)	Check the following. <ul style="list-style-type: none"> • The GOT is not communicating with another computer. • The communication target is not the network device excluding the GOT. • [Peripheral S/W Communication Port No.] in the [Communication Configuration] dialog matches with the port No. set to the GOT.
80112405	An error occurred. Please check if both GOT and PC are properly connected together via Ethernet cabling.	Network error	Check the GOT is connected to the network correctly.
80112406	An error occurred. Unable to communicate with GOT via Ethernet. The possible causes are shown below. (1) The GOT is communicating via USB/RS232. (2) The GOT is not turned on.	The connecting socket is disconnected forcibly.	Check the following. <ul style="list-style-type: none"> • The GOT is not communicating using the USB or RS232. • The GOT is powered on.
801fa000	An error occurred. Routing parameter is insufficient in the GOT of the relay station. Please set routing parameter for the GOT.	The routing parameter set for the relay station (GOT) is incorrect.	Check the routing parameter setting of the relay station.

Error code	Error message	Description	Corrective action
801fa080	An error occurred. Information is insufficient in the GOT of the relay station Ethernet setting. Please set the Ethernet setting of the GOT.	The Ethernet setting configured for the relay station (GOT) is incorrect.	Check the routing parameter and the IP address.
801fa200	An error occurred. Communication driver is not booted in the GOT of the relay station. Please check the GOT setting.	One of the following is the cause. • No communication driver is installed on the GOT. • The package data is corrupt. • The communication driver does not support the relay function.	Install the package data on the GOT again.
801fa304	An error occurred. The basic system application cannot be written in this GOT hardware version. Please prepare the new drawing software.	The hardware versions of the BootOS and the GOT do not match.	Install the BootOS from the appropriate version of GT Designer3.
801fa305	An error occurred. SD card cannot be accessed. The possible causes are shown below. • The SD card cover of the GOT is open. • The SD card access switch of the GOT is turned off.	The possible causes are as follows. • The SD card cover is open. • The SD card access switch of the GOT is turned off.	Close the SD card cover. Turn on the SD card access switch of the GOT.
801fa306	An error occurred. Project data, system application, and resource data cannot be written/deleted since the write-protect switch is activated. Please deactivate the write-protect switch.	The write protection switch of the data storage is on.	Cancel the write protection switch of the data storage.
801fa309	An error occurred. The package data/resource data cannot be written due to the shortage of free space on the drive.	The available space of the drive is not sufficient.	Acquire the free space by deleting unnecessary files or others. Or, reduce the size of the package data or resource data to be written.
801fa30c	An error occurred.	The data storage is not connected to the specified drive.	Check the data storage is connected correctly to the specified drive.
801fa30d	The following drive is not mounted. X: XXXXXXXXX Check the drive.		
801fa311	An error occurred. The specified file cannot be found. Update the information. (Click on the "Get Drive Information" button.)	The specified file does not exist.	Check if the specified file name is correct.
801fa315	An error occurred. The specified drive cannot be formatted.	The drive is used for the GOT direct startup and therefore cannot be formatted.	Select a drive that is not used for the GOT direct startup.
801fa317	An error occurred.	The possible causes are as follows. • The communication cable is broken or disconnected. • The GOT is in communication with another application.	Check the following. • Check that the communication cable is connected correctly. • Check that the GOT is not in communication with another application.
801fa318	The cable is disconnected/unconnected or the GOT is in communication with another application. The possible causes are shown below. • GOT write is in process • GOT read is in process • GOT verification is in process • GOT information acquisition is in process • GOT diagnostics is in process		
801fa31f	An error occurred. The password is incorrect.	The input password is incorrect.	Input the correct password.
801fa326	An error occurred. The package data cannot be written due to the shortage of free space on the buffering area.	The free space in the buffering area is insufficient.	Reduce the size of the package data by decreasing the number of incorporated functions and others.
801fa327	An error occurred. The package data cannot be written due to the shortage of free space on the project data area.	The free space in the project data area is insufficient.	Reduce the size of the package data by decreasing the number of incorporated functions and others.
801fa328	An error occurred. The security key of the GOT is deleted. Update the information. (Click on the "Get GOT Information" button.)	The GOT is requested to delete a security key that has already been deleted.	Click the [Get GOT Information] button on the [GOT] tab in the [Security Key Setting] dialog to update the GOT information.

Error code	Error message	Description	Corrective action
801fa32a	An error occurred. This function cannot be executed since the GOT does not support security key function. The possible causes are shown below. • Version of the BootOS in the GOT does not support security key function.	The following operations are performed to the GOT whose BootOS does not support the security key function. Writing a security key to the GOT Deleting a security key from the GOT Acquiring the GOT information	Install the latest version of GT Designer3 on the personal computer, and then install the latest BootOS on the GOT.
801fa32b	An error occurred. The security key is set for the GOT. Please delete the security key and then write again.	Writing of the security key is performed to the GOT that already has a security key.	Delete the current security key from the GOT, and then write a new one to the GOT.
801fa32f	An error occurred. This function cannot be executed since the GOT does not support data write of the selected resource data. The possible causes are shown below. • The resource data that the destination GOT does not support is selected. • Version of the basic system application in the GOT does not support writing of the selected resource data file.	The write destination GOT does not support the file format of the selected resource data. Or, the target GOT has an older version of the standard system application, and therefore the resource data file cannot be written.	Delete the unsupported resource data file from the write target list. Or, install the latest version of GT Designer3, and then write the package data to the GOT.
801fa330	An error occurred. Failed to access the file. Perform the following operations. • Reduce the number of files in the destination. • Check if the selected file in the GOT exists. • Check if the selected file in the GOT can be overwritten.	The number of files and folders has exceeded the storage limit for the root directory of the FAT16 formatted data storage on the write destination drive.	Reduce the number of the files and folders in the data storage on the write destination drive.
		The selected file is nonexistent or write-protected in the GOT.	Check the following. • The selected file exists. • The selected file is not write-protected.
801fa332	An error occurred. Communication with the GOT is disconnected during monitoring. Check the state of the GOT and retry.	Communication with the GOT has been lost due to a setting change in the utility or other causes.	Wait for some time, and then execute the GOT diagnostics again.
801fc202	An error occurred.	When the GOT accesses another station, the remote password authentication fails.	Do not set a remote password in the relay station and other stations, or exclude the GOT from the remote password authentication.
801fc205	Please confirm whether a remote password is set in the relay station. It is not possible to establish communication when a remote password is set in the relay station.		
80110009	An error occurred.	Packet send error	Check the line is connected.
8011000a	Communication error	Communication time error	Check the GOT operates normally and perform the communication again.
80112208	The possible causes are shown below. • The communication port settings are incorrect.	USB line error (Cable is disconnected halfway.)	Check the USB cable connected to the GOT.
80112403	• The cable is disconnected or broken.	Socket line close error	Perform the communication again.
80112501	• The GOT is Powered OFF. • The communication setting of each controller or routing parameter setting is incorrect. • Dialog window is displayed in the GOT. • The remote password is set for the programmable controller / module which is not supported.	Easysocket generate error	Check the following. • Easysocket is installed. • The GOT is in communication using another communication method. • The GOT is connected correctly.
801fa302	• It is not connected with GOT2000.	The GOT is processing data and no interrupt is available.	After the GOT completes the current process, perform the operation again.
801fa307	• The time set for "Timeout (Sec)" is short.	The specified file is read-only.	Check the destination data storage.
801fa30f		The specified path does not exist.	Check the specified path is correct.
801fa310		The specified path is incorrect.	Check the input path. • The reserved word is not used. • A dot is not used at the top. • A dot is not used at the end. • The path and the file name are not too long.
801fa32c		Writing data from GT Designer3 whose version is earlier than version 1.122C is restricted in the GOT.	Install the latest version of GT Designer3, and then perform the operation again.
801fa331		The GOT diagnostics cannot be executed due to IP address duplication, security key authentication failure, or other causes.	Check that the relevant settings are configured properly, and then execute the GOT diagnostics again.

Error code	Error message	Description	Corrective action
a	An error occurred. The software installation file is damaged or incomplete. Please reinstall.	Failed to generate the object of EZSocket.	Reinstall GT Designer3.
c9	Memory Card error Failed to create the folder. Check if the destination memory card exists.	Folder creating error	Check the destination data storage.
ca	Memory Card error Failed to delete the folder.	Folder deleting error	Check either of the following. • The specified folder exists. • The specified folder is not read-only.
cc	Memory Card error Failed to copy the file. The capacity of the destination memory card is full. Reduce the capacity. * The specified drive may be write protected.	File copy error	Check the following. • Capacity of the data storage • Access privilege of the destination drive When the user account control is valid, set a destination drive other than drive C.
dc	Memory Card error Failed to delete the file.	File deleting error	Check either of the following. • The specified file exists. • The specified file is not read-only.
132	An error occurred. The BootOS cannot be written if its version is older than the one of the BootOS written in the GOT. Version of the BootOS in the GOT: BB Version of the BootOS to be written: AA	A later version of the BootOS is already installed on the GOT.	Install the BootOS version that is newer than the one installed to the GOT to the GOT.
133	An error occurred. The GOT type is different or unsupported.	The GOT type acquired from the GOT and the one of the package data do not match. Or, the type of the GOT to communicate with is not supported.	Check the GOT type of the project and the destination GOT.
134	An error occurred. Package data is not written. Write the package data.	The BootOS was started when the following processing is performed. • Installing the BootOS • Writing the package data • Writing or acquiring the GOT identification information • Performing the processing other than writing or acquiring of the security	Write the package data again.
13a	An error occurred. Functions to be written and already written functions conflict with each other. • The selected function: %s • The written function: %s *Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	Since the function which is written and the one which is already written are competing, the system application cannot be written.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
13d (GT27, GT25, GT23, and GS25)	An error occurred. There are more than 4 communication drivers that are already written in the GOT and those to be written. (Up to 4 communication drivers can be written in GOT.) Delete the already written communication drivers and write the items again. * Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	Four communication drivers have already been installed on the GOT. Therefore, the communication driver cannot be installed.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]

Error code	Error message	Description	Corrective action
13d (GT21 and GS21)	An error occurred. There are more than 2 communication drivers that are already written in the GOT and those to be written. (Up to 2 communication drivers can be written in GOT.) Delete the already written communication drivers and write the items again. * Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	Two communication drivers have already been installed on the GOT. Therefore, the communication driver cannot be installed.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
190	An error occurred. The package data in the memory card is directly started. The following operations cannot be performed. • Deleting directly-started package data • Formatting the drive of package data in execution • Writing another package data to the drive of package data in execution • Writing package data to the destination other than the drive of package data in execution * Take out the memory card from the GOT to perform these operations.	When the package data is started from the data storage directly, the following operations cannot be performed. • Deleting the package data during the direct startup • Formatting the startup drive • Writing another package data to the startup drive • Writing package data to a drive other than the startup drive	Do not perform the following operations. • Deleting the package data during the direct startup • Formatting the startup drive • Writing another package data to the startup drive • Writing package data to a drive other than the startup drive
191	An error occurred. Failed to create the file.	Failed to create a file when the resource data is read.	Check the destination folder is not read only.
192	An error occurred. Failed to create the folder.	Failed to create a folder when the resource data is read.	Check the destination folder is not read only.
193	An error occurred. The processing is not properly completed since the data may be broken.	The data is broken.	The processing may recover if the processing is redone after GT Designer3 is installed again. However, the processing cannot recover when the data in the saving file is broken.
194	An error occurred. The processing is not properly completed since the file may be broken.		
195	An error occurred. The package data to be written is insufficient. Change the write mode to "Synchronize" and retry.	The basic system application is not included in the package data.	Add the basic system application and the project data in the package data.
196	An error occurred. The system major version of the package data in the GOT is different from the one of the package data to be written. The project data and special data will be deleted since they do not work properly if the major versions are different. Package data without project data and basic system application cannot be written.	This error occurs when the package data is written without selecting the project data in the [Write Option] dialog, the same package data exists in the GOT, and the system application of the different major version is written.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
197	An error occurred. Multiple package data are written in the drive. In the current software, data cannot be written to the drive where multiple package data exist. Please update the software version.	Multiple package data exist in the destination drive of the package data.	Write the package data from GT Designer3 of the latest version or write the package data to other drives.
198	An error occurred. There is no package data in the specified drive.	The package data does not exist in the specified drive.	Specify the drive in which the package data is stored.
199	An error occurred. The package data cannot be written with the write mode "Select" since project security is set for the project. Change the write mode to "Synchronize" and retry.	The package data with the project security is written to the GOT. Therefore, the data cannot be written by setting [Write Mode] to [Selection] in the [Write Option] dialog.	Write the data by setting [Write Mode] to [Synchronize] in the [Write Option] dialog.

Error code	Error message	Description	Corrective action
19a	An error occurred. Unsupported GOT security is set. Please update the software version.	The GOT does not support the security setting to be written.	Install the latest version of GT Designer3, and then write the package data to the GOT.
19b	An error occurred. Soft security key is set for the project in the GOT. This function cannot be executed since the current GT Designer3 does not support the soft security key function. Update the application and retry.	The project in the GOT is protected with a security key. Therefore, the following operations are not available. • Verify GOT • Read from GOT (when destination for reading is set to [GT Designer3])	Install the latest version of GT Designer3, and then perform the operation again.
19d	An error occurred. It is necessary to update the BootOS written in the GOT to make the current package data work in the GOT. Update the BootOS and write the package data again. * Please check "Procedures and precautions for GOT Write" before updating the BootOS.	The package data containing the following items cannot be written to the GOT because the BootOS on the GOT does not support the items. • [Wireless LAN] • [MES Interface] • [Printer(ESC/P-R)] • [Network Drive]	Install the latest version of GT Designer3 on the personal computer, install the latest BootOS on the GOT, and then rewrite the package data to the GOT.
19e	An error occurred. The write processing cannot be executed since the setting to restrict write from GT Designer3 of the older versions is in effect. Check the version of GT Designer3 in which the editing is executed.	The setting, which restricts writing data from earlier versions of GT Designer3, is enabled on the GOT. The GT Designer3 version is old.	Install the latest version of GT Designer3, and then perform the operation again.
1a0	An error occurred. The package data cannot be written with the write mode "Select" since security key is set for the project. Change the write mode to "Synchronize" and retry.	The package data to be written to the GOT contains a project protected with a security key. Therefore, the data cannot be written when [Write Mode] is set to [Select] in the [Write Option] dialog.	Select [Synchronize] for [Write Mode] in the [Write Option] dialog.
1a1	An error occurred. This function cannot be executed since the GOT does not support security key function. The possible causes are shown below. • Version of the basic system application in the GOT does not support security key function. • Version of the BootOS in the GOT does not support security key function.	The following operations are performed to the GOT that does not support the security key function. Writing a security key to the GOT Deleting a security key from the GOT Acquiring the GOT information	Install the latest version of GT Designer3 on the personal computer, install the latest BootOS on the GOT, and then rewrite the package data to the GOT.
1a2	An error occurred. This function cannot be executed since the GOT does not support GOT diagnostics function. The possible cause is shown below. • Version of the basic system application in the GOT does not support GOT diagnostics function.	The GOT diagnostics function that monitors occurring errors is not supported.	Install the latest version of GT Designer3, and then write the package data to the GOT.
1a5	An error occurred. Functions to be written and already written functions conflict with each other. Either GB2312 or GBK of Chinese (simplified) outline font can be written. * Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	The system application cannot be written because the application conflicts with the existing one in the GOT.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
1a6	An error occurred. FA transparent function is used in other MELSOFT applications for the GOT. Terminate the function and retry.	Another MELSOFT application is using the FA transparent function, and therefore the following processes cannot be executed. • Writing the package data • Installing the BootOS • Deleting package data • Formatting a drive • Starting the GOT internal device monitor of the GOT diagnostics function	Wait 30 seconds after the application ends the FA transparent function, and then execute the process again.

Error code	Error message	Description	Corrective action
1a7	An error occurred. Functions to be written and already written functions conflict with each other. Either high-quality version (with antialiasing) or normal version (without antialiasing) of outline font can be written. * Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	The system application cannot be written because the application conflicts with the existing one in the GOT.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
1a8	An error occurred. This function cannot be executed since the GOT does not support resource file write. The possible cause is shown below. • The version of the basic system application in the GOT does not support writing of the resource file.	The target GOT has an older version of the standard system application, and therefore the resource data file cannot be written.	Install the latest version of GT Designer3, and then write the package data to the GOT.
1a9	An error occurred. The resource file that does not exist is specified. Check the file to be written.	The selected resource data file is nonexistent.	Check that the file exists.
1b0	An error occurred. The resource file that cannot be read is specified. Check the file to be written.	Another software application is using the selected resource data file, and therefore the file cannot be opened.	Check that the file is not being used by the other software applications.
1b1	An error occurred. Memory capacity in the PC is insufficient. Check the size of the resource file to be written.	The personal computer does not have enough memory, and therefore the selected resource data file cannot be opened.	Perform the following operations on the personal computer to free up the hard disk space and memory, and then write the resource data file. • Exit unnecessary applications. • Delete unnecessary files.
1b2	An error occurred. There are more than 2 kanji regions of the outline font that is already written in the GOT and the outline font to be written. (Up to 2 kanji regions can be written in GOT.) Delete the kanji regions of the already written outline font and write the font again. *Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	The GOT has the outline font and two KANJI regions of data. Therefore, different KANJI region data cannot be written additionally.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
1b3	An error occurred. The style of the outline font that is already written in the GOT is different from the one of the outline font to be written. (Only 1 style can be written in GOT.) Delete the style of the already written outline font and write the font again. * Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	The typeface data of the outline font to be written differs from the one in the GOT. Therefore, the typeface data cannot be written.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
1b4	An error occurred. The following function to be written conflicts with the function that is already written in the GOT. • Key Window Design Information *Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.	The system application cannot be written because the application conflicts with the existing one in the GOT.	Write the package data after performing either of the following operations. • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]

Error code	Error message	Description	Corrective action
1b5	<p>An error occurred.</p> <p>The package data cannot be written since the communication via Ethernet will be disabled if it is written in the following cases. Write the package data from [Communication] -> [Write to GOT].</p> <ul style="list-style-type: none"> • Package data does not exist in the destination • The package folder is different from the one of the package data in the destination drive • The project ID is different from the one of the package data in the destination drive • The major version of the package data in the destination drive is different from the one of the system application • Security key is set for the write target package data • Security key is set for the package data in the destination • Free space of the destination drive is insufficient 	<p>As the individual identification information and the communication interface setting data are not written to multiple GOTs in one go, the following result will occur under the conditions shown left.</p> <p>Ethernet communications become unavailable and the package data cannot be written accordingly.</p>	<p>Write the package data to each GOT individually by selecting [Communication] → [Write to GOT] or [Write to Memory Card] from the menu.</p>
1b6	<p>An error occurred.</p> <p>The package data cannot be written since the data in the GOT contains the following settings.</p> <ul style="list-style-type: none"> • System label Ver.2 • Global Label • Label (GT Designer3) • OMRON NJ/NX Tag • AB Native Tag <p>*Change the setting of "Screen Switching/Windows, System Information, Station No. Switching" to "Write" in the dialog of Write Option, and then write the package data.</p>	<p>When [Not write] is selected for [Screen Switching/Window, System Information, Station No. Switching] in the [Write Option] dialog, you cannot write package data to multiple GOTs in one go if any of the GOTs has the setting of labels or tags.</p>	<p>Perform one of the following operations.</p> <ul style="list-style-type: none"> • Select [Write] for [Screen Switching/Window, System Information, Station No. Switching] in the [Write Option] dialog, and then rewrite the package data. • Select [Communication] → [Write to GOT] or [Write to Memory Card] from the menu to write the package data to the target GOTs separately.
1b8	<p>An error occurred.</p> <p>Functions to be written and already written functions conflict with each other. Either GOT Graphic Ver.1 or GOT Graphic Ver.2 of PC Remote Operation (Ethernet) can be written.</p> <p>* Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.</p>	<p>The system application cannot be written because the application conflicts with the existing one in the GOT.</p>	<p>Write the package data after performing either of the following operations.</p> <ul style="list-style-type: none"> • Selecting [Synchronize] in [Write Mode] of [Write Option] • Deleting the package data in [Drive Information] of [GOT Read]
1b9	<p>An error occurred.</p> <p>The data cannot be written with the write mode "Select" since the package data that contains expanded base screens is written. Change the write mode to "Synchronize" and retry.</p>	<p>The package data to be written to the GOT contains the project in which the base screen size expansion is enabled. Therefore, the data cannot be written when [Write Mode] is set to [Select] in the [Write Option] dialog.</p>	<p>Select [Synchronize] for [Write Mode] in the [Write Option] dialog, and then write the package data.</p>

Error code	Error message	Description	Corrective action
1bb	<p>An error occurred.</p> <p>The data cannot be written since the operation memory (RAM) size of the write data exceeds 128 MB, the capacity of the GOT.</p> <p>Write data to the following GOT whose operation memory (RAM) capacity is 256 MB.</p> <ul style="list-style-type: none"> Function version on the rating plate on the GOT rear face: "C" or later Version of the standard system application: "01.39.000" or later 	<p>The RAM capacity required for the package data to be written to and the size of the iQSS data (CSP+) used in the GOT exceed the capacity of the GOT operation memory (RAM). Therefore, the data cannot be written to the GOT.</p>	<p>Write the package data after performing either of the following operations.</p> <ul style="list-style-type: none"> Reduce the RAM capacity required for the package data. Write the data to a GOT with function version C or later and standard system application version 01.39.000 or later. Reduce the number of devices set for the iQSS data (CSP+) in the GOT and rewrite the data.
1bc	<p>Check the following data sizes and write the package data again when writing the data to the GOT other than the above.</p> <ul style="list-style-type: none"> Package data to be written CSP+ for iQSS data in the GOT 	<p>The RAM capacity required for the package data to be written to and the size of the iQSS data (CSP+) used in the GOT exceed the capacity of the GOT operation memory (RAM). Therefore, the data cannot be written to the GOT.</p> <p>(The function version is earlier than C, or the standard system application version is earlier than 01.39.000.)</p>	<p>Write the package data after performing either of the following operations.</p> <ul style="list-style-type: none"> Reduce the RAM capacity required for the package data. Write the data to a GOT with function version C or later and standard system application version 01.39.000 or later. Reduce the number of devices set for the iQSS data (CSP+) in the GOT and rewrite the data. <p>When the data is written to a GOT with function version C or later, update the standard system application according to one of the following procedures.</p> <ul style="list-style-type: none"> Select [Select] for [Write Mode] and write the standard system application. Obtain the drive information on the [GOT Read] screen, delete the package data in the GOT, and rewrite the package data. While pressing the S.MODE switch on the GOT rear face, turn on the GOT and write the package data.
1bd	<p>An error occurred.</p> <p>Functions to be written and already written functions conflict with each other.</p> <p>Either Kana-kanji Conversion or Pinyin Conversion can be written depending on the conversion method.</p> <p>* Select "Synchronize" for Write Mode in the dialog of Write Option or delete the package data from the drive information in the [GOT Read] tab, and then write the package data.</p>	<p>The system application cannot be written because the application conflicts with the existing one in the GOT.</p>	<p>Write the package data after performing either of the following operations.</p> <ul style="list-style-type: none"> Selecting [Synchronize] in [Write Mode] of [Write Option] Deleting the package data in [Drive Information] of [GOT Read]

REVISIONS

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

Revision date	* Manual number	Description
December 2006	BCN-P5670-A	First edition
April 2023	BCN-P5670-AR	<ul style="list-style-type: none">• Ended: Support for GOT1000, GOT900, and GOT800 series• Ended: Support for Windows 8.1, Windows 8, and Windows 7

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WARRANTY

Please check the following product warranty details before using this product.

■ 1. Gratis Warranty Term and Gratis Warranty Range

If any faults or defects (hereinafter "Failure") found to be the responsibility of Mitsubishi occurs during use of the product within the gratis warranty term, the product shall be repaired at no cost via the sales representative or Mitsubishi Service Company. However, if repairs are required onsite at domestic or overseas location, expenses to send an engineer will be solely at the customer's discretion.

Mitsubishi shall not be held responsible for any re-commissioning, maintenance, or testing on-site that involves replacement of the failed module.

(1) Gratis Warranty Term

The gratis warranty term of the product shall be for thirty-six (36) months after the date of purchase or delivery to a designated place.

Note that after manufacture and shipment from Mitsubishi, the maximum distribution period shall be six (6) months, and the longest gratis warranty term after manufacturing shall be forty-two (42) months.

The gratis warranty term of repair parts shall not exceed the gratis warranty term before repairs.

(2) Gratis Warranty Range

- (a) The customer shall be responsible for the primary failure diagnosis unless otherwise specified.
If requested by the customer, Mitsubishi Electric Corporation or its representative firm may carry out the primary failure diagnosis at the customer's expense.
The primary failure diagnosis will, however, be free of charge should the cause of failure be attributable to Mitsubishi Electric Corporation.
- (b) The range shall be limited to normal use within the usage state, usage methods, and usage environment, etc., which follow the conditions and precautions, etc., given in the instruction manual, user's manual and caution labels on the product.
- (c) Even within the gratis warranty term, repairs shall be charged in the following cases.
 - Failure occurring from inappropriate storage or handling, carelessness or negligence by the user. Failure caused by the user's hardware or software design.
 - Failure caused by unapproved modifications, etc., to the product by the user.
 - When the Mitsubishi product is assembled into a user's device, Failure that could have been avoided if functions or structures, judged as necessary in the legal safety measures the user's device is subject to or as necessary by industry standards, had been provided.
 - Failure that could have been avoided if consumable parts designated in the instruction manual had been correctly serviced or replaced.
 - Replacing consumable parts such as a battery, backlight, and fuse.
 - Failure caused by external irresistible forces such as fires or abnormal voltages, and Failure caused by force majeure such as earthquakes, lightning, wind and water damage.
 - Failure caused by reasons that could not be predicted by scientific technology standards at the time of shipment from Mitsubishi.
 - Any other failure found not to be the responsibility of Mitsubishi or that admitted not to be so by the user.

■ 2. Onerous repair term after discontinuation of production

- (1) Mitsubishi shall accept onerous product repairs for seven (7) years after production of the product is discontinued. Discontinuation of production shall be notified with Mitsubishi Technical Bulletins, etc.
- (2) Mitsubishi shall not accept a request for product supply (including spare parts) after production is discontinued.

■ 3. Overseas service

Overseas, repairs shall be accepted by Mitsubishi's local overseas FA Center.

Note that the repair conditions at each FA Center may differ.

■ 4. Exclusion of loss in opportunity and secondary loss from warranty liability

Regardless of the gratis warranty term, Mitsubishi shall not be liable for compensation to:

- (1) Damages caused by any cause found not to be the responsibility of Mitsubishi.
- (2) Loss in opportunity, lost profits incurred to the user by Failures of Mitsubishi products.
- (3) Special damages and secondary damages whether foreseeable or not, compensation for accidents, and compensation for damages to products other than Mitsubishi products.
- (4) Replacement by the user, maintenance of on-site equipment, start-up test run and other tasks.

■ 5. Changes in product specifications

The specifications given in the catalogs, manuals, or technical documents are subject to change without prior notice.

■ 6. Product application

- (1) In using the Mitsubishi graphic operation terminal, the usage conditions shall be that the application will not lead to a major accident even if any problem or fault should occur in the graphic operation terminal device, and that backup and fail-safe functions are systematically provided outside of the device for any problem or fault.
- (2) The Mitsubishi graphic operation terminal has been designed and manufactured for applications in general industries, etc. Thus, applications in which the public could be affected such as in nuclear power plants and other power plants operated by respective power companies, and applications in which a special quality assurance system is required, such as for Railway companies or Public service shall be excluded from the graphic operation terminal applications.
In addition, applications in which human life or property could be greatly affected, such as in aircraft, medical, railway applications, incineration and fuel devices, manned transportation equipment, recreation and amusement devices, safety devices, shall also be excluded from the graphic operation terminal.
Even for the above applications, however, Mitsubishi Electric Corporation may consider the possibility of an application, provided that the customer notifies Mitsubishi Electric Corporation of the intention, the application is clearly defined and any special quality is not required, after the user consults the local Mitsubishi representative.

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BCN-P5670-AR(2304)MEE

MODEL: -

MODEL CODE: -

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