

GT Simulator2

Integrated FA Software

Operating Manual

SW2D5C-GTWK2-E

● SAFETY PRECAUTIONS ●

(Always read these precautions before using this equipment.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.

The precautions given in this manual are concerned with this product.


In this manual, the safety precautions are ranked as "DANGER" and "CAUTION".



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



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

Note that the  caution level may lead to a serious accident according to the circumstances.

Always follow the instructions of both levels because they are important to personal safety.

Please save this manual to make it accessible when required and always forward it to the end user.

[Test Operation Precautions]

DANGER

- GT Simulator2 is designed to simulate the actual GOT to debug created screens. However, we do not guarantee the operations of the GOT and PLC CPU after debugging.
After performing debugging on GT Simulator2, connect the GOT and PLC CPU and perform ordinary debugging before starting actual operation.
Not using the actual GOT and PLC CPU for debugging may result in accidents due to incorrect outputs or malfunctions.

CAUTIONS FOR USING THIS SOFTWARE

1. Required PC memory

The processing may be terminated by Microsoft® Windows® on a personal computer of which main memory capacity is less than 64M bytes. Make sure to secure the capacity of 64M bytes or more.

2. Free capacity of hard disk

At least 200M bytes of free capacity of virtual memory should be secured within hard disk to run this software.

The processing may be terminated by Windows®, if free space of 200M bytes or more cannot be secured within hard disk while running GT Simulator2.

Secure enough free capacity of virtual memory within hard disk space in order to run the software.

When using the GT Simulator2 together with the GT Designer2, GX Developer or GX Simulator, the extra free capacity is required.

For the free capacity required for using the GT Designer2, GX Developer or GX Simulator, refer to the following manual.



- GT Designer2 Version□ Basic Operation/Data Transfer Manual
- GX Developer Version□ Operating Manual (Startup)
- GX Simulator Version□ Operating Manual

3. Display of GT Simulator2 and GOT

Display of GT Simulator2 may be different from display of GOT.

Confirm for actual display of GOT on the GOT

REVISIONS

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

Print Date	* Manual Number	Revision
Mar., 2005	SH(NA)-080546ENG-A	First edition
Oct., 2005	SH(NA)-080546ENG-B	Compatible with the GT Designer2 Version 2.18U. Compatible with the GT Simulator2 Version 2.18U. Partial corrections ABOUT MANUALS, ABBREVIATIONS AND GENERIC TERMS IN THIS MANUAL, HOW TO READ THIS MANUAL, Section 1.1, Section 2.1, 2.2, 2.4.1, 2.4.3, 2.4.4, Section 3.1, 3.2, 3.3.1, 3.4.1, 3.4.2, Section 4.1.1, 4.2, Section 5.2, 5.3, 5.3.1, 5.3.2, 5.5, Section 6.1, 6.2.2, 6.3 to 6.5, Section 8.1, 8.2, Appendix 1, 1.1, Appendix 2, Appendix 3 Additions Section 6.6
Jan., 2006	SH(NA)-080546ENG-C	Compatible with the GT Designer2 Version 2.27D. Compatible with the GT Simulator2 Version 2.27D. Partial corrections ABOUT MANUALS, ABBREVIATIONS AND GENERIC TERMS IN THIS MANUAL, HOW TO READ THIS MANUAL, Section 2.2, 2.4.1, Section 3.2, 3.3.1, Section 4.1.2, Section 5.3.1, Section 6.4, Appendix 1.1, Appendix 3 Additions Section 6.7
Jun., 2006	SH(NA)-080546ENG-D	Compatible with the GT Designer2 Version 2.32J. Compatible with the GT Simulator2 Version 2.32J. Partial corrections Section 2.2, 2.3, 3.1, 3.2, 3.3.1, 3.4.2, 4.4, 5.3.1, 5.3.2, 7.2, Appendix 3
Nov., 2006	SH(NA)-080546ENG-E	Compatible with the GT Designer2 Version 2.43V. Compatible with the GT Simulator2 Version 2.43V. Partial corrections Section 2.3, 3.3.1, 3.4.2, 5.3.1
May, 2007	SH(NA)-080546ENG-F	Compatible with GT Designer2 Version 2.58L Compatible with GT Simulator2 Version 2.58L Partial corrections Section 2.3, 3.1, 3.2, 3.3.1, 3.4.2, 5.3.1, Appendix 1, Appendix 2, Appendix 3
Aug., 2007	SH(NA)-080546ENG-G	Compatible with GT Designer2 Version 2.63R Compatible with GT Simulator2 Version 2.63R Partial corrections Section 3.2

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

Print Date	* Manual Number	Revision
Dec., 2007	SH(NA)-080546ENG-H	Compatible with GT Designer2 Version 2.73B. Compatible with GT Simulator2 Version 2.73B. Partial corrections Section 2.2, 2.3, 3.2, 3.4.2
Feb., 2008	SH(NA)-080546ENG-I	Compatible with GT Designer2 Version 2.77F. Compatible with GT Simulator2 Version 2.77F. Partial corrections Section 3.2, 6.2.3
Jun., 2008	SH(NA)-080546ENG-J	Compatible with GT Designer2 Version 2.82L. Compatible with GT Simulator2 Version 2.82L. Partial corrections Section 2.3, 2.4.2
Oct., 2008	SH(NA)-080546ENG-K	Compatible with the GT Designer2 Version 2.90U. Compatible with the GT Simulator2 Version 2.90U. Partial corrections Chapter 1, Section 1.1, 2.2, 2.3, 2.4.1, 2.4.2, 3.1, 3.2, 3.3, 3.4.1, 3.4.2, 4.1.2, 5.2, 5.3, 5.5, 6.1, 6.6, 6.7, Chapter 7, 8.2, 8.3, Appendix 1, 1.1, Appendix 3
Dec., 2008	SH(NA)-080546ENG-L	Compatible with the GT Designer2 Version 2.91V. Compatible with the GT Simulator2 Version 2.91V. Partial additions Section 2.3, 3.3.1, 3.10, Chapter 7 Partial corrections Section 2.2, 4.1.2, 6.6
Mar., 2009	SH(NA)-080546ENG-M	Compatible with the GT Designer2 Version 2.96A. Compatible with the GT Simulator2 Version 2.96A. Partial additions Section 2.2, 2.3, 3.1, 3.2, 5.3.1, Appendix 3

Japanese Manual Version SH-080543-O

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

© 2005 MITSUBISHI ELECTRIC CORPORATION

INTRODUCTION

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

Read this manual and make sure you understand the functions and performance of the GOT thoroughly in advance to ensure correct use.

CONTENTS

SAFETY PRECAUTIONS	A - 1
CAUTIONS FOR USING THIS SOFTWARE	A - 2
REVISIONS.....	A - 3
INTRODUCTION.....	A - 5
CONTENTS	A - 5
ABOUT MANUALS	A - 8
ABBREVIATIONS AND GENERIC TERMS.....	A - 10
HOW TO READ THIS MANUAL	A - 14

1. OVERVIEW 1 - 1 to 1 - 3

1.1 Features	1 - 2
--------------------	-------

2. SYSTEM CONFIGURATION 2 - 1 to 2 - 14

2.1 System Configuration	2 - 1
2.2 Operating environment	2 - 3
2.3 PLC CPUs that Can Be Simulated	2 - 5
2.4 Connection Cable	2 - 9
2.4.1 Connecting to QCPU or motion controller CPU (Q series).....	2 - 9
2.4.2 Connecting to QnACPU, ACPU, motion controller CPU (A series) and FXCPU.....	2 - 10
2.4.3 Connecting to MELDAS C6/C64	2 - 13
2.4.4 Connecting to Omron PLC CPU	2 - 14

3. SPECIFICATIONS 3 - 1 to 3 - 38

3.1 GOT that Can Be Simulated	3 - 1
3.2 Functions that cannot be simulated	3 - 3
3.3 Precautions	3 - 10
3.3.1 Precautions for using the GT Simulator2.....	3 - 10
3.3.2 Precautions for connecting to GX Simulator.....	3 - 17
3.3.3 Precautions for connecting PLC CPU	3 - 18
3.4 Device Ranges that Can Be Simulated	3 - 19
3.4.1 Connecting to PLC CPU.....	3 - 19
3.4.2 Connecting to GX Simulator	3 - 20

4. SCREEN CONFIGURATION OF GT SIMULATOR2	4 - 1 to 4 - 6
4.1 Screen Configuration and Basic Operation	4 - 1
4.1.1 Screen configuration.....	4 - 1
4.1.2 Basic operation.....	4 - 2
4.2 Menu Bar	4 - 3
4.3 Tool bar	4 - 4
4.4 How to use HELP	4 - 5
5. GT SIMULATOR2 OPERATING METHOD	5 - 1 to 5 - 24
5.1 Operating Procedure	5 - 1
5.2 Starting GT Simulator2	5 - 3
5.3 Option Setting	5 - 4
5.3.1 Setting items (GOT1000 series (GT16/GT15/GT11) simulator).....	5 - 5
5.3.2 Setting items (GOT-A900 series simulator).....	5 - 10
5.4 Executing a simulation	5 - 15
5.5 Opening the Project	5 - 17
5.6 Setting Reading Data (GOT-A900 Series Simulator)	5 - 19
5.7 Simulating Operation	5 - 23
5.8 Exiting from GT Simulator2	5 - 24
6. FUNCTIONS OF GT SIMULATOR2	6 - 1 to 6 - 11
6.1 Snap Shot	6 - 1
6.2 Print	6 - 2
6.2.1 Printing.....	6 - 2
6.2.2 Performing print preview.....	6 - 3
6.2.3 Performing page setup.....	6 - 4
6.2.4 Performing print setup.....	6 - 5
6.3 Property	6 - 6
6.4 System Alarm	6 - 7
6.5 Script Error	6 - 8
6.6 Object Script Error	6 - 9
6.7 Full Screen Mode Function (GT16**-X, GT15**-X only)	6 - 10
7. DEVICE MONITOR	7 - 1 to 7 - 20
7.1 Overview	7 - 1
7.2 Precautions	7 - 2
7.3 Screen Configuration of Device Monitor	7 - 3
7.3.1 Screen configuration and various Tools.....	7 - 3
7.3.2 Menu Bar.....	7 - 4
7.3.3 Tool Bar.....	7 - 5
7.3.4 Device Monitor screen.....	7 - 6

7.3.5	Status Bar	7 - 8
7.4	Device Monitor Operation Method	7 - 9
7.4.1	Starting Device Monitor	7 - 10
7.4.2	Stopping and restarting the monitor	7 - 11
7.4.3	Exit Device Monitor	7 - 11
7.5	Device Monitor Functions	7 - 12
7.5.1	Sorting the data	7 - 12
7.5.2	Testing device value	7 - 13
7.5.3	Registering/Deleting device (Free Registration screen)	7 - 14
7.5.4	Displaying screens with cascade/tile	7 - 15
7.5.5	Changing Device Monitor screen	7 - 16
7.6	Setting Display	7 - 17
7.6.1	Setting items	7 - 17

8. TROUBLESHOOTING	8 - 1 to 8 - 10
---------------------------	------------------------

8.1	Troubleshooting for File Save Problems	8 - 1
8.2	Error Message (GOT1000 series (GT16/GT15/GT11) simulator)	8 - 1
8.3	Error Message (GOT-A900 series simulator)	8 - 6

APPENDICES	App - 1 to App - 10
-------------------	----------------------------

Appendix 1	Examples of using GT Simulator2	App - 1
Appendix 1.1	Simulating the sample project data	App - 2
Appendix 2	Applicable Project Data	App - 9
Appendix 3	List of Functions Added by GT Simulator2 Version Upgrade	App - 10

INDEX	Index - 1 to Index - 3
--------------	-------------------------------

ABOUT MANUALS

The following manuals are also related to this product.
In necessary, order them by quoting the details in the tables below.

Related Manuals

Manual Name	Manual Number (Model Code)
GT16 User's Manual - Describes the GT16 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the GT16 functions, including the utility. (Sold separately)	SH-080778ENG (1D7M88)
GT15 User's Manual - Describes the GT15 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the GT15 functions, including the utility. (Sold separately)	SH-080528ENG (1D7M23)
GT11 User's Manual - Describes the GT11 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the GT11 functions, including the utility. (Sold separately)	JY997D17501A (09R815)
GT SoftGOT1000 Version2 Operating Manual Describes the screen configuration, functions and using method of GT SoftGOT1000. (Sold separately)	SH-080602ENG (1D7M48)
GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series) Describes methods of the GT Designer2 installation operation, basic operation for drawing and transmitting data to GOT1000 series. (Sold separately)*1	SH-080529ENG (1D7M24)
GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 1/3 GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 2/3 GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 3/3 Describes specifications and settings of each object function applicable to GOT1000 series. (Sold separately)*1	SH-080530ENG (1D7M25)
GOT1000 Series Connection Manual 1/2 GOT1000 Series Connection Manual 2/2 GOT1000 Series Connection Manual 3/3 Describes system configurations of the connection method applicable to GOT1000 series and cablecreation. (Sold separately)*1	SH-080532ENG (1D7M26)
GOT1000 Series Extended/Option Functions Manual Describes extended functions and option functions applicable to GOT series. (Sold separately)*1	SH-080544ENG (1D7M32)

*1 The manual in PDF-format is included in the GT Works2 and GT Designer2 products.

(Continued to next page)

Manual Name	Manual Number (Model Code)
GT Works2 Version2/GT Designer2 Version2 Operating Manual (Startup • Introductory Manual) Describes installing methods of GT Designer2 and drawing methods for persons who use GOT900 series for the first time. (Sold separately)*1	SH-080520ENG (1DM215)
GT Designer2 Version2 Reference Manual Describes specifications and settings of each object function applicable to GOT900 series. (Sold separately)*1	SH-080522ENG (1DM217)
GOT-A900 Series Operating Manual (GT Works2 Version2/GT Designer2 Version 2 compatible Extended • Option Functions Manual) Describes specifications and settings of each object function applicable to GOT1000 series. <ul style="list-style-type: none"> • Utility • Special module monitor • Motion monitor • Kana-kanji conversion • Ladder monitor • Network monitor • Servo amplifier monitor • Font change • System monitor • List editor • CNC monitor • System dialog language switching (Sold separately)*1	SH-080523ENG (1DM218)
GOT-A900 Series User's Manual (GT Works2 Version2/GT Designer2 Version2 compatible Connection System Manual) Describes system configurations of the connection method applicable to GOT-A900 series and cable creation method. (Sold separately)*1	SH-080524ENG (1DM219)
GX Developer Version8 Operating Manual (Start up) Describes system configuration, installation methods and startup procedure of GX Developer. (Sold separately)	SH-080372E (13JU40)
GX Simulator Version7 Operating Manual Describes setting and operating methods for monitoring the device memory and simulating the machine side operation using GX Simulator. (Sold separately)	SH-080468ENG (13JU51)

*1 The manual in PDF-format is included in the GT Works2 and GT Designer2 products.

ABBREVIATIONS AND GENERIC TERMS

Abbreviations and generic terms used in this manual are as follows:

■ GOT

Abbreviations and generic terms		Description	
	GT SoftGOT1000	Abbreviation of GT SoftGOT1000	
	GT1695	GT1695M-X	Abbreviation of GT1695M-XTBA, GT1695M-XTBD
	GT1685	GT1685M-S	Abbreviation of GT1685M-STBA, GT1685M-STBD
GT1675	GT1675M-S	Abbreviation of GT1675M-STBA, GT1675M-STBD	
	GT1675M-V	Abbreviation of GT1675M-VTBA, GT1675M-VTBD	
GT1665	GT1665M-S	Abbreviation of GT1665M-STBA, GT1665M-STBD	
	GT1665M-V	Abbreviation of GT1665M-VTBA, GT1665M-VTBD	
GT16□□, GT16		Abbreviation of GT1695, GT1685, GT1675, GT1665	
GT1595	GT1595-X	Abbreviation of GT1595-XTBA, GT1595-XTBD	
GT1585	GT1585V-S	Abbreviation of GT1585V-STBA, GT1585V-STBD	
	GT1585-S	Abbreviation of GT1585-STBA, GT1585-STBD	
GT157□	GT1575V-S	Abbreviation of GT1575V-STBA, GT1575V-STBD	
	GT1575-S	Abbreviation of GT1575-STBA, GT1575-STBD	
	GT1575-V	Abbreviation of GT1575-VTBA, GT1575-VTBD	
	GT1575-VN	Abbreviation of GT1575-VNBA, GT1575-VNBD	
GT156□	GT1572-VN	Abbreviation of GT1572-VNBA, GT1572-VNBD	
	GT1565-V	Abbreviation of GT1565-VTBA, GT1565-VTBD	
GT155□	GT1562-VN	Abbreviation of GT1562-VNBA, GT1562-VNBD	
	GT1555-V	Abbreviation of GT1555-VTBD	
GT155□	GT1555-Q	Abbreviation of GT1555-QTBD, GT1555-QSBD	
	GT1550-Q	Abbreviation of GT1550-QLBD	
GT15□□, GT15		Abbreviation of GT1595, GT1585, GT157□, GT156□, GT155□	
GT115□	GT1155-Q	Abbreviation of GT1155-QTBDQ, GT1155-QSBDQ, GT1155-QTBDA, GT1155-QSBDA, GT1155-QTBD, GT1155-QSBD	
	GT1150-Q	Abbreviation of GT1150-QLBDQ, GT1150-QLBDA, GT1150-QLBD	
Handy GOT	GT1155HS-Q	Abbreviation of GT1155HS-QSBD	
	GT1150HS-Q	Abbreviation of GT1150HS-QLBD	
GT11□□, GT11		Abbreviation of GT1155-Q, GT1150-Q, GT11 Handy GOT	
GT105□	GT1055-Q	Abbreviation of GT1055-QSBD	
	GT1050-Q	Abbreviation of GT1050-QBBD	
GT104□	GT1045-Q	Abbreviation of GT1045-QSBD	
	GT1040-Q	Abbreviation of GT1040-QBBD	
GT1030		Abbreviation of GT1030-LBD, GT1030-LBD2, GT1030-LBDW, GT1030-LBDW2	
GT1020		Abbreviation of GT1020-LBD, GT1020-LBD2, GT1020-LBL, GT1020-LBDW, GT1020-LBDW2, GT1020-LBLW	
GT10□□, GT10		Abbreviation of GT105□, GT104□, GT1030, GT1020	
GOT900 Series		Abbreviation of GOT-A900 series, GOT-F900 series	
GOT800 Series		Abbreviation of GOT-800 series	

■ Communication unit

Abbreviations and generic terms	Description			
Bus connection unit	GT15-QBUS, GT15-75QBUSL,	GT15-QBUS2, GT15-75QBUS2L,	GT15-ABUS, GT15-75ABUSL,	GT15-ABUS2, GT15-75ABUS2L
Serial communication unit	GT15-RS2-9P,	GT15-RS4-9S,	GT15-RS4-TE	
RS-422 conversion unit	GT15-RS2T4-9P,	GT15-RS2T4-25P		
Ethernet communication unit	GT15-J71E71-100			
MELSECNET/H communication unit	GT15-J71LP23-25,	GT15-J71BR13		
MELSECNET/10 communication unit	GT15-75J71LP23-Z ^{*1} , GT15-75J71BR13-Z ^{*2}			
CC-Link IE controller network communication unit	GT15-J71GP23-SX			
CC-Link communication unit	GT15-J61BT13,	GT15-75J61BT13-Z ^{*3}		
Interface converter unit	GT15-75IF900			
Serial multi-drop connection unit	GT01-RS4-M			
Connection Conversion Adapter	GT10-9PT5S			

*1 A9GT-QJ71LP23 + GT15-75IF900 set

*2 A9GT-QJ71BR13 + GT15-75IF900 set

*3 A8GT-J61BT13 + GT15-75IF900 set

■ Option unit

Abbreviations and generic terms		Description	
Printer unit		GT15-PRN	
Video/RGB unit	Video input unit	GT16M-V4,	GT15V-75V4
	RGB input unit	GT16M-R2,	GT15V-75R1
	Video/RGB input unit	GT16M-V4R1,	GT15V-75V4R1
	RGB output unit	GT16M-ROUT,	GT15V-75ROUT
Multimedia unit		GT16M-MMR	
CF card unit		GT15-CFCD	
CF card extension unit ^{*1}		GT15-CFEX-C08SET	
External I/O unit		GT15-DIO,	GT15-DIOR
Sound output unit		GT15-SOUT	
Fingerprint unit		GT15-80FPA	

*1 GT15-CFEX + GT15-CFEXIF + GT15-C08CF set.

Option

Abbreviations and generic terms		Description			
Memory card	CF card	GT05-MEM-16MC, GT05-MEM-256MC	GT05-MEM-32MC, GT05-MEM-512MC	GT05-MEM-64MC, GT05-MEM-1GC, GT05-MEM-2GC	GT05-MEM-128MC, GT05-MEM-2GC
Memory card adaptor		GT05-MEM-ADPC			
Option function board		GT16-MESB, GT15-QFN32M,	GT15-FNB, GT15-QFN48M,	GT15-QFN, GT15-MESB48M,	GT15-QFN16M, GT11-50FNB
Battery		GT15-BAT, GT11-50BAT			
Protective Sheet	For GT16	GT16-90PSCB, GT16-80PSCB, GT16-70PSCB, GT16-60PSCB,	GT16-90PSGB, GT16-80PSGB, GT16-70PSGB, GT16-60PSGB,	GT16-90PSCW, GT16-80PSCW, GT16-70PSCW, GT16-60PSCW,	GT16-90PSGW, GT16-80PSGW, GT16-70PSGW, GT16-60PSGW,
	For GT15	GT15-90PSCB, GT15-80PSCB, GT15-70PSCB, GT15-60PSCB, GT15-50PSCB,	GT15-90PSGB, GT15-80PSGB, GT15-70PSGB, GT15-60PSGB, GT15-50PSGB,	GT15-90PSCW, GT15-80PSCW, GT15-70PSCW, GT15-60PSCW, GT15-50PSCW,	GT15-90PSGW, GT15-80PSGW, GT15-70PSGW, GT15-60PSGW, GT15-50PSGW,
	For GT11	GT11-50PSCB, GT11H-50PSC	GT11-50PSGB,	GT11-50PSCW,	GT11-50PSGW,
	For GT10	GT10-50PSCB, GT10-40PSCB, GT10-30PSCB, GT10-20PSCB,	GT10-50PSGB, GT10-40PSGB, GT10-30PSGB, GT10-20PSGB,	GT10-50PSCW, GT10-40PSCW, GT10-30PSCW, GT10-20PSCW,	GT10-50PSGW, GT10-40PSGW, GT10-30PSGW, GT10-20PSGW,
Protective cover for oil		GT05-90PCO, GT05-50PCO	GT05-80PCO,	GT05-70PCO,	GT05-60PCO,
USB environmental protection cover		GT16-UCOV,	GT15-UCOV,	GT11-50UCOV	
Stand		GT15-90STAND, GT05-50STAND	GT15-80STAND,	GT15-70STAND,	A9GT-50STAND,
Attachment		GT15-70ATT-98, GT15-60ATT-87,	GT15-70ATT-87, GT15-60ATT-77,	GT15-60ATT-97, GT15-50ATT-95W,	GT15-60ATT-96, GT15-50ATT-85
Backlight		GT16-90XLTT, GT16-70SLTT, GT15-70SLTT, GT15-60VLTN	GT16-80SLTT, GT16-70VLTT, GT15-70VLTT,	GT15-90XLTT, GT16-60SLTT, GT15-70VLTN,	GT15-80SLTT, GT16-60VLTT, GT15-60VLTT,
Multi-color display board		GT15-XHNB,	GT15-VHNB		
Connector conversion box		GT11H-CNB-37S			
Emergency stop sw guard cover		GT11H-50ESCOV			
Memory loader		GT10-LDR			
Memory board		GT10-50FMB			

Software

Abbreviations and generic terms	Description
GT Works2 Version□	SW□D5C-GTWK2-E, SW□D5C-GTWK2-EV
GT Designer2 Version□	SW□D5C-GTD2-E, SW□D5C-GTD2-EV
GT Designer2	Abbreviation of screen drawing software GT Designer2 for GOT1000/GOT900 series
GT Converter2	Abbreviation of data conversion software GT Converter2 for GOT1000/GOT900 series
GT Simulator2	Abbreviation of screen simulator GT Simulator 2 for GOT1000 / GOT900 series
GT SoftGOT1000	Abbreviation of monitoring software GT SoftGOT1000
GT SoftGOT2	Abbreviation of monitoring software GT SoftGOT2
GX Developer	Abbreviation of SW□D5C-GPPW-E(-EV)/SW□D5F-GPPW-E type software package
GX Simulator	Abbreviation of SW□D5C-LLT-E(-EV) type ladder logic test tool function software packages (SW5D5C-LLT (-EV) or later versions)
Document Converter	Abbreviation of document data conversion software Document Converter for GOT1000 series
PX Developer	Abbreviation of SW□D5C-FBDQ-E type FBD software package for process control

■ License key (for GT SoftGOT1000)

Abbreviations and generic terms	Description
License	GT15-SGTKEY-U, GT15-SGTKEY-P

■ License key (for GT SoftGOT2)

Abbreviations and generic terms	Description
License key	A9GTSOFT-LKEY-P (For DOS/ PC)
License key FD	SW5D5F-SGLKEY-J (For PC CPU module)

■ Others

Abbreviations and generic terms	Description	
OMRON PLC	Abbreviation of PLC manufactured by OMRON Corporation	
KEYENCE PLC	Abbreviation of PLC manufactured by KEYENCE CORPORATION	
KOYO EI PLC	Abbreviation of PLC manufactured by KOYO ELECTRONICS INDUSTRIES CO., LTD.	
SHARP PLC	Abbreviation of PLC manufactured by Sharp Manufacturing Systems Corporation	
JTEKT PLC	Abbreviation of PLC manufactured by JTEKT Corporation	
TOSHIBA PLC	Abbreviation of PLC manufactured by TOSHIBA CORPORATION	
TOSHIBA MACHINE PLC	Abbreviation of PLC manufactured by TOSHIBA MACHINE CO., LTD.	
HITACHI IES PLC	Abbreviation of PLC manufactured by Hitachi Industrial Equipment Systems Co., Ltd.	
HITACHI PLC	Abbreviation of PLC manufactured by Hitachi, Ltd.	
FUJI FA PLC	Abbreviation of PLC manufactured by Fuji Electric FA Components & Systems Co., Ltd.	
PANASONIC PLC	Abbreviation of PLC manufactured by Panasonic Electric Works Co., Ltd.	
YASKAWA PLC	Abbreviation of PLC manufactured by YASKAWA Electric Corporation	
YOKOGAWA PLC	Abbreviation of PLC manufactured by Yokogawa Electric Corporation	
ALLEN-BRADLEY PLC	Abbreviation of Allen-Bradley PLC manufactured by Rockwell Automation, Inc.	
GE FANUC PLC	Abbreviation of PLC manufactured by GE Fanuc Automation Corporation	
LS IS PLC	Abbreviation of PLC manufactured by LS Industrial Systems Co., Ltd.	
SCHNEIDER PLC	Abbreviation of PLC manufactured by Schneider Electric SA	
SIEMENS PLC	Abbreviation of PLC manufactured by Siemens AG	
Temperature controller	OMRON temperature controller	Abbreviation of temperature controller manufactured by OMRON Corporation
	SHINKO indicating controller	Abbreviation of temperature controller manufactured by Shinko Technos Co., Ltd.
	CHINO controller	Abbreviation of temperature controller manufactured by CHINO CORPORATION
	FUJI SYS temperature controller	Abbreviation of temperature controller manufactured by Fuji Electric Systems Co., Ltd.
	YAMATAKE temperature controller	Abbreviation of temperature controller manufactured by Yamatake Corporation
	YOKOGAWA temperature controller	Abbreviation of temperature controller manufactured by Yokogawa Electric Corporation
	RKC temperature controller	Abbreviation of temperature controller manufactured by RKC INSTRUMENT INC.
PC CPU module	Abbreviation of PC CPU Unit manufactured by CONTEC CO., LTD	
GOT (server)	Abbreviation of GOTs that use the server function	
GOT (client)	Abbreviation of GOTs that use the client function	
Windows® font	Abbreviation of TrueType font and OpenType font available for Windows® (Differs from the True Type fonts settable with GT Designer2)	
Intelligent function module	Indicates the modules other than the PLC CPU, power supply module and I/O module that are mounted to the base unit.	
MODBUS® /TCP	Generic term for the protocol designed to use MODBUS® protocol messages on a TCP/IP network.	

HOW TO READ THIS MANUAL

1 Functions

This manual describes functions available for the GT Simulator2 Version2.96A.
 For the added functions by the product version upgrade, refer to the list of functions added by GT Simulator2 version upgrade in Appendices.

2 Symbols

Following symbols are used in this manual.

5.3 Option Setting

This section describes how to set GT Simulator2 connection type, GOT type to be simulated, sequence program to be used and others.

- 1 Perform either of the following operations.
 - Click (Option).
 - Select [Simulate] → [Option].
 - Right-click the mouse and select [Option].
- 2 The Option dialog box is displayed.
 After setting each items, click the button.
 Refer to the below for details of Option dialog box.
 - Section 5.3.1 Setting items (GOT1000 series GT15 simulator)
 - Section 5.3.2 Setting items (GOT-A900 series simulator)

Point Setting [Option]
 Make the [Option] setting before starting simulation. The [Option] setting cannot be changed while simulating. Exit from GT Simulator2 once and restart GT Simulator2.

indicates the operation steps.

Menu and items are differentiated with parentheses.

[] refers to the menu of GOT utility.

: refers to dialog box buttons or keys of PC keyboard.

Indicates the location in which the detailed explanation is given (manual, chapter section, item of the manual).

Point Refers to information required for operation.

Hint! Refers to information useful for operation.

Remark Refers to supplementary explanations for reference.

2.4.4 Connecting to Omron PLC CPU

The RS-232 cable used for connecting the GT Simulator2 and a PLC should be prepared by the user. The following describes the connection diagram, connector and others for each cable.

1 Connection diagram

PC (GT Simulator2) side	Signal name	Cable connection and signal direction	Omron products side	
			Pin No.	Signal name
	CD		1	FG
	RD(RXD)		2	SD
	SD(TXD)		3	RD
	ER(DTR)		4	RS
	SG		5	CS
	DR(DSR)		6	-
	RS(RTS)		7	FR
	CS(CTS)		8	ER
	-		9	SG

2 Connector specifications

Indicates the setting items and supported functions for [GOT1000 series (GT16) simulator].

Indicates the setting items and supported functions for [GOT1000 series (GT15) simulator].

The setting item or function specific to the specified type of GOT.
 (For GT15)

Indicates the setting items and supported functions for [GOT-A900 series simulator].

Indicates the setting items and supported functions for [GOT1000 series (GT15/GT11) simulator].

*Since the above page was created for explanation purpose, it differs from the actual page.

1. OVERVIEW

This manual describes the system configuration, screen configuration, operation methods and others of the GT Simulator2 applicable to GOT1000 series (GT16/GT15/GT11) or GOT-A900 series. GT Simulator2 is designed to simulate GOT operations on a PC using the project data of GT Designer2. This manual describes using screen of [GOT1000 series (GT15) simulator]. (Except for the case using screen of [GOTA-900 series simulator] only)



(1) Installation method of GT Simulator2

For the installation method of GT Simulator2, refer to the following manuals.

•For GOT1000 (GT16/GT15/GT11) series

☞ GT Designer2 Version□ Basic Operation/Data Transfer Manual
(2.2 Installing the Software Programs)

•For GOT-A900 series

☞ GT Works2 Version□ /GT Designer2 Version□ Operating Manual
(Startup Introductory Manual)

(2) Project data creating method of GT Designer2

For the project data creating method of GT Designer2, refer to the following manuals.

•For GOT1000 (GT16/GT15/GT11) series

☞ GT Designer2 Version□ Screen Design Manual

•For GOT-A900 series

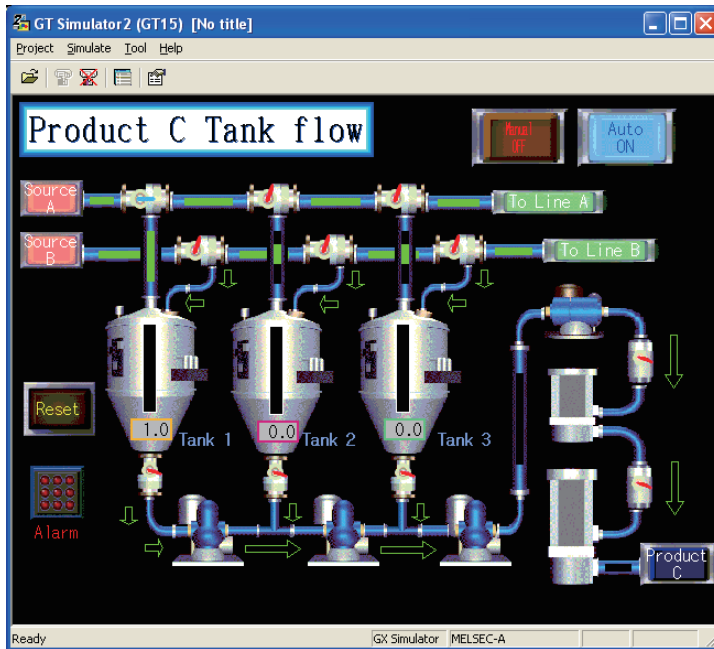
☞ GT Designer2 Version□ Reference Manual

1.1 Features

- 1 Support the project data simulation of GOT1000 series (GT16/GT15/GT11) and GOT-A900 series.

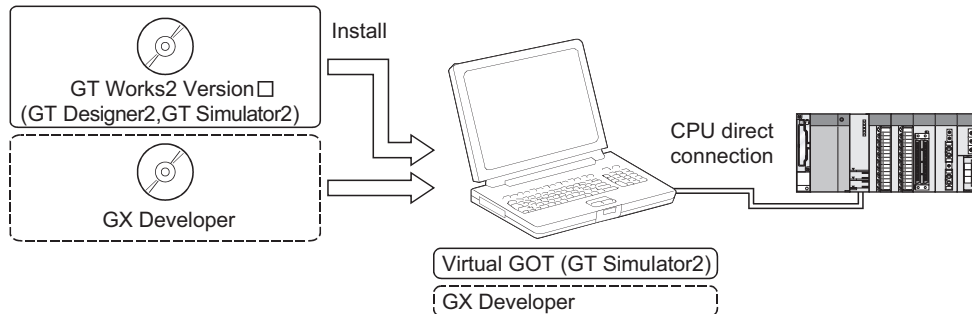
GT Simulator2 supports the project data simulation of GOT1000 series (GT16/GT15/GT11) and GOT-A900 series.

Simulator for GOT1000 series (GT16/GT15/GT11) or GOT-A900 series are selected with the [Main Menu] on GT Simulator2. (☞ Section 5.2 Starting GT Simulator2)

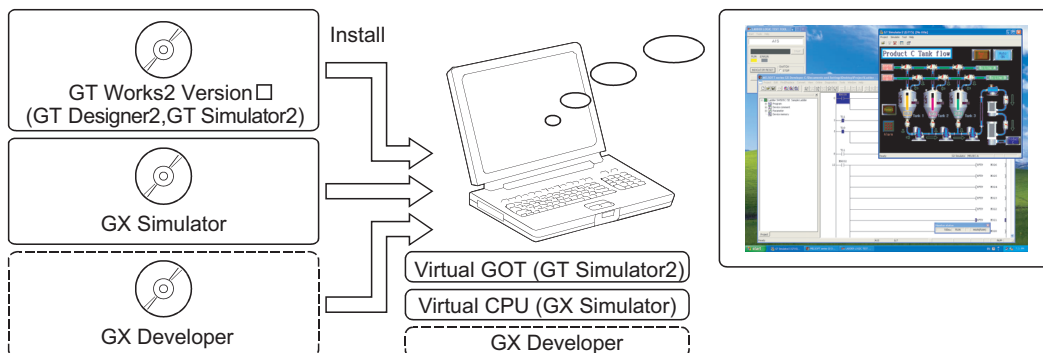


2 Simulation of GOT screen on personal computer

- (1) Available to project data debug without GOT
 GT Simulator2 is available to debug project data without GOT by simulating GOT operations on personal computer.

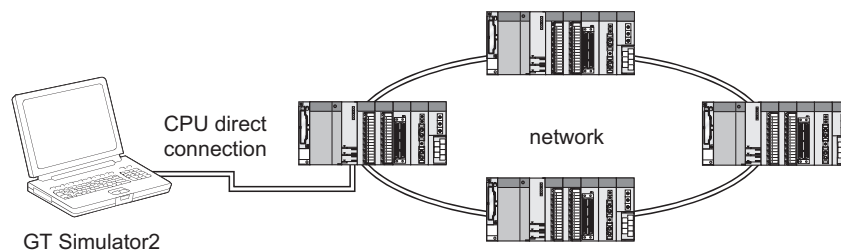


- (2) Interaction with GX Simulator
 GT Simulator2 is available to debug screens with GX Simulator.
 Installation of GX Simulator and GT Designer2 on the same personal computer allows operations from screen creation to screen debug to be supported by a single personal computer.
 Any creation or correction made to a screen on GT Designer2 is available to debug on GT Simulator2 immediately. Therefore, design efficiency is improved greatly.



3 Compatibility with intelligent function module or network-compatible operation environment (Only for the PLC CPU connection)

Direct connection of a personal computer and PLC CPU allows monitoring and write operation debugging of intelligent function module or on-network PLC.



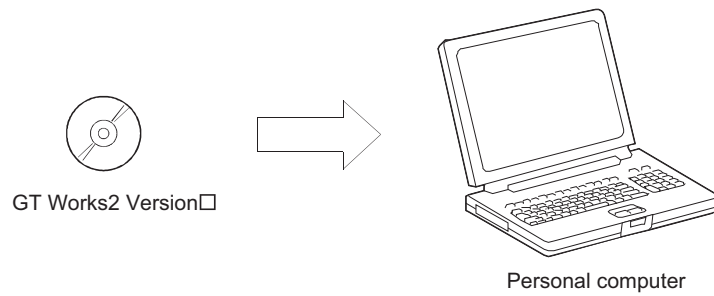
Remark

Monitoring speed when GT Simulator2 is directly connected to CPU
 When GT Simulator2 is connected directly with the PLC CPU, monitoring speed is lower than when it is connected with GX Simulator.

2. SYSTEM CONFIGURATION

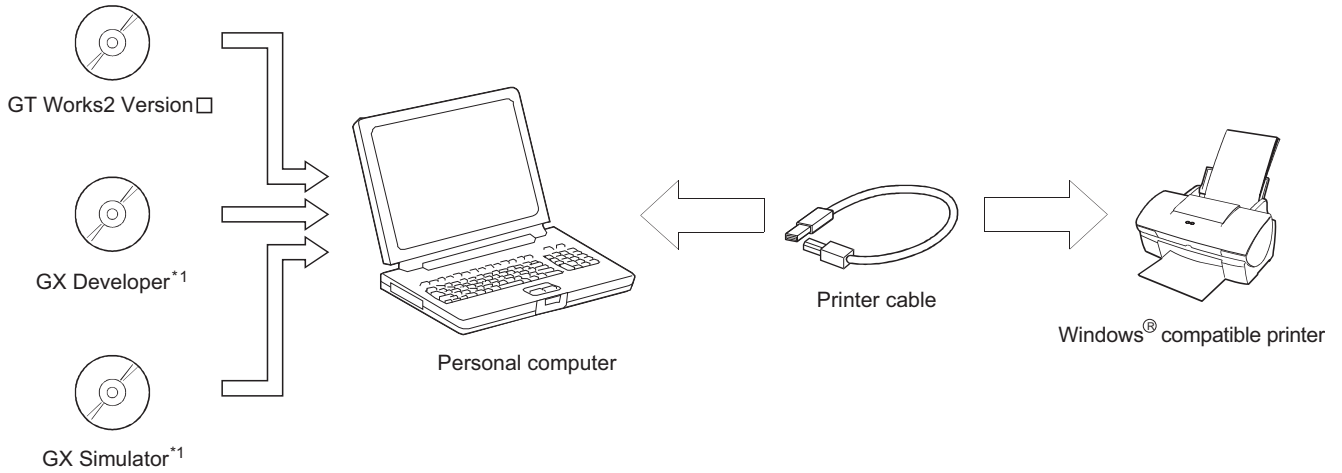
2.1 System Configuration

1 When installing GT Simulator2

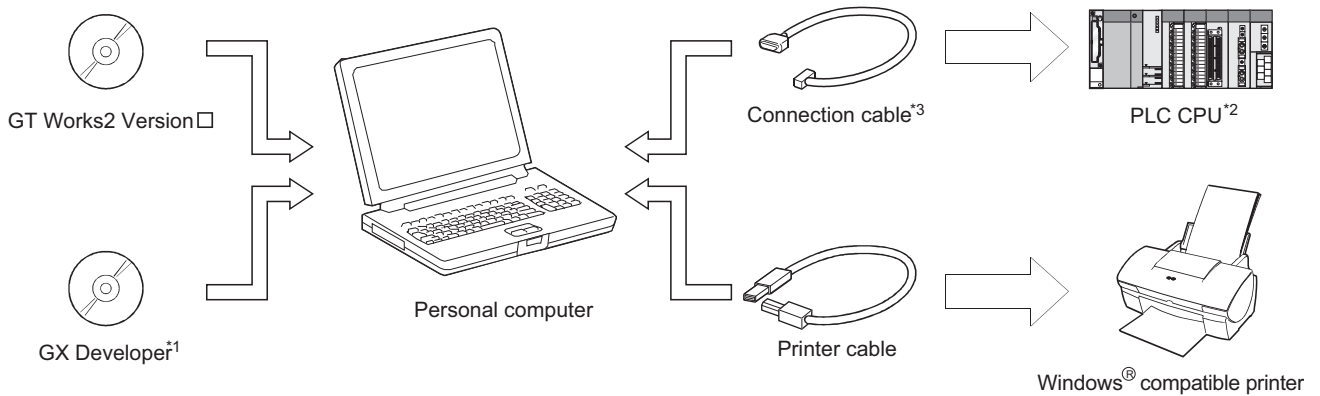


2 When executing GT Simulator2

(1) When connecting to GX Simulator



(2) When using PLC CPU (Direct connection to CPU)



*1 For the installation methods of GX Developer and GX Simulator, refer to the following manual.

☞ GX Developer Version□ Operating Manual (Start up)

*2 For PLC CPUs that can be simulated, refer to the following.

☞ Section 2.3 PLC CPUs that Can Be Simulated

*3 For the cables used for connecting a personal computer and a PLC CPU, refer to the following.

☞ Section 2.4 Connection Cable

2.2 Operating environment

The following shows the GT Simulator2 operating environment

Item	Description
Personal computer	PC/AT compatible personal computer that Windows® runs on
OS	Microsoft® Windows® 98 Operating System [English version] Microsoft® Windows® Millennium Edition Operating System [English version] Microsoft® WindowsNT® Workstation4.0 Operating System Service Pack 3 or later [English version] ^{*2} Microsoft® Windows® 2000 Professional Operating System Service Pack 4 or later [English version] ^{*2} Microsoft® Windows® XP Professional Operating System Service Pack 2 or later [English version] ^{*3*4*7} Microsoft® Windows® XP Home Edition Operating System Service Pack 2 or later [English version] ^{*3*4*7} Microsoft® Windows Vista® Ultimate Operating System [English version] ^{*3*4*7} Microsoft® Windows Vista® Enterprise Operating System [English version] ^{*3*4*7} Microsoft® Windows Vista® Business Operating System [English version] ^{*3*4*7} Microsoft® Windows Vista® Home Premium Operating System [English version] ^{*3*4*7} Microsoft® Windows Vista® Home Basic Operating System [English version] ^{*3*4*7}
Computer	Refer to "Applicable operating system and performance required for personal computer" on the next page.
CPU	
Memory	
Hard disk space*1	For installation (This product only) :700MB or more For installation (This product and manuals) :950MB or more For execution :200MB or more
Disk drive	CD-ROM drive
Display color	<ul style="list-style-type: none"> ▪ For [GOT1000 series (GT16) simulator] ▪ For [GOT1000 series (GT15) simulator] High color (16 bits) or more <ul style="list-style-type: none"> ▪ For [GOT1000 series (GT11) simulator] ▪ For [GOT-A900 series simulator] 256 colors or more
Display	Resolution of 800 × 600 dots or more (1024 × 768 dots or more when using the full screen mode function)
Software	When creating or editing of project data <ul style="list-style-type: none"> ▪ For [GOT1000 series (GT16/GT15/GT11) simulator] GT Designer2 ^{*5} <ul style="list-style-type: none"> ▪ For [GOT-A900 series simulator] GT Designer or GT Designer2 ^{*5}
	When using GX Simulator : GX Simulator Version5 or later ^{*6} (Refer to [Software versions of GX Simulator that simulates PLC CPU] in the following page.)

*1 When using GT Designer2, GX Developer, GX Simulator, free space is required separately. For the free space required when using GT Designer2, GX Developer or GX Simulator, refer to the following manuals.

☞

- GT Designer2 Version□ Basic Operation/Data Transfer Manual
- GX Developer Version□ Operating Manual (Start up)
- GX Simulator Version□ Operating Manual

*2 Administrator authority is required for installing GT Simulator2.

*3 Administrator authority is required for installing and using GT Simulator2.

- *4 The following functions are not supported.
 - "Compatibility mode"
 - "Fast user switching"
 - "Change your desktop themes (fonts)"
 - "Remote desktop"
- *5 Use GT Designer2 included in GT Works2 that contains GT Simulator2

 Section 3.3.1  GT Simulator2 Versions

- *6 Use the products compatible with the same language as for GT Simulator2, GX Developer or GX Simulator.
- *7 Only the 32-bit OS is available.

Applicable operating system and performance required for personal computer

Operating system	Performance required for personal computer	
	CPU	Memory
Microsoft® Windows® 98 Operating System [English version]	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® Millennium Edition Operating System [English version]	Pentium® 200MHz or more	64MB or more
Microsoft® WindowsNT® Workstation4.0 Operating System [English version]	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® 2000 Professional Operating System [English version]	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® XP Professional Operating System [English version]	Pentium® 300MHz or more	128MB or more
Microsoft® Windows® XP Home Edition Operating System [English version]		
Microsoft® Windows Vista® Ultimate Operating System [English version]	800MHz or more (Recommended: 1GHz or more)	512MB or more (Recommended: 1GB or more)
Microsoft® Windows Vista® Enterprise Operating System [English version]		
Microsoft® Windows Vista® Business Operating System [English version]		
Microsoft® Windows Vista® Home Premium Operating System [English version]		
Microsoft® Windows Vista® Home Basic Operating System [English version]		



Remark

Software version of GX Simulator that simulates PLC CPU

The following describes the software versions of the GX Simulator that simulates a PLC CPU.

PLC CPU simulated	Software version
QCPU (A mode), ACPUCPU, motion controller CPU (A series)	Version5 A or later
QCPU (Q mode), (except Q00J/Q00/Q01CPU), QnACPU, FXCPU	Version5 E or later
Q00JCPU, Q00CPU, Q01CPU	Version6.00A or later
Q02PHCPU, Q06PHCPU	Version7.20W or later
Q12PHCPU, Q25PHCPU	Version6.10L or later
Q12PRHCPU, Q25PRHCPU	Version6.20W or later
FX3UC Series	Version7.08J or later
FX3U Series*1	
FX3G Series*1	
Q00JCPU, Q00UCPU, Q01UCPU, Q02UCPU, Q03UDCPU, Q04UDHCPU, Q06UDHCPU, Q10UDHCPU, Q13UDHCPU, Q20UDHCPU, Q26UDHCPU, Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q10UDEHCPU, Q13UDEHCPU, Q20UDEHCPU, Q26UDEHCPU	Version7.23Z or later


*1 Only the GOT1000 series (GT16/GT15/GT11) simulator is compatible.

2.3 PLC CPUs that Can Be Simulated

1 Applicable CPU list

The following table indicates the PLC CPU that can be simulated with GT Simulator2.

(1) MELSEC PLC

Type		Model name				
QCPU	QCPU (Q Mode)	Q00JCPU, Q02CPU, Q02PHCPU, Q12PRHCPU, Q00UJCPU, Q03UDCPU, Q20UDHCPU, Q03UDECPU, Q20UDEHCPU,	Q00CPU, Q02HCPU, Q06PHCPU, Q25PRHCPU, Q00UCPU, Q04UDHCPU, Q26UDHCPU, Q04UDEHCPU, Q26UDEHCPU	Q01CPU, Q06HCPU, Q12PHCPU, Q01UCPU, Q06UDHCPU, Q06UDEHCPU,	Q12HCPU, Q25PHCPU, Q02UCPU, Q10UDHCPU, Q10UDEHCPU,	Q25HCPU, Q13UDHCPU, Q13UDEHCPU,
	QCPU (A Mode)	Q02CPU-A,	Q02HCPU-A,	Q06HCPU-A		
Network module		QJ72LP25-25,	QJ72LP25G,	QJ72BR15		
QnACPU	QnACPU type	Q2ACPU,	Q2ACPU-S1,	Q3ACPU,	Q4ACPU,	Q4ARCPU
	QnASCPU type	Q2ASCPU,	Q2ASCPU-S1,	Q2ASHCPU,	Q2ASHCPU-S1	
ACPU	AnCPU type	AnUCPU	A2UCPU,	A2UCPU-S1,	A3UCPU,	A4UCPU
		AnACPU	A2ACPU,	A2ACPU-S1,	A3ACPU	
		AnNCPU	A1NCPU,	A2NCPU,	A2NCPU-S1,	A3NCPU
	AnSCPU type	AnUS(H)CPU	A2USCPU,	A2USCPU-S1,	A2USHCPU-S1	
		AnS(H)CPU	A1SCPU, A2SHCPU	A1SCPU-S1,	A1SCPUC24-R2,	A2SCPU, A1SHCPU,
A1SJ(H)CPU		A1SJCPU,	A1SJCPU-S3,	A1SJHCPU		
A1FXCPU	A1FXCPU					
Motion controller CPU	Q series	Q170MCPU*1				
	A series	A171SHCPU*2, A273UHCPU*3,	A172SHCPU*2, A273UHCPU-S3*3	A173UHCPU*3,	A173UHCPU-S1*3,	
FXCPU		FX0 series, FX1 series, FX2 series, FX3UC series,	FX0N series, FX1N series, FX2C series, FX3U series,	FX0S series, FX1NC series, FX2N series, FX3G series	FX1S series, FX2NC series,	
MELDAS C6/C64		 FCA C6,	FCA C64			

*1 Only the PLC CPU area (CPU No.1) is available for simulation.

*2 Monitoring is allowed in the A2SHCPU device range.

*3 Monitoring is allowed in the A3UCPU device range.

(2) OMRON PLC*1

(a) Compatible model

Type	Model name		
PLC CPU	CPM2A		
	CQM1,	CQM1H	
	CS1,	CS1D	
	CJ1H,	CJ1G,	CJ1M
	C200H α series (C200HX, C200HG)		
	CV500*2,	CV1000*2,	CV2000*2
	CVM1-CPU01*2,	CVM1-CPU11*2,	CVM1-CPU21*2

*1 CPU direct connection only is compatible.

The connection to the RS-232C adaptor, connection cable, rack type host link unit, serial communication module, communication board or serial communication board is not compatible.

*2 RS-422 communication is not compatible. (RS-232 communication only)

(b) Setting of the PLC CPU side*3

When connecting to GT Simulator2, set for PLC CPU side as follows.


Item	Set value
Transmission speed	9600bps
Data length	7 bits
Stop bit	2 bits
Parity	Even
Communicating condition format	Individual setting
Host link station No.	00

*3 For the setting of the PLC CPU side, refer to the following manual.

•For GOT1000 (GT16/GT15/GT11) series

 GOT1000 Series Connection Manual

•For GOT-A900 series

 GOT-A900 Series User's Manual (GT Works2 Version□ /GT Designer2 Version□ compatible Connection System Manual)

2 PLC CPU that can be simulated in each connection type

The following describes the connection types applied to the GT Simulator2 and the PLC CPU that can be simulated in each connection.

PLC CPU simulated		GOT1000 series (GT16/GT15/GT11) simulator ^{*7}		GOT-A900 series simulator	
		CPU direct connection	GX Simulator ^{*8}	CPU direct connection	GX Simulator ^{*8}
QCPU ^{*1*2}	QCPU (Q mode)	○	○	○	○
	QCPU (A mode)	○	○	○	○
QnACPU ^{*1*2}		○	○	○	○
ACPU ^{*1*2}		○ ^{*3}	○	○ ^{*3}	○
Motion controller CPU	Q series ^{*4}	×	×	×	×
	A series	○	○	○	○
FXCPU		○	○ ^{*5}	○ ^{*5}	○ ^{*5}
MELDAS C6/C64 ^{*1}		×	×	○	×
OMRON PLC		○ ^{*6}	△	×	△
KEYENCE PLC		×	△	×	×
SHARP PLC		×	△	×	△
JTEKT PLC		×	△	×	×
TOSHIBA PLC		×	△	×	△
HITACHI IES PLC		×	△	×	△
HITACHI PLC		×	△	×	×
FUJI FA PLC		×	△	×	×
PANASONIC PLC		×	△	×	△
YASKAWA PLC		×	△	×	△
YOKOGAWA PLC		×	△	×	×
ALLEN-BRADLEY PLC		×	△	×	△
SIEMENS PLC		×	△	×	△
OMRON temperature controller		×	×	×	×
SHINKO indicating controller		×	×	×	×
CHINO controller		×	×	×	×
FUJI SYS temperature controller		×	×	×	×
YAMATAKE temperature controller		×	×	×	×
YOKOGAWA temperature controller		×	×	×	×
RKC temperature controller		×	×	×	×
Inverter		×	×	×	×
Microcomputer		×	×	×	×
Servo amplifier		×	×	×	×

○ : Applicable (Same as the device range of GOT)

△ : Applicable (Restricted in device range)

×

*1 When simulating other station

At CPU direct connection

: Other station in the connected network can be simulated.

At GX Simulator

: Other station cannot be simulated. (Simulated as the host device.)

*2 The following describes PLC CPUs that can be simulated as other station.

The PLC CPU connected to the GT Simulator2 (host station)	Other station		
	QCPU (Q mode)	QnACPU	ACPU QCPU (A mode)
QCPU (Q mode)	○	○	○
QnACPU	×	○	×
ACPU, QCPU (A mode)	×	×	○

○ : Applicable × : N/A



*3 When simulating AnNCPUS1, A2SCPU, A0J2HCPU or A2CCPU, writing is allowed for the following software version or later.

Writing is not allowed for the prior versions.

- AnNCPUS1 •Version L or later for the one with link, version H or later for the one without link.
- A2SCPU •Version H or later
- A0J2HCPU •Version E or later
- A2CCPU •Version H or later

*4 Only the PLC CPU area (CPU No.1) in the Q170MCPUS is available for simulation.

*5 When [PC type] of GX Developer project is [FX3UC], simulating is allowed in the device range FX2N series.



 Section 3.3.2  When simulating the project data whose PLC type is [MELSEC-FX]

*6 Device Monitor cannot be used.

*7 The device monitor cannot be used for the GOT1000 series GT16 simulator.

*8 For simulation with a third party PLC, the available device range for simulation is the same as that of the A4UCPU or the ACPUS.

For details, refer to the following.

 3.3.2  When simulating the project data in which a third party PLC is set for the PLC Type.



Device range that can be simulated by the GT Simulator2

For device range that that can be simulated by the GT Simulator2, refer to the following.

 Section 3.4 Device Ranges that Can Be Simulated

2.4 Connection Cable

This section provides the converter/cable whose operations has been checked by our company.



Remark

Converter/Cable used in GT Simulator2

The converter/cable used for the GX Developer can be applied to the GT Simulator2.

2.4.1 Connecting to QCPU or motion controller CPU (Q series)

1 Using the product manufactured by Mitsubishi Electric or Mitsubishi (Electric System) Service

- (1) For users employing [GOT1000 series (GT16/GT15/GT11) simulator]

System configuration^{*1*2}



GT01-C30R2-6P (Mitsubishi (Electric System) Service)
(For the PC side 9-pin D-sub connector)

- (2) For users employing [GOT-A900 series simulator]

System configuration^{*1*2}




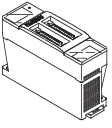






QC30R2 (Mitsubishi Electric)
(For the PC side 9-pin D-sub connector)

*1 For the motion controller CPU (Q series), only the PLC CPU area (CPU No.1) in the Q170MCPU is available for simulation.

*2 USB communication between GT Simulator2 and QCPU cannot be performed.
(When performing USB communication, show the confirmation message of communication line [Confirm the communication line].)

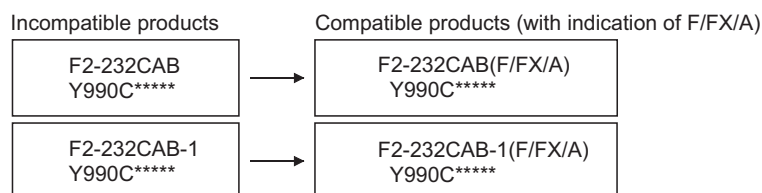
2.4.2 Connecting to QnACPU, ACPU, motion controller CPU (A series) and FXCPU

1 Using the product manufactured by Mitsubishi Electric

PC side (RS-232 cable)	RS-232/RS-422 Converter*3	PLC CPU Side(RS-422 cable)
 F2-232CAB*1*2 (For the 25-pin D-sub connector of the PC side)	 FX-232AW	 FX-422CAB(0.3m), FX-422CAB-150(1.5m) (For connecting to QnACPU, ACPU, motion controller CPU (A series), FX1CPU, FX2CPU, or FX2CCPU)
 F2-232CAB-1*2 (For the 9-pin D-sub connector of the PC side)	 FX-232AWC	
 AC30N2A*1 (For the 25-pin D-sub connector of the PC side)	 FX-232AWC-H (FX series only)	 FX-422CAB0(1.5m) (For connecting to FX0/FX0s/FX0N/FX1s/FX1N/FX2N/FX1NC/FX2NC/FX3G/FX3U/FX3UCPU)



*1 When using a DOS/V PC, a straight cable for conversion between 9-pin D-sub and 25-pin D-sub is required separately.

*2 How to distinguish products compatible with QnACPU, ACPU.
Check the model name label of the cable.



*3 When connecting the FX-232AWC-H to the FX3UCPU, transmission speed of 9600/19200/38400/57600/115200 bps is available.
When connecting the FX-232AWC or FX-232AW, either of transmission speed of 9600/19200bps is available.

- (1) For users employing [GOT1000 series (GT16/GT15/GT11) simulator]
When connection to the function expansion board or function adaptor of FX1S/FX1N/FX2N/FX1NC/FX2NC/FX3U/FX3UC/FX3G CPU, the following cables are available.

RS-232 cable*1*2
 GT01-C30R2-9S
 GT01-C30R2-25P


*1 The following system configurations are available in the GT01-C30R2-9S.

Model name	Function expansion board	Function adapter	PC side connector
FX3U series, FX3UC series (FX3UC-□□-LT)	FX3U-232-BD	-	9-pin D-sub
	FX3U-232-BD, FX3U-485-BD, FX3U-422-BD, FX3U-USB-BD, FX3U-CNV-BD	FX3U-232ADP	
FX3UC series (FX3UC-□□/D, FX3UC-□□/DSS)	-		
FX3G series	FX3G-232-BD	-	9-pin D-sub
	FX3G-CNV-BD	FX3U-232ADP	
FX2N series	FX2N-232-BD	-	9-pin D-sub
	FX2N-CNV-BD	FX2NC-232ADP	
FX1NC, FX2NC series	-	FX2NC-232ADP	9-pin D-sub
FX1S, FX1N series	FX1N-232-BD	-	9-pin D-sub
	FX1N-CNV-BD	FX2NC-232ADP	

*2 The following system configurations are available in the GT01-C30R2-25P.

Model name	Function expansion board	Function adapter	PC side connector
FX3U series, FX3UC series (FX3UC-□□-LT)	FX3U-232-BD	-	25-pin D-sub
	FX3U-232-BD, FX3U-485-BD, FX3U-422-BD, FX3U-USB-BD, FX3U-CNV-BD	FX3U-232ADP	
FX3UC series (FX3UC-□□/D, FX3UC-□□/DSS)	-		
FX3G series	FX3G-232-BD	-	25-pin D-sub
	FX3G-CNV-BD	FX3U-232ADP	
FX2N series	FX2N-CNV-BD	FX0N-232ADP	9-pin D-sub
	FX2N-232-BD	-	25-pin D-sub
	FX2N-CNV-BD	FX2NC-232ADP	
FX1NC, FX2NC series	-	FX0N-232ADP	9-pin D-sub
	-	FX2NC-232ADP	25-pin D-sub
FX1S, FX1N series	FX1N-CNV-BD	FX0N-232ADP	9-pin D-sub
	FX1N-232-BD	-	25-pin D-sub
	FX1N-CNV-BD	FX2NC-232ADP	

Point

- (1) Specifications and precautions for converters/cables
Refer to the following manual for the specifications and precautions for converters/cables.
 The manual for each product
- (2) Inserting and removing a converter/cable that receives electricity from the 5VDC power
Turn the PLC CPU side power OFF before inserting and removing the converter/cable that receives electricity from the PLC CPU side 5VDC power.
- (3) Inserting and removing a converter/cable that does not receive electricity from the 5VDC power
Refer to the following procedures when inserting and removing the peripheral device or cable that does not receive electricity from the PLC CPU side 5VDC power (receives from an external power supply).
 - ① Make sure to touch the static discharge wrist strap or grounded metal before operation and discharge electrostatic from cables, human body or others.
 - ② Turn off the PC.
 - ③ Turn off the converter.
Ground the FG terminal if provided.
 - ④ Insert and remove the converter/cable connected to the PC and PLC.
 - ⑤ Turn on the converter.
 - ⑥ Turn on the PC.
 - ⑦ Start the software package.

2.4.3 Connecting to MELDAS C6/C64

The conversion cable for connecting the GT Simulator2 and MELDAS C6/C64 is required to be created by the user.

The following describes the connection diagram, connector and others for each cable.

1 Connection diagram

Personal Computer(GT Simulator2) Side	Cable Connection and Signal Direction	MELDAS C6/C64(TERMINAL) Side	
		Pin number	Signal name
GND		1	GND
RD(RXD)		-	-
SD(TXD)		-	-
GND		-	-
DR(DSR)		6	SD(TXD)
CS(CTS)		-	-
		11	GND
		16	RD(RXD)
		18	ER(DTR)

2 Connector specifications

- (1) PC side connector
Use the connector compatible with the PC side.
- (2) MELDAS C6/C64 side connector
Use the connector compatible with MELDAS C6/C64 side.
For details, refer to the following manual.

User's Manual for the MELDAS C6/C64

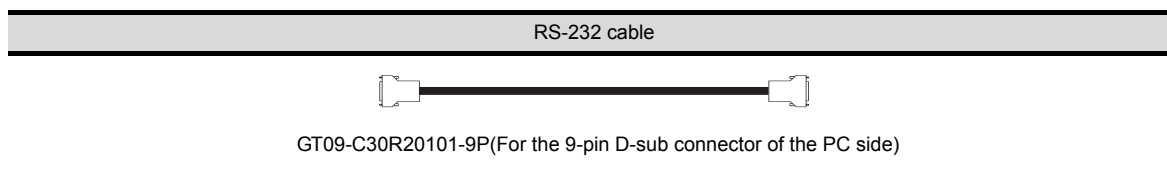
3 Precautions for creating cables

The length of the conversion cable must be 15m or shorter.

2.4.4 Connecting to Omron PLC CPU



1 When using a product made in Mitsubishi Electric System Service Co., Ltd.



2 When using an RS-232 cable prepared by user

The following describes the connection diagram, connector and others for each cable.

(1) Connection diagram

PC (GT Simulator2) side Signal name	Cable connection and signal direction	Omron products side	
		Pin No.	Signal name
CD		1	FG
RD(RXD)		2	SD
SD(TXD)		3	RD
ER(DTR)		4	RS
SG		5	CS
DR(DSR)		6	-
RS(RTS)		7	FR
CS(CTS)		8	ER
-		9	SG

(2) Connector specifications

(a) PC side connector

Use the connector compatible with the PC side.

(b) Omron PLC CPU side connector

Use the connector compatible with Omron PLC CPU side.

For details, refer to the following manual.

User's Manual for Omron PLC CPU

(3) Precautions for creating cables

The length of the cable must be 15m or less.

3. SPECIFICATIONS

3.1 GOT that Can Be Simulated

The following table indicates the GOT that can be simulated on GT Simulator2.
Any GOT other than the below cannot be simulated.

1 For [GOT1000 series (GT16) simulator]

Name	Resolution (dots)	Display color	Memory capacity ^{*1}
GT16**-X	1024 × 768	High Color (16-bits)	57M bytes
GT16**-S	800 × 600		
GT16**-V	640 × 480		

2 For [GOT1000 series (GT15) simulator]

Name	Resolution (dots)	Display color	Memory capacity ^{*1}
GT15**-X	1024 × 768	High Color (16-bits)	57M bytes
GT15**-S	800 × 600		
GT15**-V	640 × 480		
GT155*-V			
GT15**-Q	320 × 240		

3 For [GOT1000 series (GT11) simulator]

Name	Resolution (dots)	Display color	Memory capacity ^{*1}
GT11**-Q ^{*2}	320 × 240	256 colors	3M bytes

4 For [GOT-A900 series simulator]

Name	Resolution (dots)	Display color	Memory capacity ^{*1}
GT SoftGOT2	1280 × 1024	256 colors	33M bytes
	1024 × 768		
	800 × 600		
	640 × 480		
A985GOT	800 × 600		9M bytes
A97*GOT	640 × 480		
A960GOT	640 × 480		
A956WGOT	480 × 234		
A95*GOT ^{*3}	320 × 240		

*1 The memory of GOT user area to store project data and Option OS, etc.

*2 Incompatible with the grip and operation switches of the handy GOT

*3 Incompatible with the grip and operation switches of the A950 handy GOT



Display color

The number of display colors for the actual GOT differs according to the model. The following shows the number of display colors for all GOTs when simulating with GT Simulator2.

[GOT1000 series GT16 simulator]: 65536 colors

[GOT1000 series GT15 simulator]: 65536 colors

[GOT1000 series GT11 simulator]: 256 colors

[GOT-A900 series simulator]: 256 colors

Check the actual display colors for the GOT with [Preview] on GT Designer2.

3.2 Functions that cannot be simulated

The following functions cannot be used on GT Simulator2.

1 For [GOT1000 series (GT16) simulator]

Function category			Function name
Utility functions ^{*1}	GOT setup	GOT main unit setup	Time setting, Transparent mode, Clean, Video/RGB setting , Multimedia setting
		Display	Screen save time, Screen save backlight, Battery alarm display, Brightness,contrast
		Operation	Key sensitivity, Key reaction speed, Touch panel calibration, Touch detection mode
		GOT maintenance function	Maintenance timing setting, Addition times reset, GOT start time
	Communication setting		Communication setting
	Debug		Debug
	Self check		Self check
	Data control	Data control	Data control
OS/project information		OS/project information	
Extension function ^{*2}		System monitor function, Barcode function, Video display ^{*3} , RGB display, Multimedia function, External I/O function, Operation panel function, Backup/restore function, CNC data I/O function, RFID function, Operator authentication (External authentication/fingerprint authentication)	
Option functions ^{*2}		Ladder monitor function ^{*4} , List editor for MELSEC-A ^{*4} , List editor for MELSEC-FX ^{*4} , Intelligent module monitor function, Network monitor function, Q motion monitor function, Servo amplifier monitor function, CNC monitor function, Gateway function, MES interface function, SFC monitor function, Ladder editor function	
Others		FA transparent functions, Human sensor function, RGB output	

*1 Refer to the following manual for details of Utility function.

 GT16 User's Manual

*2 Refer to the following manual for details of Extension and Option functions.

 GOT1000 Series Extended/Option Functions Manual

*3 Video windows are displayed in blue color. (Video images are not displayed.)

A window to which transparent processing is applied or a window displayed on an overlap window is not displayed.

The resolution of video windows cannot be changed. (Fixed to 640 × 480 dots)

*4 The equivalent function is available when using the GT Simulator2 and GX Developer on the same PC.



[GOT Setup] of Utility function

The GT Simulator2 can set up [GOT setup], but some functions are inoperative.
The following table indicates whether they are operative or not on GT Simulator2.

Item	Operability on GT Simulator2	
Display	Language	○
	Opening screen time	○
	Screen save time	×
	Screen save backlight	×
	Battery alarm display	×
	Brightness, contrast	×
Operation	Buzzer volume	○ ^{*5}
	Window move buzzer	○ ^{*5}
	Security setting	○
	Utility call key	○ ^{*6}
	Key sensitivity	×
	Key reaction speed	×
	Touch panel calibration	×
	Touch Detection Mode	×
Transparent mode settings	×	

○: Operable ×: Inoperative

- *5 When using the following basic software, there is no differentiation in [LONG] and [SHORT] of Buzzer Volume. The same length of Buzzer Volume sounds.
- Microsoft® Windows® 98 Operating System (English version)
 - Microsoft® Windows® Millennium Edition Operating System (English version)
- *6 When two points are set for the utility call key, click either one point, and then the utility screen is displayed. Even though [Pressing time] is set, the function does not operate.


2 For [GOT1000 series (GT15) simulator]

Function category	Function name	
Utility functions* ¹	Communication Settings, Debug & self check* ⁵ , Program/data control* ⁵ , Addition times reset	Time setting & display, Maintenance timing setting, Screen clean up,
Extension function* ²	System monitor function, Video display* ³ , External I/O function, Backup/restore function, RFID function	Barcode function, RGB display, Operation panel function, CNC data I/O function, Operator authentication (External authentication/ fingerprint authentication)
Option functions* ²	Ladder monitor function* ⁴ , List editor for MELSEC-FX* ⁴ , Network monitor function, Servo amplifier monitor function, Gateway function, SFC monitor function,	List editor for MELSEC-A* ⁴ , Intelligent module monitor function, Q motion monitor function, CNC monitor function, MES interface function, Ladder editor function
Others	FA transparent functions, RGB output	Human sensor function,

*1 Refer to the following manual for details of Utility function.

 GT15 User's Manual

*2 Refer to the following manual for details of Extension and Option functions.

 GOT1000 Series Extended/Option Functions Manual

*3 Video windows are displayed in blue color. (Video images are not displayed.)

A window to which transparent processing is applied or a window displayed on an overlap window is not displayed.

The resolution of video windows cannot be changed. (Fixed to 640 × 480 dots)

*4 The equivalent function is available when using the GT Simulator2 and GX Developer on the same PC.

*5 With special function switches, the logging information, advanced recipe information, operation log information, and operator info. management can be used.

 GT Designer2 Version□ Screen Design Manual



[GOT Setup] of Utility function

The GT Simulator2 can set up [GOT setup], but some functions are inoperative. The following table indicates whether they are operative or not on GT Simulator2.

Item	Operability on GT Simulator2	
Display	Language	○
	Opening screen time	○
	Screen save time	×
	Screen save backlight	×
	Battery alarm display	×
	Brightness, contrast	×
Operation	Buzzer volume	○ ^{*6}
	Window move buzzer	○ ^{*6}
	Security setting	○
	Utility call key	○ ^{*7}
	Key sensitivity	×
	Key reaction speed	×
	Touch panel calibration ^{*8}	×
	Touch Detection Mode	×
Q/QnA ladder monitor	×	
Transparent mode settings	×	
Video/RGB Setting ^{*9}	×	
Backup/restoration setting	×	

○: Operable ×: Inoperable

- *6 When using the following basic software, there is no differentiation in [LONG] and [SHORT] of Buzzer Volume. The same length of Buzzer Volume sounds.
 - Microsoft® Windows® 98 Operating System (English version)
 - Microsoft® Windows® Millennium Edition Operating System (English version)
- *7 When two points are set for the utility call key, click either one point, and then the utility screen is displayed. Even though [Pressing time] is set, the function does not operate.
- *8 Setting item only for GT15**-X
- *9 Setting item only for GT15**-S


3 For [GOT1000 series (GT11) simulator]

Function category	Function name	
Utility functions* ¹	Communication Settings, Program/data control, Screen clean up	Time setting & display, Debug & self check,
Extension function* ²	System monitor function, RFID function	Barcode function,
Option functions* ²	List editor for MELSEC-A* ³ ,	List editor for MELSEC-FX* ³
Others	FA transparent functions	

*1 Refer to the following manual for details of Utility function.

 GT11 User's Manual

*2 Refer to the following manual for details of Extension and Option functions.

 GOT1000 Series Extended/Option Functions Manual

*3 The equivalent function is available when using the GT Simulator2 and GX Developer on the same PC.



[GOT Setup] of Utility function

The GT Simulator2 can set up [GOT setup], but some functions are inoperative. The following table indicates whether they are operative or not on the GT Simulator2.

Item		Operability on GT Simulator2
Display	Language	○
	Opening screen time	○
	Screen save time	×
	Screen save backlight	×
	Battery alarm display	×
	Brightness, contrast	×
Operation	Buzzer volume	○* ⁴
	Window move buzzer	○* ⁴
	Security setting	○
	Utility call key	○* ⁵
	Key sensitivity	×
	Key reaction speed	×
Handy GOT	Grip Switch LED settings	×

○: Operable ×: Inoperable

*4 When using the following basic software, there is no differentiation in [LONG] and [SHORT] of the buzzer volume. The same length of Buzzer Volume sounds.

- Microsoft® Windows® 98 Operating System Japanese version
- Microsoft® Windows® Millennium Edition Operating System Japanese version

*5 When two points are set for the utility call key, click either one point, and then the utility screen is displayed. Even though [Pressing time] is set, the function does not operate.

4 For [GOT-A900 series simulator]

Function category	Function name	
Object function ^{*1}	Report function ^{*3} , Test function,	Hard copy function ^{*3*4} , Barcode function
Utility function	System monitor, List edit, Motion/CNC monitor, Servo amplifier monitor, Screen & OS copy, Screen cleanup, Brightness/contrast adjustment	Network monitor, Ladder monitor, Special module monitor, Memory information, Clock, Self-test,
Extension function ^{*2}	System monitor function Operation Panel function	External I/O function,
Option function ^{*2}	Ladder monitor function ^{*5} , List editor function ^{*5} , Motion monitor function, CNC monitor function	Special unit monitor function, Network monitor function ^{*5} , Servo amplifier monitor function,
Other function	Transparent function, Brightness adjustment function, VIDEO/RBG display function ^{*6} , Font change function,	Human sensor function, Sound function, Gateway function, System dialog language switching function

*1 Refer to the following manual for details of object function.

 GT Designer2 Version□ Reference Manual

*2 Refer to the following manual for details of Extension and Option functions.

 GOT-A900 Series Operating Manual
(GT Works2 Version□/GT Designer2 Version□ compatible Extended • Option Functions Manual)


*3 This function can be used when simulating GT SoftGOT2.

The data is stored into each folder in the GSS2 created in the installation destination folder.

[Rev./Norm], [Writing Notification Device], and [Writing Error Notification Device] of the hard copy function cannot be simulated.

The system information related to the hard copy function also cannot be simulated.

*4 By using the GT Simulator2 snapshot and printing functions equivalent functions become possible.

 • Section 6.1 Snap Shot
• Section 6.2 Print

*5 By using GT Simulator2 and GX Developer together on the personal computer, equivalent functions become possible.

*6 Video windows are displayed in blue color. (Video images are not displayed.)

A window to which transparent processing is applied or a window displayed on an overlap window is not displayed.

The RGB screen cannot be displayed.



(1) [Main Menu] display of Utility function

The 2-point press is not allowed for [Menu call key].
To display [Main Menu], make [Special Function Switch (Utility)] setting.
Refer to the following manual for the setting method.

GT Designer2 Version□ Reference Manual

(2) [GOT Setup] of Utility function

The GT Simulator2 can set up [GOT setup], but some functions are inoperative.
The following table indicates whether they are operative or not on GT Simulator2.

Item	Operability on GT Simulator2
Buzzer volume	○*1
Outside speaker	○
Screen save time	×
Screen save light	×
Language	○

○: Operable ×: Inoperable

*1 When using the following basic software, there is no differentiation in [LONG] and [SHORT] of Buzzer Volume.

The same length of Buzzer Volume sounds.

- Microsoft® Windows® 98 Operating System (English version)
- Microsoft® Windows® Millennium Edition Operating System (English version)

3.3 Precautions

3.3.1 Precautions for using the GT Simulator2

1 In the case of simulating project data of GOT-F900 series

- (1) When simulating project data of GT11
The simulation is disabled by changing the [GOT Type] of GT Designer2 to "GT15".
However, any functions the GT15 is incompatible with cannot be converted.
When changing [GOT Type], always back up the data.
Incompatible functions may not be converted at the time of [GOT Type] changing, and the functions may not be converted properly when [GOT Type] is changed to "GT11" again.
- (2) When simulating project data of GOT-F900 series
The simulation is disabled by changing the [GOT Type] of GT Designer2 to "GOT-A900 series".
However, any incompatible functions with the GOT-A900 series cannot be converted.
When changing [GOT Type], always back up the data.
The functions may not be converted properly when the incompatible functions may not be converted at [GOT Type] changing and [GOT Type] is changed to "GOT-F900 series" again.

2 Simulating the project data of vertical display type

For GT11, the project data of vertical display type cannot be simulated while display type can be selected.

Perform the simulation after changing [GOT type] of the GT Designer2 to "GT16/GT15".

Note that a function that is not compatible with GT16/GT15 cannot be converted.

When changing [GOT type], be sure to backup data.

If this is not done, the incompatible functions are not be converted when [GOT type] is changed, and these functions cannot be converted correctly when [GOT type] is changed to GT11 again.

3 The display of the GT Simulator2 and GOT

The display of GT Simulator2 may differ from that of the GOT.

Confirm on the GOT for display of the actual GOT.

4 Numerical Display

When the [View Format] of [Numerical Display] is set to [Real] and if illegal value is stored, illegal value will be displayed on GT Simulator2. (GOT displays [non].)

5 Time display

The clock data of the personal computer is used for clock display when simulating GT Simulator2.

(GOT reads and shows the clock data of the PLC CPU.)

GT Simulator2 does not support the daylight saving function. Do not check [Automatically adjust clock for daylight saving changes] on the personal computer.

6 Hard copy function

[Rev./Norm], [Writing Notification Device], and [Writing Error Notification Device] of the hard copy function cannot be simulated.


The system information related to the hard copy function also cannot be simulated.

7 Logging, advanced recipe, operation log, operator authentication

The logging information, advanced recipe information, operation log information, and operator info. management cannot be displayed with the utility.

For using the logging information, advanced recipe information, operation log information, and operator info. management, set special function switches.

For special function switches, refer to the following manual.

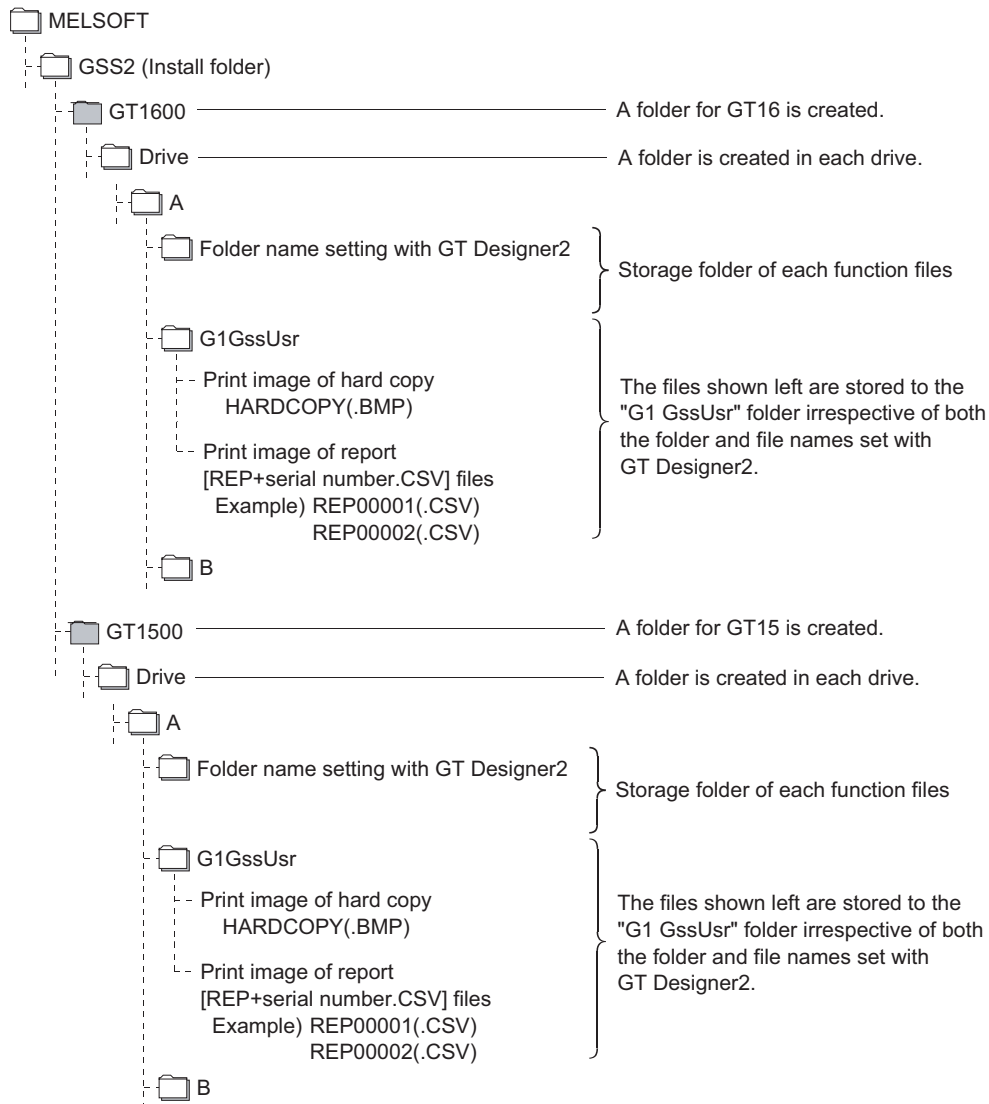
 GT Designer2 Version2 Screen Design Manual

8 Functions in which data are stored to the memory card

When the memory card is set as the file storage destination with objects or option functions, the files will be stored in the hard disc of the PC.

The files of each function are stored in the folder listed below.

• For GOT1000 series GT16/GT15 simulator

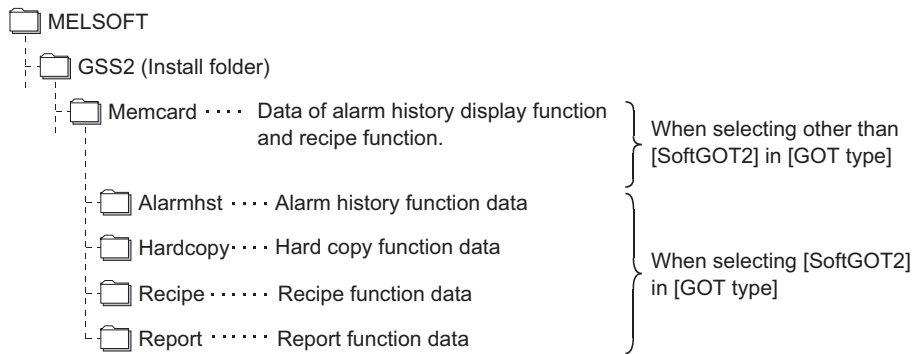


• For [GOT1000 series (GT11) simulator]



• For [GOT-A900 series simulator]

The storage location differs according to the setting of [GOT type] in [Simulate] on the Action setup tab of [Option].



9 GT Simulator2 Versions

Use the same version of GT Simulator2 as that of GT Designer2 that the project data is created. When the different version is used, the file may not be opened, the functions and settings may be invalid, or GT Simulator2 does not operate correctly.

 Appendix 2 Applicable Project Data

10 Using the project data of GT Designer of the SW3D5C-GOTR-PACK or earlier or those converted by GT Converter



To use the project data of GT Designer2 of the SW3D5C-GOTR-PACK or earlier or those converted by GT Converter, read out and save the project data on the GT Designer of the SW3D5C-GOTR-PACK or later or the GT Designer2.

If using the project data of GT Designer of the SW3D5C-GOTR-PACK or earlier or those converted by GT Converter as it is, the GT Simulator2 may not operate normally.

11 Printer output



(1) Printer output

Data cannot be output directly to the printer with using the report function or hard copy function, etc.

A print image (TXT/CSV/BMP format file) is saved in the personal computer's hard disk, so output each file to the printer separately.

 **8** Functions in which data are stored to the memory card in this section

(2) When using project data which sets frequently the printing trigger to ON

When using project data which frequently sets the printing trigger to ON, check that there is enough free space on the personal computer's hard disk, and delete printing images if necessary. The file of print images will not be deleted even if GT Simulator2 is exited.

(3) When opening the print image file on the personal computer

If Wordpad or Memopad were used to open saved printing image files (TXT files), the display of the character spacing may be slightly out of line.

If the character spacing is out of line, adjust the character font or font size.

(4) System alarm during hard copying

The system alarm will not be displayed during hard copying.

Refer to the following for troubleshooting for the hard copy function.

 Section 8.1 Troubleshooting for File Save Problems

12 Sound output



The sound output function is executed with the sound function of a personal computer (Sound card) and speakers.

When the personal computer to be used cannot output sounds, the sound output function cannot be used.

13 Functions in which data are stored in the memory card in advance by the user


• For [GOT1000 series (GT15) simulator]

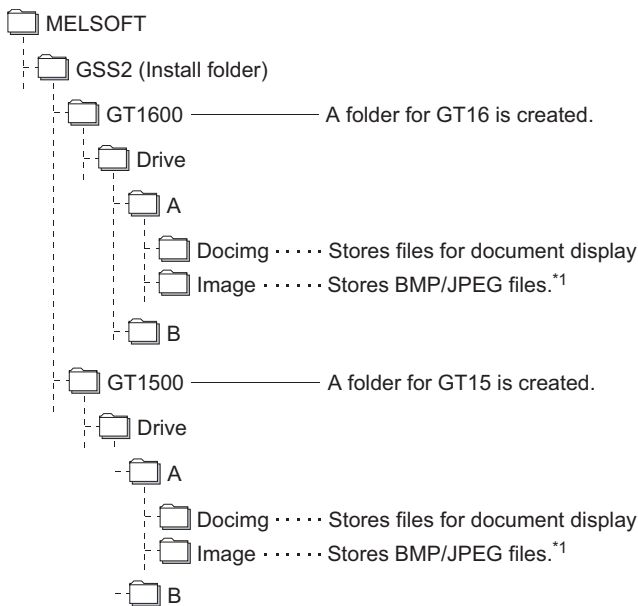
When registering BMP/JPEG files for parts or data for document display, store them in the hard disk of the personal computer.

Store each data in the following folders (user-created).

(The drive to be used depends on the specifications and setting of the object.)

For details of each function, refer to the following manual.

 GT Designer2 Version□ Screen Design Manual



*1 Folder can be any name.

For details on how to use BMP/JPEG file, refer to the following manual.

 GT Designer2 Version□ Screen Design Manual

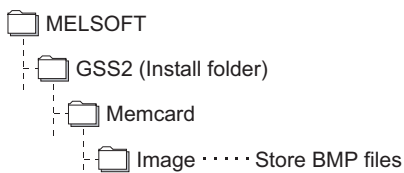
• For [GOT-A900 series simulator]

When registering BMP files for parts, save in the personal computer's hard disk.

Store the BMP files in Image folder below (generated automatically).

Refer to the following manual for BMP files for parts.

 GT Designer2 Version□ Reference Manual



14 When connecting to FXCPU

For setting the odd point of [Counter (current value) (c)] (16-bit) to Head Device with recipe function, use the C199 or earlier.

15 For project data with the multi-channel function applied

Only channel1 can be simulated.


Devices other than channel1 are ignored.

To monitor a device other than channel1, change the channel to be debugged to channel1 by selecting [Tools]→[Batch Edit]→[Replace CH No...] menu.

Example) To simulate channel2 when using channel1 and channel2

- ① Batch change from channel1 to channel3.
- ② Batch change from channel2 to channel1.

For batch change of channels, refer to the following manual.

 GT Designer2 Version□ Basic Operation/Data Transfer Manual

3.3.2 Precautions for connecting to GX Simulator

1 When GX Simulator has been started from GT Simulator2

GX Simulator cannot be started for being used on GX Developer.
Exit from GT Simulator2, then restart GX Simulator from GX Developer.

2 When GX Simulator has been started from GX Developer

- (1) When GX Simulator has been started from GX Developer
GX Simulator2 uses the GX Simulator started from GX Developer.
- (2) When exiting GX Simulator
Not that if you exit from GX Developer and GX Simulator first, GT Simulator2 will result in a communication error.

3 When simulating the project data in which a third party PLC is set for the PLC Type.

- (1) When simulating with using [Default] of GX Developer Project
By setting the CPU type in [Option] of GT Simulator2 to [ACPU], the simulation in the device ranges of A4UCPU is possible. (☞ Section 5.3 Option Setting)
Refer to the below for the device ranges that can be simulated.

☞ Section 3.4 Device Ranges that Can Be Simulated

- (2) When simulating with using [Fixed] of GX Developer Project
Specify GX Developer project whose PLC series is [ACPU].
By setting the CPU type in [Option] of GT Simulator2 to [ACPU], the simulation in the device ranges of ACPU (Specified PLC type) is possible. (☞ Section 5.3 Option Setting)
Refer to the below for the device ranges that can be simulated.

☞ Section 3.4 Device Ranges that Can Be Simulated

4 When simulating the project data whose PLC type is [MELSEC-FX]

- (1) When simulating with using GX Developer project whose PLC type is [FX3UC]
It is not possible to simulate by specifying a GX Developer project whose PLC type is [FX3UC] when [GX Developer Project] in [Option] of GT Simulator2 is set to [Fixed].
Set [GX Developer Project] in [Option] of GT Simulator2 to [Default], then simulate in the device ranges of FX2N Series.

(☞ Section 5.3 Option Setting)

5 When simulating the buffer memory

By setting [GX Developer project] in [Option] of GT Simulator2 to [Fixed] and specifying an I/O-assigned GX Developer project, the buffer memory can be simulated.

(☞ Section 5.3 Option Setting)

The buffer memory cannot be simulated since I/O assignment has not been made, when [GX Developer project] in [Option] of GT Simulator2 is set to [Default].



Difference with debug executed by connecting to PLC CPU

Refer to the following manual for the difference with debug executed by connecting to PLC CPU.

☞ GX Simulator Version□ Operating Manual

3.3.3 Precautions for connecting PLC CPU

1 When connecting GT Simulator2 to the function extension board of the FXCPU

When connecting GT Simulator2 to the function extension board of the FXCPU, make the following settings on GX Developer.

- 1 Uncheck [Operate communication setting] on the PLC system (2) tab of [PLC Parameter].
- 2 Set "0" in special register (D8120) of FXCPU.

3.4 Device Ranges that Can Be Simulated

The following device ranges can be simulated on GT Simulator2.

3.4.1 Connecting to PLC CPU




PLC CPU that can be simulated on GT Simulator2

Refer to the below for PLC CPU that can be simulated on GT Simulator2.

 Section 2.3 PLC CPUs that Can Be Simulated

It is possible to simulate the device ranges that can be monitored on GOT. Refer to the following manual for the device ranges that can be monitored on GOT.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

3.4.2 Connecting to GX Simulator



(1) Devices unsupported by GX Simulator

The devices unsupported by GX Simulator cannot be simulated.
Refer to the following manual for the device ranges supported by GX Simulator.

GX Simulator Version□ Operating Manual

(2) PLC CPU that can be simulated on GT Simulator2

Refer to the following manual for PLC CPU that can be simulated on GT Simulator2.

Section 2.3 PLC CPUs that Can Be Simulated

1 MITSUBISHI PLC

It is possible to simulate the device ranges that can be monitored on GOT.
Refer to the following manual for the device ranges that can be monitored on GOT.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

GT Designer2 Version□ Reference Manual

2 OMRON PLC (OMRON SYSMAC)

Device name	GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)	
Bit device	I/O relay/Internal auxiliary relay	..000000 to ..614315	..000000 to ..008115
	Data link relay (LR)	LR00000 to LR19915	LR00000 to LR08115
	Auxiliary memory relay (AR)	AR00000 to AR95915	-
	Holding relay (HR)	HR00000 to HR51115	HR00000 to HR08115
	Internal holding relay (W)	WR00000 to WR51115	WR00000 to WR08115
	Timer contact (TIM)	TIM0000 to TIM4095 (TIM2047)*2	TIM0000 to TIM0255
	Counter contact (CNT)	CNT0000 to CNT4095 (CNT2047)*2	CNT0000 to CNT0255
	Word device bit	Specified bits of the following word devices (Except for data link relay, auxiliary memory relay, holding relay and internal holding relay.)	Specified bits of the following word devices (Except for data link relay, auxiliary memory relay, holding relay and internal holding relay.)
Word device	I/O relay/Internal auxiliary relay	..0000 to ..6143	..0000 to ..0081
	Data link relay (LR)	LR000 to LR199	LR000 to LR081
	Auxiliary memory relay (AR)	AR000 to AR959	-
	Holding relay (HR)	HR000 to HR511	HR000 to HR081
	Internal holding relay (W)	WR000 to WR511	WR000 to WR081
	Data memory (DM)	DM00000 to DM32767 (DM9999)*2	DM0000 to DM8191
	Timer (current value) (TIM)	TIM0000 to TIM4095 (TIM2047)*2	TIM0000 to TIM0255
	Counter (current value) (CNT)	CNT0000 to CNT4095 (CNT2047)*2	CNT0000 to CNT0255
	Extended data memory (EM current bank)	EM00000 to EM32767 (EM9999)*2	-
	Extended data memory (EM banks 0 to 12)	E000000 to E032767 (E09999)*2 : EC00000 to EC32767 (EC9999)*2	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version Reference Manual

*2 In parentheses, the device ranges of GOT-A900 Series is indicated.

3 KEYENCE PLC (KEYENCE KV-700/1000)

	Device name	GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Relay (..)	..00000 to ..59915	..00000 to ..51115
	Internal AUX relay (MR)	MR00000 to MR99915	MR00000 to MR51115
	Latch relay (LR)	LR00000 to LR99915	LR00000 to LR51115
	Control relay (CR)	CR00000 to CR3915	CR00000 to CR1515
	Timer (contact) (T)	T0000 to T3999	T0000 to T0255
	Counter (contact) (C)	C0000 to C3999	C0000 to C0255
	High-speed counter comparators (contact) (CTC)	CTC0 to CTC3	-
	Word device bit	Specified bits of the following word devices (Except for Timer (current value), Timer (set value), Counter (current value), Counter (set value), High-speed counter (current value), High-speed counter comparators (set value), Control memory, Temporary data memory, Index register, Digital trimmer.)	Specified bits of the following word devices (Except for Timer (current value), Timer (set value), Counter (current value), Counter (set value), High-speed counter (current value), High-speed counter comparators (set value), Control memory, Temporary data memory, Index register, Digital trimmer.)
Word device	Relay (..)	..00000 to ..59900	..00000 to ..51100
	Internal AUX relay (MR)	MR00000 to MR99900	MR00000 to MR51100
	Latch relay (LR)	LR00000 to LR99900	LR00000 to LR51100
	Control relay (CR)	CR00000 to CR3900	CR00000 to CR1500
	Timer (current value) (TC)	TC0000 to TC3999	TC0000 to TC0254
	Timer (set value) (TS)	TS0000 to TS3999	-
	Counter (current value) (CC)	CC0000 to CC3999	CC0000 to CC0254
	Counter (set value) (CS)	CS0000 to CS3999	-
	High-speed counter (current value) (CTH)	CTH0 to CTH1	-
	High-speed counter comparators (set value) (CTC)	CTC0 to CTC3	-
	Data memory (DM)	DM00000 to DM65534	DM00000 to DM8191
	Extended data memory (EM)	EM00000 to EM65534	-
	Extended data memory 2 (FM)	FM00000 to FM32766	-
	Control memory (CM)	CM00000 to CM11998	-
	Temporary data memory (TM)	TM000 to TM511	-
	Index register (Z)	Z01 to Z12	Z01 to Z06
	Digital trimmer (TRM)	TRM0 to TRM7	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

☞ GT Designer2 Version ☐ Screen Design Manual

4 SHARP PLC (SHARP JW)

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	I/O relay	..00000 to ..15777 ..20000 to ..75777	..00000 to ..15777
	Timer (contact) (T)	T0000 to T1777	T0000 to T0377
	Counter (contact) (C)	C0000 to C1777	C0000 to C0377
	Word device bit	Specified bits of the following word devices	Specified bits of the following word devices
Word device	Timer (current value) (T)	T0000 to T1777	T0000 to T0377
	Counter (current value) (C)	C0000 to C1777	C0000 to C0377
	Register (09 to E7)	09000 to 09776	09000 to 09776
		19000 to 19776	19000 to 19776
		29000 to 29776	29000 to 29776
		39000 to 39776	39000 to 39776
		49000 to 49776	49000 to 49776
		59000 to 59776	59000 to 59776
		69000 to 69776	69000 to 69776
		79000 to 79776	79000 to 79776
		89000 to 89776	89000 to 89776
		99000 to 99776	99000 to 99776
		E0000 to E0776	E0000 to E0776
		E1000 to E1776	E1000 to E1776
		E2000 to E2776	E2000 to E2776
		E3000 to E3776	E3000 to E3776
		E4000 to E4776	E4000 to E4776
		E5000 to E5776	E5000 to E5776
	E6000 to E6776	-	
	E7000 to E7776	E7450 to E7776	
File register (1 to 7)	1000000 to 1177776 2000000 to 2177776 3000000 to 3177776 4000000 to 4177776 5000000 to 5177776 6000000 to 6177776 7000000 to 7177776	-	
Bit device word	Conversion of the above bit devices to words (Except Timer and Counter)	Conversion of the above bit devices to words (Except Timer and Counter)	

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

5 JTEKT PLC (JTEKT TOYOPUC-PC)

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Input (X)	X000 to X7FF	X000 to X7FF
	Output (Y)	Y000 to Y7FF	Y000 to Y7FF
	Link relay (L)	L000 to L7FF	L000 to L7FF
	Internal relay (M)	M000 to M7FF	M000 to M7FF
	Keep relay (K)	K000 to K2FF	-
	Edge detection (P)	P000 to P1FF	-
	Timer (T)	T000 to T1FF	T000 to T1FF
	Counter (C)	C000 to C1FF	C000 to C1FF
	Special relay (V)	V000 to V0FF	-
	Extended input (EX)	EX000 to EX7FF	-
	Extended output (EY)	EY000 to EY7FF	-
	Extended internal relay (EM)	EM0000 to EM1FFF	-
	Extended keep-relay (EK)	EK000 to EKFFF	-
	Extended special relay (EV)	EV000 to EVFFF	-
	Extended timer (ET)	ET000 to ET7FF	-
	Extended counter (EC)	EC000 to EC7FF	-
	Extended link relay (EL)	EL0000 to EL1FFF	-
	Extended edge detection (EP)	EP000 to EPFFF	-
	Extended input 2 (GX)	GX0000 to GXFFFF	-
	Extended output 2 (GY)	GY0000 to GYFFFF	-
Extended internal relay (GM)	GM0000 to GMFFFF	-	
Word device bit	Specified bits of the following word devices (Except EB and TCS)	Specified bits of the following word devices (Except EB and TCS)	
Word device	Data register (D)	D0000 to D2FFF	D0000 to D2FFF
	Link register (R)	R0000 to R07FF	R0000 to R07FF
	Setup value register (N)	N0000 to N01FF	N0000 to N01FF
	Special register (S)	S0000 to S03FF	-
	File register (B)	B0000 to B1FFF	B0000 to B1FFF
	Extended present value register (EN)	EN0000 to EN07FF	-
	Extended setup value register (H)	H0000 to H07FF	-
	Extended special register (ES)	ES0000 to ES07FF	-
	Extended data register (U)	U0000 to U7FFF	-
	Extended buffer register (EB)	EB00000 to EB07FFF EB08000 to EB0FFFF EB10000 to EB17FFF EB18000 to EB1FFFF	-
	Setup value register (TCS)	TCS0000 to TCS01FF	-
	Bit device word	Conversion of the above bit devices to words	Conversion of the above bit devices to words

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]


GT Designer2 Version□ Screen Design Manual

6 TOSHIBA PLC (TOSHIBA PROSEC T,V Series)

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	External input (X)	X0000 to X511F	X0000 to X511F
	External output (Y)	Y0000 to Y511F	Y0000 to Y511F
	Internal relay (R)	R0000 to R4095F	R0000 to R0511F
	Special relay (S)	S0000 to S511F	-
	Link register relay (Z)	Z0000 to Z999F	Z0000 to Z511F
	Link relay (L)	L0000 to L255F	-
	Timer (contact) (T)	T0 to T999	T0 to T255
	Counter (contact) (C)	C0 to C511	C0 to C255
	Word device bit	Specified bits of the following word devices (Only for data register, link register and file register)	Specified bits of the following word devices (Only for data register, link register and file register)
Word device	External input (XW)	XW0 to XW511	XW0 to XW511
	External output (YW)	YW0 to YW511	YW0 to YW511
	Internal relay (RW)	RW0 to RW4095	RW0 to RW4095
	Special relay (SW)	SW0 to SW511	-
	Link relay (LW)	LW0 to LW255	-
	Timer (current value) (T)	T0 to T999	T0 to T255
	Counter (current value) (C)	C0 to C511	C0 to C255
	Data register (D)	D0 to D8191	D0 to D8191
	Link register (W)	W0 to W2047	W0 to W2047
	File register (F)	F0 to F32767	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]


 GT Designer2 Version□ Reference Manual

7 HITACHI IES PLC (HITACHI HIDEIC H Series)

Device name	GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)	
Bit device	External input (X)	X00000 to X05A95	X00000 to X05A95
	External output (Y)	Y00000 to Y05A95	Y00000 to Y05A95
	Remote external input (X)	X10000 to X49995	-
	Remote external output (Y)	Y10000 to Y49995	-
	First CPU link (L)	L0000 to L3FFF	L0000 to L3FFF
	Second CPU link (L1)	L10000 to L13FFF	-
	Data area (M)	M0000 to M3FFF	M0000 to M1FFF
	On-delay timer (TD)	TD0 to TD255	TD0 to TD255
	Single-shot timer (SS)	SS0 to SS255	-
	Watchdog timer (WDT)	WDT0 to WDT255	-
	Monostable timer (MS)	MS0 to MS255	-
	Retentive timer (TMR)	TMR0 to TMR255	-
	Up counter (CU)	CU0 to CU511	CU0 to CU255
	Ring counter (RCU)	RCU0 to RCU511	-
	Up/down counter (CT)	CT0 to CT511	-
	Bit internal output (R)	R0 to R7BF	-
	Leading edge detection (DIF)	DIF0 to DIF511	-
Trailing edge detection (DFN)	DFN0 to DFN511	-	
Word device bit	Specified bits of the following word devices (Only for timer/counter and word internal output)	Specified bits of the following word devices (Only for timer/counter and word internal output)	
Word device	External input (WX)	WX0000 to WX05A7	-
	External output (WY)	WY0000 to WY05A7	-
	Remote external input (WX)	WX1000 to WX4997	-
	Remote external output (WY)	WY1000 to WY4997	-
	First CPU link (WL)	WL000 to WL3FF	WL000 to WL3FF
	Second CPU link (WL1)	WL1000 to WL13FF	-
	Data area (WM)	WM000 to WM3FF	WM000 to WM1FF
	Timer/counter (elapsed value) (TC)	TC0 to TC511	TC0 to TC255
	Word internal output (WR)	WR000 to WR3FF	WR000 to WR3FF

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

8 HITACHI PLC (Hitachi S10mini/S10V)

Device name		Monitor applicable range for GOT *1	Simulation applicable range for GT Simulator2 (Operation applicable range for GX Simulator)
Bit device	External input (X)	X000 to XFFF	X000 to XFFF
	External output (Y)	Y000 to YFFF	Y000 to YFFF
	Internal register (R)	R000 to RFFF	R000 to RFFF
	Keep relay (K)	K000 to KFFF	K000 to KFFF
	Extended internal register (M)	M000 to MFFF	M000 to MFFF
	Extended internal register (A)	A000 to AFFF	-
	On-delay timer (T)	T000 to T1FF	T000 to T1FF
	One-shot timer (U)	U000 to U0FF	-
	Up-down counter (C)	C00 to CFF	C00 to CFF
	Global link register (G)	G000 to GFFF	G000 to GFFF
	Event register (E)	E000 to EFFF	E000 to EFFF
	System register (S)	S000 to SBFF	S000 to S0FF
	Transfer register (J)	J000 to JFFF	-
Receive register (Q)	Q000 to QFFF	-	
Word device bit	Specified bit of the following word device (except External input, External output, Internal register, Extended internal register, Keep relay, On-delay timer, One-shot timer, Up-down counter, Global link register, Event register, System register, Transfer register, Receive register, Long-word work register, Floating-point work register, Backup single- precision floating-point work register.)	Specified bit of the following word device (except External input, External output, Internal register, Extended internal register, Keep relay, On-delay timer, One-shot timer, Up-down counter, Global link register, Event register, System register, Transfer register, Receive register, Long-word work register, Floating-point work register, Backup single- precision floating-point work register.)	

Device name	Monitor applicable range for GOT ^{*1}	Simulation applicable range for GT Simulator2 (Operation applicable range for GX Simulator)
External input (XW)	XW000 to XWFFF0	XW000 to XWFFF0
External output (YW)	YW000 to YWFFF0	YW000 to YWFFF0
Internal register (RW)	RW000 to RWFFF0	RW000 to RWFFF0
Extended internal register (MW)	MW000 to MWFFF0	MW000 to MWFFF0
Extended internal register (AW)	AW000 to AWFFF0	-
Keep relay (KW)	KW000 to KWFFF0	KW000 to KWFFF0
On-delay timer (TW)	TW000 to TW1F0	TW000 to TW1F0
One-shot timer (UW)	UW000 to UW0F0	-
Up-down counter (CW)	CW00 to CWF0	CW00 to CWF0
Global link register (GW)	GW000 to GWFFF0	GW000 to GWFFF0
Event register (EW)	EW000 to EWFFF0	EW000 to EWFFF0
System register (SW)	SW000 to SWBF0	SW000 to SW0F0
Transfer register (JW)	JW000 to JWFFF0	-
Receive register (QW)	QW000 to QWFFF0	-
On-delay timer (current value) (TC)	TC000 to TC1FF	TC000 to TC1FF
On-delay timer (current value) (TS)	TS000 to TS1FF	-
One-shot timer (current value) (UC)	UC000 to UC0FF	-
One-shot timer (current value) (US)	US000 to US0FF	-
Up-down counter (current value) (CC)	CC00 to CCFF	CC00 to CCFF
Up-down counter (current value) (CS)	CS00 to CSFF	-
Function data register (DW)	DW000 to DWFFF	DW000 to DWFFF
Function work register (FW)	FW000 to FWBFF	-
Extended function work register (LWW)	LWW0000 to LWWFFFF	-
Backup work register (LXW)	LXW0000 to LXW3FFF	-
Long-word work register (LLL)	LLL0000 to LLL1FFF	-
Backup long-word work register (LML)	LML0000 to LML1FFF	-
Floating-point work register (LF)	LF0000 to LF1FFF	-
Backup single-precision floating-point work register (LG)	LG0000 to LG1FFF	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

1

OVERVIEW

2

SYSTEM CONFIGURATION

3

SPECIFICATIONS

4

SCREEN CONFIGURATION OF GT SIMULATOR2

5

GT SIMULATOR2 OPERATING METHOD

6

FUNCTIONS OF GT SIMULATOR2

7

DEVICE MONITOR

8

TROUBLESHOOTING

9 FUJI FA PLC (Fuji Electric FA Components & Systems MICREX-F series)

	Device name	Monitor applicable range for GOT *1	Simulation applicable range for GT Simulator2 (Operation applicable range for GX Simulator)
Bit device	I/O relay (B)	B0000 to B511F	B0000 to B511F
	Auxiliary relay (M)	M0000 to M511F	M0000 to M511F
	Keep relay (K)	K0000 to K063F	K0000 to K063F
	Special relay (F)	F0000 to F125F	F0000 to F015F
	Annunciator relay (A)	A0000 to A045F	A0000 to A045F
	Differential relay (D)	D0000 to D036F	-
	Link memory (L)	L0000 to L511F	L0000 to L511F
	Timer output (0.01second) (T)	T000 to T511	T000 to T511
	Timer output (0.1second) (T)	T512 to T999	T512 to T999
	Counter output (C)	C000 to C511	C000 to C511
	Word device bit	Specified bit of the following word device (except I/O relay, Auxiliary relay, Keep relay, Special relay, Annunciator relay, Differential relay, Link memory, Data memory, Timer, Counter.)	Specified bit of the following word device (except I/O relay, Auxiliary relay, Keep relay, Special relay, Annunciator relay, Differential relay, Link memory, Data memory, Timer, Counter.)
Word device	I/O relay (WB)	WB000 to WB511	WB000 to WB511
	Auxiliary relay (WM)	WM000 to WM511	WM000 to WM511
	Keep relay (WK)	WK000 to WK063	WK000 to WK063
	Special relay (WF)	WF000 to WF125	WF000 to WF015
	Annunciator relay (WA)	WA000 to WA045	WA000 to WA045
	Differential relay (WD)	WD000 to WD063	-
	Link memory (WL)	WL000 to WL511	WL000 to WL511
	Direct access (W24)	W24: 0000 to W24: 0255	-
	User file (W30)	W30: 0000 to W30: 4095	-
	User file (W31)	W31: 0000 to W31: 4095	
	⋮	⋮	
	User file (W108)	W108: 0000 to W108: 4095	
	User file (W109)	W109: 0000 to W109: 4095	
	Data memory (BD)	BD0 to BD4095	BD0 to BD4095
	Timer set value (0.01second) (TS)	TS0 to TS511	-
	Timer current value (0.01second) (TR)	TR0 to TR511	-
	Timer current value (0.1second) (W9)	W9: 0000 to W9: 0487	W9: 0000 to W9: 0487
Counter set value (CS)	CS0 to CS511	-	
Counter current value (CR)	CR0 to CR511	CR0 to CR511	

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

10 PANASONIC PLC (Panasonic MEWNET-FP Series)

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Input relay (X)	X0000 to X511F	X0000 to X511F
	Output relay (Y)	Y0000 to Y511F	Y0000 to Y511F
	Internal relay (R)	R0000 to R886F	R0000 to R511F
	Special relay (R)	R9000 to R911F	R9000 to R910F
	Link relay (L)	L0000 to L639F	L0000 to L511F
	Timer contact (T)	T0 to T3071	T0 to T255
	Counter contact (C)	C0 to C3071	C0 to C255
	Word device bit	Specified bits of the following word devices (Except for input relay, output relay, internal relay, special relay and link relay)	Specified bits of the following word devices (Except for input relay, output relay, internal relay, special relay and link relay)
Word device	Input relay (WX)	WX000 to WX511	WX000 to WX511
	Output relay (WY)	WY000 to WY511	WY000 to WY511
	Internal relay (WR)	WR000 to WR886	WR000 to WR511
	Special relay (WR)	WR900 to WR911	WR900 to WR910
	Link relay (WL)	WL000 to WL639	WL000 to WL511
	Timer/counter (elapsed value) (EV)	EV0 to EV3071	EV0 to EV255
	Counter contact (set value) (SV)	SV0 to SV3071	-
	Data register (DT)	DT0 to DT10239	DT0 to DT8191
	Special data register (DT)	DT90000 to DT90511	-
	Link register (LD)	LD0 to LD8447	LD0 to LD8191
	File register (FL)	FL0 to FL32764	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

11 YASKAWA PLC

(1) YASKAWA GL/PROGIC8

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Coil (O)	O1 to O63424	O1 to O8176
	Input relay (I)	I1 to I63424	I1 to I8176
	Link coil (D)	D1 to D2048	D1 to D2048
		D10001 to D12048 D20001 to D22048	-
Word device bit	Specified bits of the following word devices	Specified bits of the following word devices	
Word device	Input register (Z)	Z1 to Z31840	Z1 to Z8192 Z9000 to Z9256
	Holding register (W)	W1 to W28291	-
		SW1 to SW28291	-
	Link register (R, SR)	R1 to R2048	R1 to R2048
		R10001 to R12048 R20001 to R22048	-
		SR1 to SR2048	-
		SR10001 to SR12048 SR20001 to SR22048	-
Constant register (K)	K1 to K4096	K1 to K6	
Bit device word	Conversion of the above bit devices to words (Except coil and input relay)	Conversion of the above bit devices to words (Except coil and input relay)	

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

(2) YASKAWA CP-9200SH/MP900 Series

Device name		GOT monitoring available range *2	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Coil (MB)	MB000000 to MB32767F	MB000000 to MB00511F
	Input relay (IB)	IB0000 to IBFFFF	IB0000 to IB1FFF
	Word device bit	Specified bits of the following word devices (Except for coil and input relay)	Specified bits of the following word devices (Except for coil and input relay)
Word device	Input register (IW)	IW0000 to IW7FFF	IW0000 to IW1FFF
	Holding register (MW)	MW0 to MW32767	-
	Coil (MB)	MB0 to MB32767	MB0 to MB511
	Input relay (IB)	IB000 to IBFFF	IB000 to IBFFF

*2 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

(3) YASKAWA CP-9200 (H)

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Coil (OB)	OB000 to OB7FF	OB000 to OB7FF
	Input relay (IB)	IB000 to IB7FF	IB000 to IB7FF
	Word device bit	Specified bits of the following word devices	Specified bits of the following word devices
Word device	Input register (IW)	IW00 to IW7F	-
	Output register (OW)	OW00 to OW7F	-
	Data register (DW, ZD)	DW0 to DW2047	-
		ZD0 to ZD2047	ZD0 to ZD6
	Common register (MW)	MW0 to MW7694	-
	Bit device word	Conversion of the above bit devices to words	Conversion of the above bit devices to words

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

(4) YASKAWA CP-9300MS (MC compatible)

Device name		GOT monitoring available range *2	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Coil (OB)	OB0 to OB1023	OB0 to OB1023
	Input relay (IB)	IB0 to IB1023	IB0 to IB1023
	Word device bit	Specified bits of the following word devices	Specified bits of the following word devices
Word device	Input register (I)	I0 to I63	-
	Data register (M)	M0 to M2047	-
	Output register (O)	o0 to o63	-
	Bit device word	Conversion of the above bit devices to words	Conversion of the above bit devices to words

*2 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

12 YOKOGAWA PLC (FA500, FA-M3 Series)

(1) FA500/FA-M3

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Input relay (X)	X00201 to X71664	X00201 to X71664
	Output relay (Y)	Y00201 to Y71664	Y00201 to Y71664
	Internal relay (I)	I1 to I65535	-
	Link relay (L)	L1 to L71024	L1 to L71024
	Shared relay (E)	E1 to E4096	-
	Special relay (M)	M1 to M9984	M1 to M256
	Timer (TU)	TU1 to TU3072	TU1 to TU256
	Counter (CU)	CU1 to CU3072	CU1 to CU256
	Word device bit	Specified bits of the following word devices (Except for timer (TP, TS) and counter (CP, CS))	Specified bits of the following word devices (Except for timer (TP, TS) and counter (CP, CS))
Word device	Timer (TP)	TP1 to TP3072	TP1 to TP256
	Timer (TS)	TS1 to TS3072	-
	Counter (CP)	CP1 to CP3072	CP1 to CP256
	Counter (CS)	CS1 to CS3072	-
	File register (B)	B1 to B262144	-
	Data register (D)	D1 to D8192	D1 to D8192
	Shared register (R)	R1 to R4096	-
	Index register (V)	V1 to V256	-
	Link register (W)	W1 to W71024	W1 to W71024
	Special register (Z)	Z1 to Z512	Z1 to Z256
	Bit device word	Conversion of the above bit devices to words (Except for timer (TU) and counter (CU))	Conversion of the above bit devices to words (Except for timer (TU) and counter (CU))

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

(2) STARDOM/FA-M3

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Input relay (X)	X00201 to X71664	X00201 to X71664
	Output relay (Y)	Y00201 to Y71664	Y00201 to Y71664
	Internal relay (I)	I1 to I65535	I1 to I8192
	Link relay (L)	L00001 to L08192 L10001 to L18192 L20001 to L28192 L30001 to L38192 L40001 to L48192 L50001 to L58192 L60001 to L68192 L70001 to L78192	-
	Shared relay (E)	E1 to E4096	-
	special relay (M)	M1 to M9984	-
	Timer (TU)	TU1 to TU3072	TU1 to TU256
	Counter (CU)	CU1 to CU3072	CU1 to CU256
	Word device bit	Specified bits of the following word devices (Except TP, TS, CP, and CS)	Specified bits of the following word devices (Except TP, TS, CP, and CS)
	Word device	Timer (TP)	TP1 to TP3072
Timer (TS)		TS1 to TS3072	-
Counter (CP)		CP1 to CP3072	CP1 to CP256
Counter (CS)		CS1 to CS3072	-
File register (B)		B1 to B262144	-
Data register (D)		D1 to D65536	D1 to D8192
Shared register (R)		R1 to R4096	-
Index register		V1 to V256	V1 to V7
Link register (W)		W00001 to W08192 W10001 to W18192 W20001 to W28192 W30001 to W38192 W40001 to W48192 W50001 to W58192 W60001 to W68192 W70001 to W78192	-
Special register (Z)		Z1 to Z1024	-
Bit device word		Conversion of the above bit devices to words (Except TU and CU)	Conversion of the above bit devices to words (Except TU and CU)

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual


13 ALLEN-BRADLEY PLC

(1) AB SLC500

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Bit (B)	B3:0/0 to B3:255/15 B10:0/0 to B255:255/15	-
	Timer (timing bit) (T)	T4:0/14 (TT) to T4:255/14 (TT) T10:0/14 (TT) to T255:255/14 (TT)	-
	Timer (completion bit) (T)	T4:0/13 (DN) to T4:255/13 (DN) T10:0/13 (DN) to T255:255/13 (DN)	-
	Counter (up counter) (C)	C5:0/15 (CU) to C5:255/15 (CU) C10:0/15 (CU) to C255:255/15 (CU)	-
	Counter (down counter) (C)	C5:0/14 (CD) to C5:255/14 (CD) C10:0/14 (CD) to C255:255/14 (CD)	-
	Counter (completion bit) (C)	C5:0/13 (DN) to C5:255/13 (DN) C10:0/13 (DN) to C255:255/13 (DN)	-
	Integer (N)	N7:0 to N7:255 N10:0 to N255:255	-
Word device	Bit (B)	B3:0 to B3:255 B10:0 to B255:255	-
	Timer (set value) (T)	T4:0.1 (PRE) to T4:255.1 (PRE) T10:0.1 (PRE) to T255:255.1 (PRE)	-
	Timer (current value) (T)	T4:0.2 (ACC) to T4:255.2 (ACC) T10:0.2 (ACC) to T255:255.2 (ACC)	-
	Counter (set value) (C)	C5:0.1 (PRE) to C5:255.1 (PRE) C10:0.1 (PRE) to C255:255.1 (PRE)	-
	Counter (current value) (C)	C5:0.2 (ACC) to C5:255.2 (ACC) C10:0.2 (ACC) to C255:255.2 (ACC)	-
	Integer (N)	N7:0 to N7:255 N10:0 to N255:255	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]


 GT Designer2 Version□ Reference Manual

(2) AB MicroLogix1000/1200/1500 Series

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Bit (B)	B3:0/0 to B255:255/15	-
	Timer (timing bit) (T)	T3:0/14 (TT) to T255:255/14 (TT)	-
	Timer (completion bit) (T)	T3:0/13 (DN) to T255:255/13 (DN)	-
	Counter (up counter) (C)	C3:0/15 (CU) to C255:255/15 (CU)	-
	Counter (down counter) (C)	C3:0/14 (CD) to C255:255/14 (CD)	-
	Counter (completion bit) (C)	C3:0/13 (DN) to C255:255/13 (DN)	-
	Integer (N)	N3:0/0 to N255:255/15	-
Word device	Bit (B)	B3:0 to B255:255	-
	Timer (set value) (T)	T3:0.1 (PRE) to T255:255.1 (PRE)	-
	Timer (current value) (T)	T3:0.2 (ACC) to T255:255.2 (ACC)	-
	Counter (set value) (C)	C3:0.1 (PRE) to C255:255.1 (PRE)	-
	Counter (current value) (C)	C3:0.2 (ACC) to C255:255.2 (ACC)	-
	Integer (N)	N3:0 to N255:255	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

(3) AB Control/CompactLogix

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	BOOL	BOOL0[0] to BOOL999[31999]	-
Word device	INT	INT0[0] to INT999[999]	-
	DINT	DINT0[0] to DINT999[999]	-
	REAL	REAL0[0] to REAL999[999]	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

14 SIEMENS PLC

(1) SIEMENS S7-300/400 Series

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Input relay (I)	I0000 to I5117	I0000 to I5117
	Output relay (Q)	Q0000 to Q5117	Q0000 to Q5117
	Bit memory (M)	M00000 to M20477	M00000 to M10237
	Word device bit	Specified bits of the following word devices (Only for data register)	Specified bits of the following word devices (Only for data register)
Word device	Input relay (IW)	IW000 to IW510	IW000 to IW510
	Output relay (QW)	QW000 to QW510	QW000 to QW510
	Bit memory (MW)	MW0000 to MW2046	MW0000 to MW1022
	Timer (present value) (T)	T0 to T511	T0 to T255
	Counter (present value) (C)	C0 to C511	C0 to C255
	Data register (D)	D000100000 to D000165534	-
		D000200000 to D000265534	
		D000300000 to D000365534	
.			
.			
.			
D409400000 to D409465534			
D409500000 to D409565534			

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

 GT Designer2 Version□ Reference Manual

(2) SIEMENS S7-200 Series

Device name		GOT monitoring available range *1	Available range for simulating with GT Simulator2 (The operable range on GX Simulator)
Bit device	Variable memory (V)	V0 to V51197	-
	Input relay (I)	I00 to I77	I00 to I77
	Output relay (Q)	Q00 to Q77	Q00 to Q77
	Bit memory (M)	M000 to M317	M000 to M317
	Special memory (SM)	SM0000 to SM1947	-
	Timer (T)	T0 to T255	T0 to T255
	Counter (C)	C0 to C255	C0 to C255
	Sequence control relay (S)	S000 to S317	-
Word device	Variable memory (VW)	VW0 to VW5118	VW0 to VW1022
	Input relay (IW)	IW0 to IW6	IW0 to IW6
	Output relay (QW)	QW0 to QW6	QW0 to QW6
	Analog input (AIW)	AIW0 to AIW30	-
	Analog output (AQW)	AQW0 to AQW30	-
	Bit memory (MW)	MW0 to MW30	MW0 to MW30
	Special memory (SMW)	SMW0 to SMW192	-
	Timer (T)	T0 to T255	T0 to T255
	Counter (C)	C0 to C255	C0 to C255
	High speed counter (HC)	HC0 to HC2	-
	Sequence control relay (SW)	SW0 to SW30	-

*1 For precautions when using each device that can be monitored by GOT, refer to the following manual.

• For [GOT1000 series (GT16/GT15/GT11) simulator]

 GT Designer2 Version□ Screen Design Manual

• For [GOT-A900 series simulator]

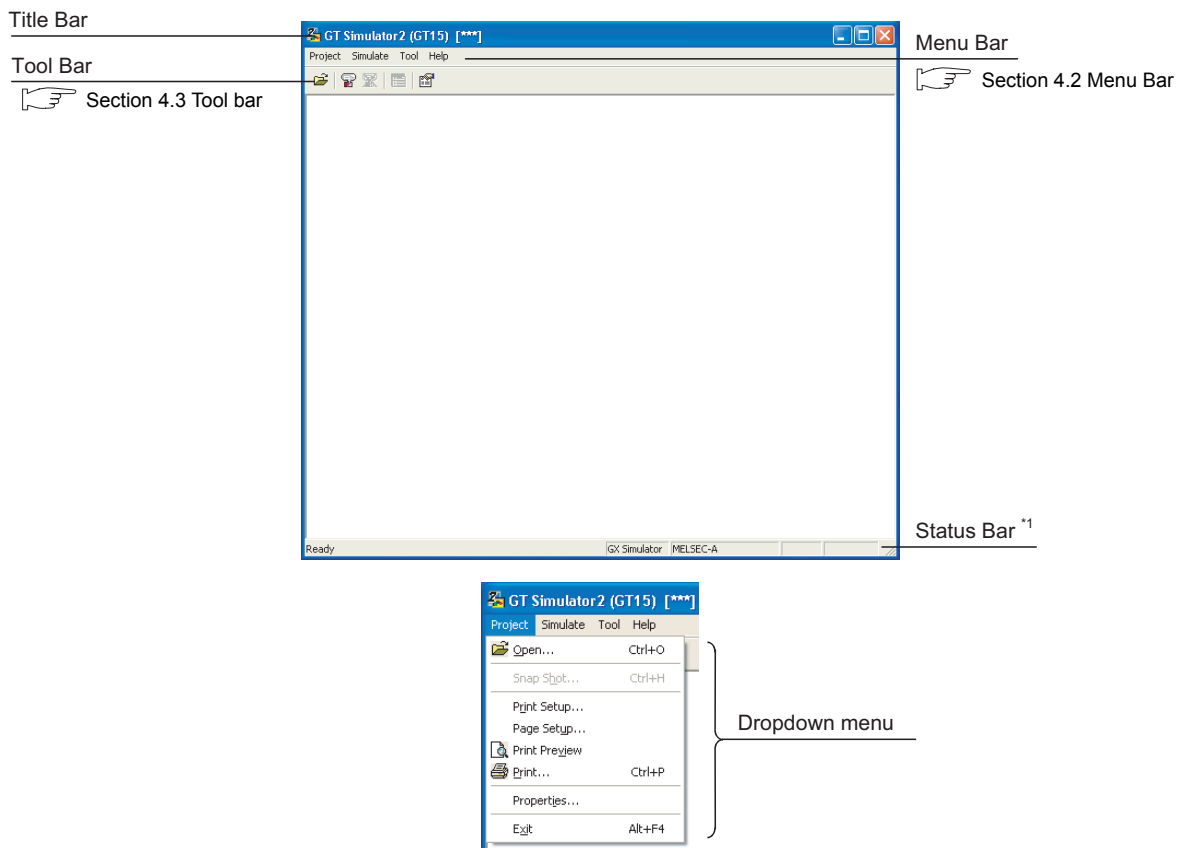
 GT Designer2 Version□ Reference Manual

4. SCREEN CONFIGURATION OF GT SIMULATOR2

4.1 Screen Configuration and Basic Operation

4.1.1 Screen configuration

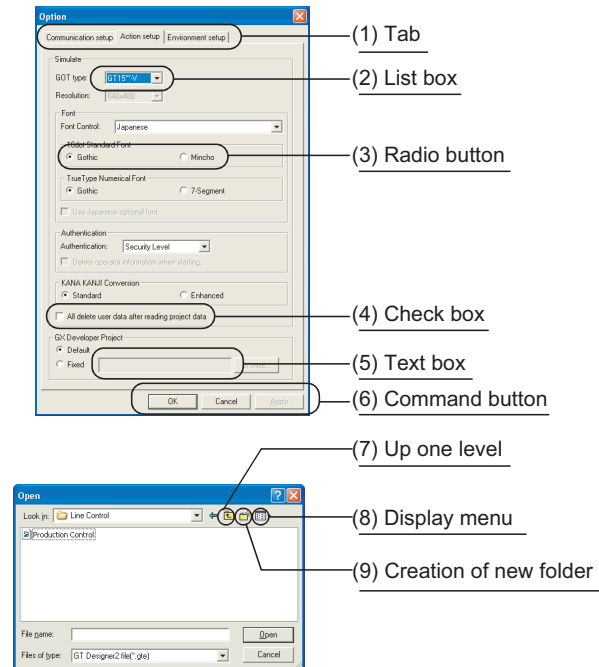
This section describes screen configuration.



- *1 When using the GOT1000 series (GT11) simulator, the whole status bar can not be displayed as the screen size is 320×240 dots.
To display the whole status bar, enlarge the window.

4.1.2 Basic operation

This section describes basic operation.



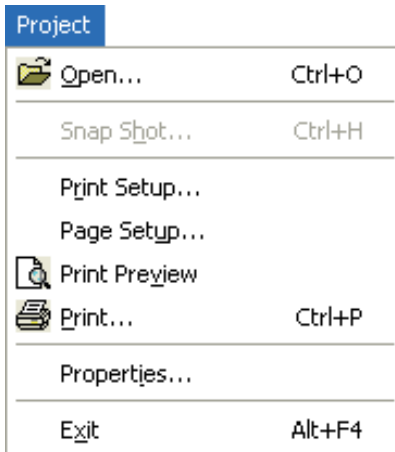
- (1) Tab
Click to switch from one tab to another.
- (2) List box
Click ▼ to display the selection list, then click and select an item.
- (3) Radio button
Select an item by clicking the corresponding ○.
- (4) Check box
When executing the item, click to put a check mark ✓.
- (5) Text box
Enter a text from the keyboard.
- (6) Command button
The command buttons such as [OK] and [Cancel] are provided. Click the command button indicating desired operation.
- (7) Up one level
Displays the level one up from the current folder.
- (8) Display menu
Provides the viewing mode of the folders and files in the current folder; select from detailed display, list display and another modes.
- (9) Creation of new folder
Displays the folders and files in the current folder; select from detailed display, list display and other modes.

4.2 Menu Bar

This section describes commands assigned to the menu bar.

In this section, the screen of [GOT1000 series GT15 simulator] is used for the explanation.

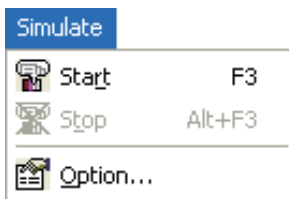
Project



The Project menu contains options for project data reading, Snap Shot and printing.

- Chapter 5 GT SIMULATOR2 OPERATING METHOD
- Chapter 6 FUNCTIONS OF GT SIMULATOR2

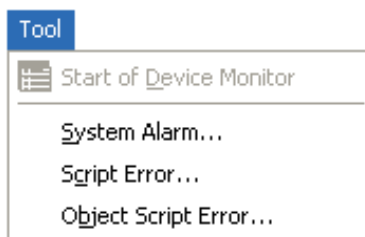
Simulate



The Simulate menu contains options for starting/exiting simulation and GT Simulator2 settings.

- Chapter 5 GT SIMULATOR2 OPERATING METHOD

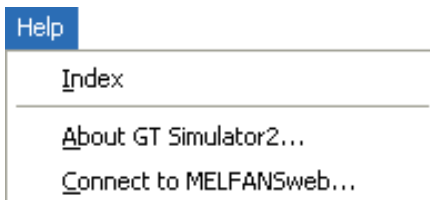
Tool



The Tool menu contains options for starting/exiting Device Monitor and displaying each error information.

- Chapter 6 FUNCTIONS OF GT SIMULATOR2
- Chapter 7 DEVICE MONITOR

Help



The Help menu contains functions of viewing the PDF manual related to the GT Designer2 and checking the software version.




- Section 4.4 How to use HELP

4.3 Tool bar

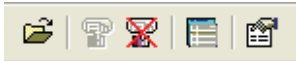
This section describes the tool bar.





1 Before simulating



Name	Description
 Open a GT Designer2 file.	Reads the project data to be simulated. (☞ Section 5.5 Opening the Project)
 Start	Executes simulation with project data simulated previous time. (☞ Section 5.4 Executing a simulation)
 Option	Displays the option dialog box. (☞ Section 5.3 Option Setting)

2 While simulating



Name	Description
 Open a GT Designer2 file.	Reads the project data to be simulated. (☞ Section 5.5 Opening the Project)
 Stop	Terminates the simulation. (☞ Section 5.8 Exiting from GT Simulator2)
 Start of Device Monitor	Starts Device Monitor. *1 (☞ Chapter 7 DEVICE MONITOR)
 Option	Displays the Option dialog box. *2 (☞ Section 5.3 Option Setting)

*1 Clicking this during Device Monitor operation terminates the Device Monitor.

*2 Only the check of the [Option] settings is available. (Setting cannot be changed.)

4.4 How to use HELP

Using Help allows viewing of the GT Designer2 related PDF manuals and the software version check.



Before viewing the PDF manual

To view the PDF manual, GT Manual and Adobe® Reader® must be installed.

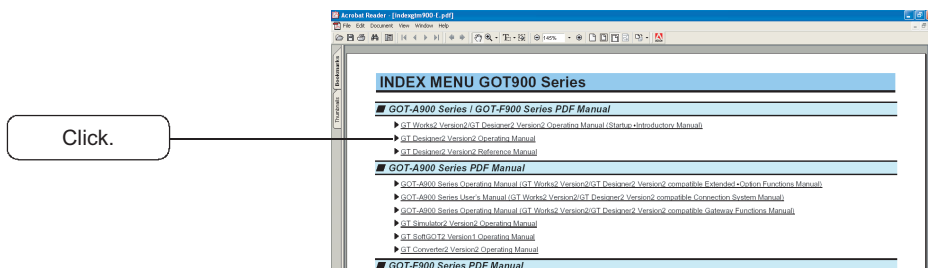
1 Operating method

1 Click an item within [Help].

Item	Description
[Index]	Displays the PDF manual list.
[About GT Simulator2...]	Used to check the GT Simulator2 version.
[Connect to MEL FANweb...]	Connects to the Information site for Mitsubishi Electric Industrial Automation Products, MELFANSweb.

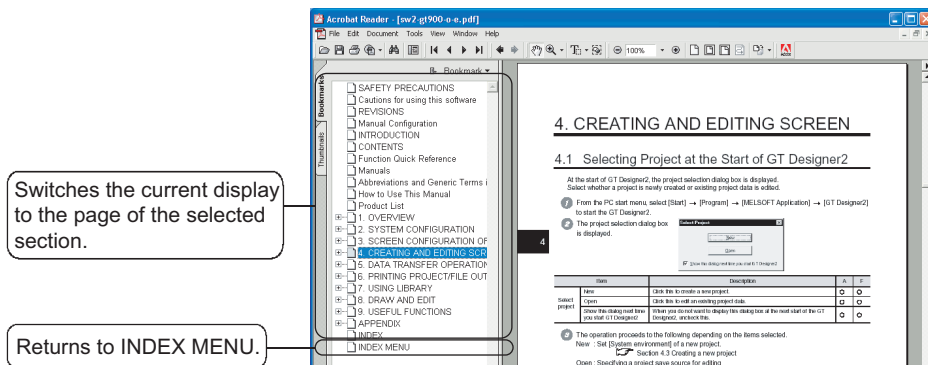
2 Viewing a PDF manual (When [Index] is selected)

1 After operation in 1, the following screen appears. Click the manual to be viewed.



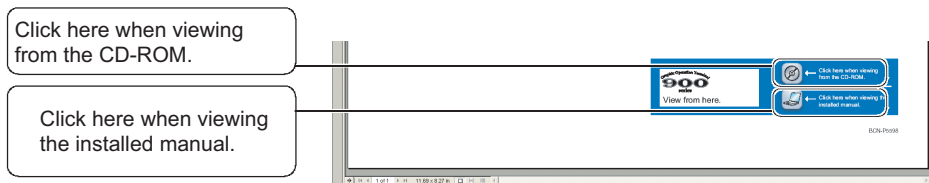
*The illustration above is given as an example and different from the actual page.

2 The selected manual is displayed. (For details of the Adobe® Reader® operating method, refer to Help of Adobe® Reader® .)



*The illustration above is given as an example and different from the actual page.

- 3 Clicking the Logo in the lower right of INDEX MENU switches the screens between GOT1000 and GOT900 series.

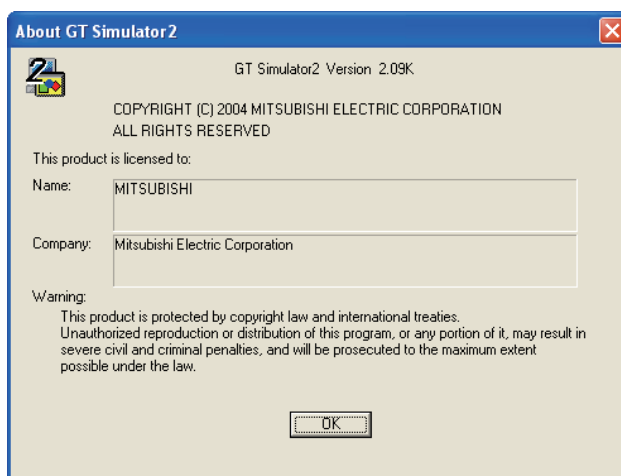


(Example: Screen for changing to GOT900 Series screen)

*The illustration above is given as an example and different from the actual page.

3 Confirming GT Simulator2 version (When [About GT Simulator2...] is selected)

- 1 After operation in 1, the screen about GT Simulator2 is displayed.



(Example: For Version 2.09K)

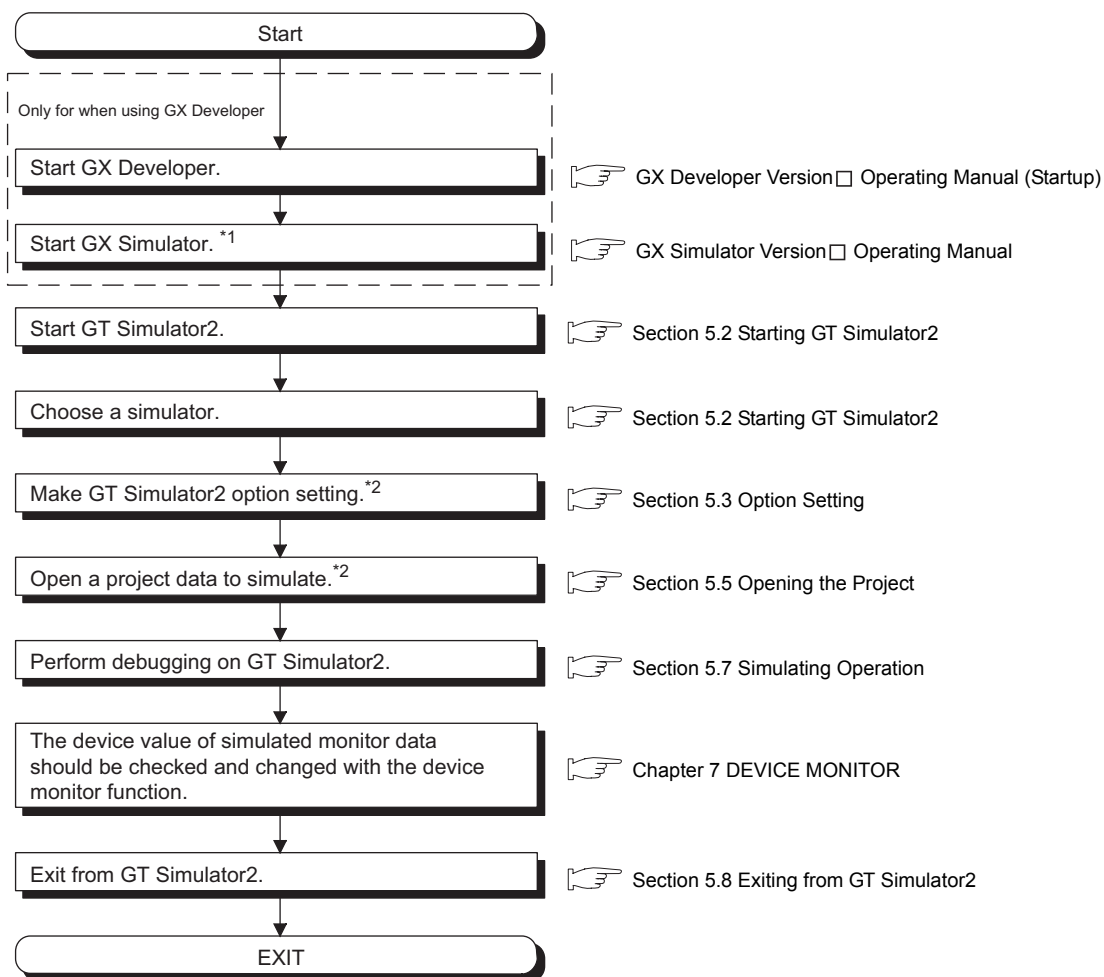
Item	Description
GT Simulator2	Displays GT Simulator2 version.
NAME	Displays the name entered during GT Simulator2 installation.
COMPANY	Displays the company name entered during GT Simulator2 installation.
OK	Closes the About GT Simulator2 screen.

5. GT SIMULATOR2 OPERATING METHOD

5.1 Operating Procedure

The following describes the operating procedure of GT Simulator2.

1 When connecting GT Simulator2 and GX Simulator

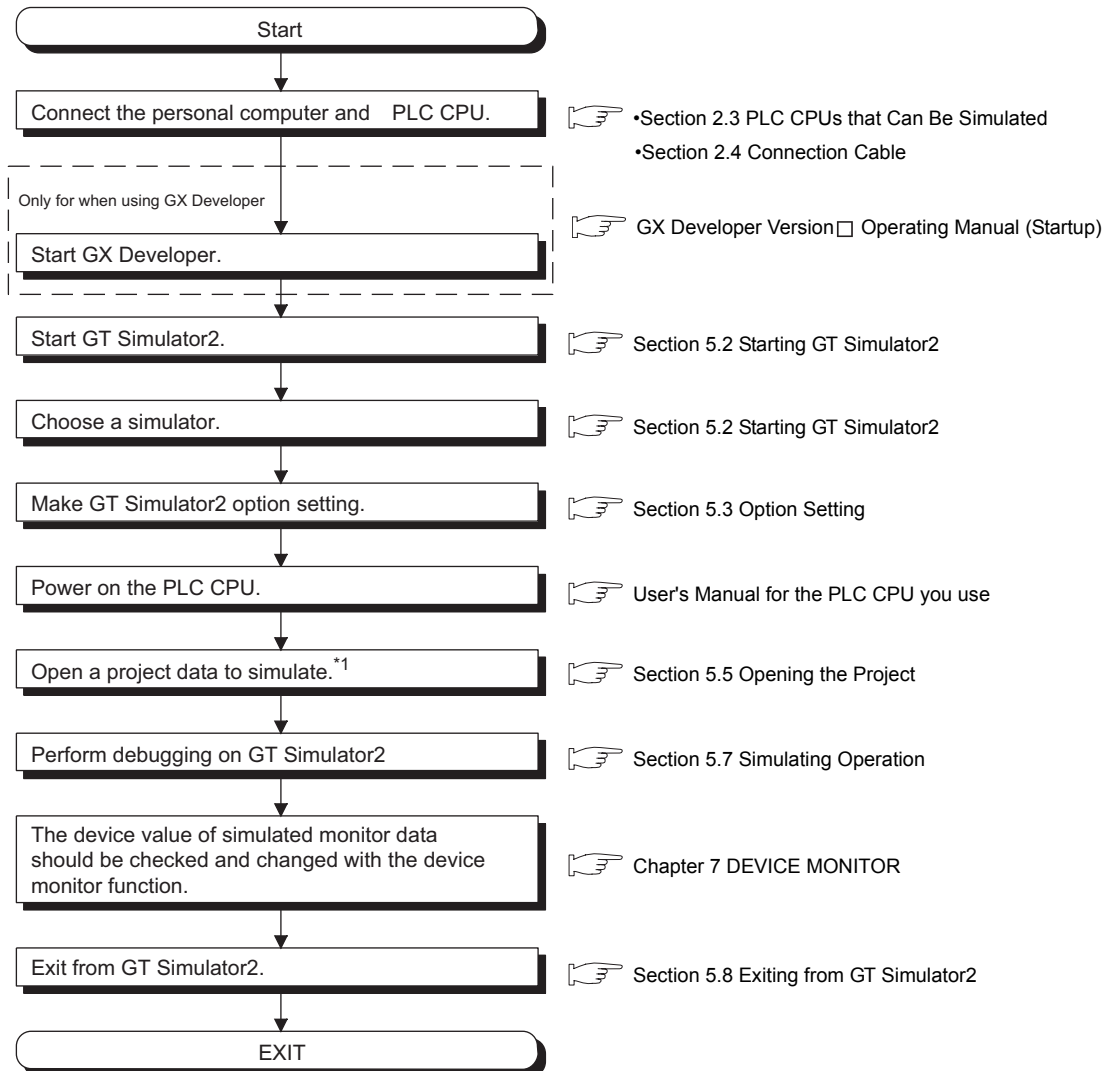


*1 In the case that GX Developer is not used, GX Simulator is automatically started when the simulation is executed on GT Simulator2.

*2 To simulate the project data previously simulated, select [Simulate] → [Start] from the menu. Refer to the below for details.

Section 5.4 Executing a simulation

2 When connecting GT Simulator2 and PLC CPU



*1 To simulate the project data previously simulated, select [Simulate] → [Start].
Refer to the below for details.

Section 5.4 Executing a simulation

Point

About [Connection] of [Option]

The setting of [Connection] is reset to [GX Simulator] (Default) after exiting GT Simulator2.

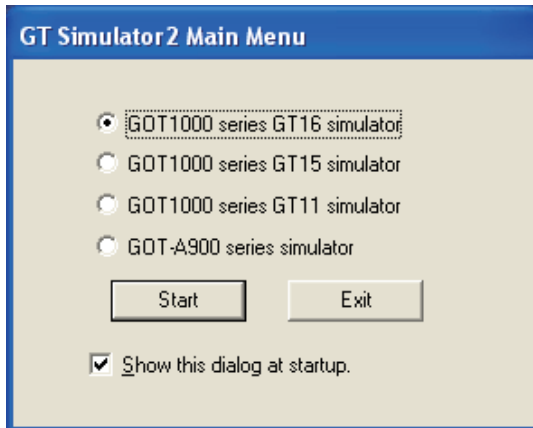
When connecting GT Simulator2 and PLC CPU, set [Connection] to [CPU] again after starting GT Simulator2.

5.2 Starting GT Simulator2

This section describes how to select a simulator and start the GT Simulator2.

- 1 Select [Start] → [Program] → [MELSOFT Application] → [GT Works2] → [GT Simulator2] of Microsoft® Windows® .
- 2 GT Simulator2 Main Menu dialog box is displayed.

Set the following items and click the button.



Item	Description
GOT1000 series GT16 simulator	Select this item when starting [GOT1000 series GT16 simulator]. When simulating project data of GT16, select this item.
GOT1000 series GT15 simulator	Select this item when starting [GOT1000 series GT15 simulator]. When simulating project data of GT15, select this item.
GOT1000 series GT11 simulator	Select this item when starting [GOT1000 series GT11 simulator]. When simulating project data of GT11, select this item.
GOT-A900 series simulator	Select this item when starting [GOT-A900 series simulator]. When simulating project data of GOT-A900 series, select this item.
Show this dialog at startup.	Uncheck this item when you do not want to display this dialog box at the GT Simulator2 startup from the next time.
<input type="button" value="Start"/>	Starts GT Simulator2.
<input type="button" value="Exit"/>	Closes this dialog box without starting GT Simulator2.

- 3 GT Simulator2 is started.



Unchecking [Show this dialog at startup.]

You cannot choose the simulator at the GT Simulator2 startup from the next time after unchecking [Show this dialog at startup.]


Make the setting to display the GT Simulator2 Main Menu dialog box at the startup on the Environment setup tab of [Option].

Section 5.3 Option Setting

5.3 Option Setting

This section describes how to set GT Simulator2 connection type, GOT type to be simulated, sequence program to be used and others.


1 Perform either of the following operations.

- Click  (Option).
- Select [Simulate] → [Option].
- Right-click the mouse and select [Option].

2 The Option dialog box is displayed.

After setting each items, click the button.

Refer to the below for details of Option dialog box.

-  Section 5.3.1 Setting items (GOT1000 series (GT16/GT15/GT11) simulator)
- Section 5.3.2 Setting items (GOT-A900 series simulator)



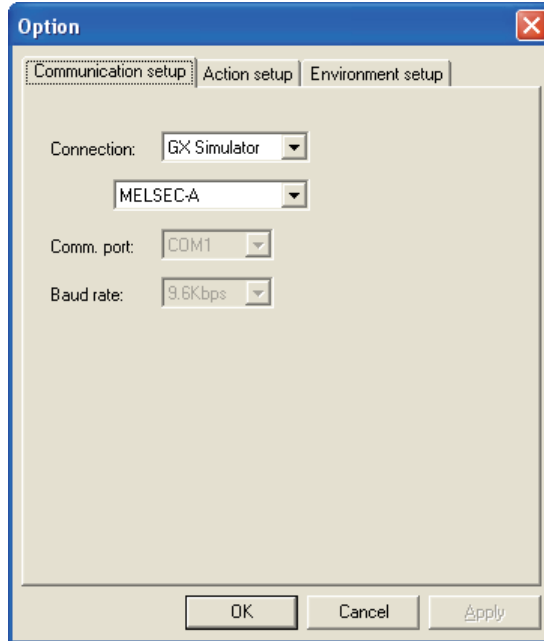
Setting [Option]

Make the [Option] setting before starting simulation. The [Option] setting cannot be changed while simulating. Exit from GT Simulator2 once and restart GT Simulator2.

5.3.1 Setting items (GOT1000 series (GT16/GT15/GT11) simulator)

1 Communication setup tab

Sets the connection target, PLC CPU type, communication port, and baud rate.



Communication setup | Action setup | Environment setup

Item	Description		
Connection	Selects a GT Simulator2 connection type.		
	GX Simulator : Set when simulating with GX Simulator.		
	CPU : Set when simulating with the PLC CPU connected.		
	Sets the CPU type used in GX Simulator and the PLC CPU connected.		
	Connection	CPU type	Description
	GX Simulator	MELSEC-A	Set when use the following PLC CPU. • ACPU • Motion controller CPU (A series) • Third party PLC
		MELSEC-QnA	Set when use QnACPU.
MELSEC-Q		Set when use QCPU (Q mode).	
MELSEC-Q(A-Mode)		Set when use QCPU (A mode).	
MELSEC-FX		Set when use FXCPU.	

(Continued to next page)

Item	Description		
Connection	CPU	MELSEC-A	Set when use ACPU or motion controller CPU (A series).
		MELSEC-QnA	Set when use QnACPU.
		MELSEC-Q	Set when use QCPU (Q mode).
		MELSEC-Q(A-Mode)	Set when use QCPU (A mode).
		MELSEC-FX	Set when use FXCPU.
		MELDAS C6*	Set when use MELDAS C6/C64.
		OMRON SYSMAC	Set when use OMRON PLC.
Comm. port	Sets the PC side communication ports (COM1 to COM6). Selectable only when [CPU] is selected for [Connection].		
Baud rate	The transmission speed between MELDAS C6* and GT Simulator2 is 19.2kbps (fixed). The other transmission speed to/from the CPU is 9.6kbps (Default).		



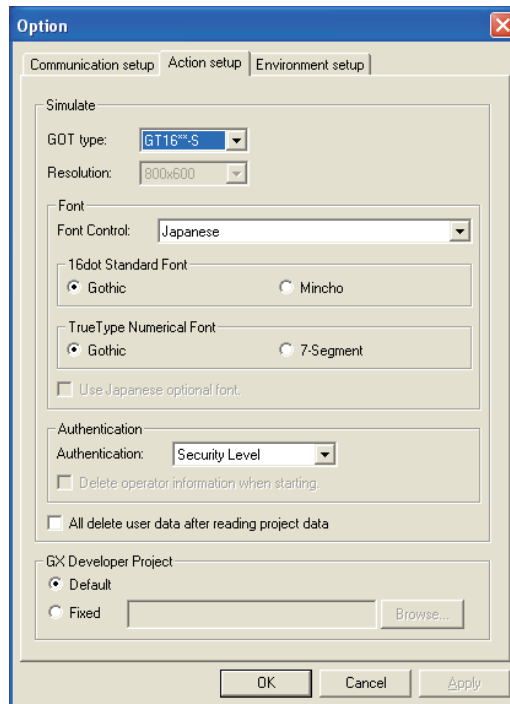
About [Connection] of [Option]

The setting of [Connection] is reset to [GX Simulator] (Default) after exiting GT Simulator2.

When connecting GT Simulator2 and PLC CPU, set [Connection] to [CPU] after starting GT Simulator2.

2 Action setup tab

Sets GOT type, resolution, font and others.




Item	Description
GOT type	<p>Sets GOT type for simulating.</p> <p>GT16**V: Simulates as GT16**V (640 × 480 dots)</p> <p>GT16**S: Simulates as GT16**S (800 × 600 dots)</p> <p>GT16**X: Simulates as GT16**X (1024 × 768 dots)</p> <p>GT15**Q: Simulates as GT15**Q (320 × 240 dots)</p> <p>GT155*-V: Simulates as GT155*-V (640 × 480 dots)</p> <p>GT15**V: Simulates as GT15**V*¹ (640 × 480 dots)</p> <p>GT15**S: Simulates as GT15**S (800 × 600 dots)</p> <p>GT15**X: Simulates as GT15**X (1024 × 768 dots)</p>
Font Control	<p>Selects a font language used for simulation.</p> <p>Select the same font language as set in [System Environment] of GT Designer2.</p> <p>Japanese : Japanese is used for simulation.</p> <p>Japanese (supporting Europe) : Japanese (supporting Europe) is used for simulation.</p> <p>Chinese (Simplified) : Chinese (Simplified) is used for simulation.</p> <p>Chinese (Simplified)(supporting Europe) : Chinese (Simplified) (supporting Europe) is used for simulation.</p> <p>Chinese (Traditional)(supporting Europe) : Chinese (Traditional)(supporting Europe) is used for simulation.</p>
16dot Standard Font	<p>Select a font type of the 16-dot standard font.*²</p> <p>[Gothic], [Mincho]</p>
TrueType Numerical Font	<p>Select a font type of the TrueType numerical font.</p> <p>[Gothic], [7-Segment]</p>
Use Japanese optional font.* ³	<p>This item can be set only when selecting [Chinese (Simplified)] or [Chinese (Simplified)(supporting Europe)] for [Font Control].</p> <p>Do not check this item normally (when displaying Chinese (Simplified)).</p> <p>When checking this item, Japanese is used for objects on which Kanji region setting is not provided.</p>

(Continued to next page)

Item	Description
Authentication *3	Select an authentic method. Select the same authentic method set in [System Environment] of GT Designer2.
Delete operator information when starting.	The item can be checked only when [Operator] is selected for [Authentication]. With checking the item, the operator information registered on GT Simulator2 is deleted when starting simulating project data. (When forgetting the password for [Operator], the operator information can be reset.)
KANA KANJI Conversion *5	Select a version of the Kana-kanji conversion function. [Standard], [Enhanced]
All delete user data after reading project data	Check this item when deleting all data in the folder below after reading project data. <ul style="list-style-type: none"> ▪ For [GOT1000 series (GT16) simulator] (Installation destination folder*4) \GSS2\GT1600\Drive\A, B, E ▪ For [GOT1000 series (GT15) simulator] (Installation destination folder*4) \GSS2\GT1500\Drive\A, B ▪ For [GOT1000 series (GT11) simulator] (Installing destination folder*4) \GSS2\GT1100\Drive\D
GX Developer Project	Sets the sequence program to be used for simulating. Default : Simulation is performed with the sequence program with one END instruction. Fixed : Simulation is performed with any sequence program. Click the <input type="button" value="Browse..."/> button and select a GX Developer project.

*1 For GOTs that can be simulated, refer to the following.

 Section 3.1 GOT that Can Be Simulated

*2 The font is set to [Mincho] automatically when selecting [Chinese (Simplified)] or [Chinese (Simplified)(supporting Europe)] for [Font Control].

*3 This setting item is available for the GOT1000 series (GT16/GT15) simulator only.

*4 Default is "C:\Program Files\MELSOFT".

*5 This setting item is available for the GOT1000 series (GT15) simulator only.

Point

GX Developer Project

When [Default] is selected, the GT Simulator2 performs simulations assuming the following CPUs.

- QCPU : Q25HCPU
- QnACPU : Q4ACPU
- ACPU : A4UCPU
- FXCPU : FX2N(C) series

When the project data has been created assuming a CPU other than the above, a normal simulation may not be performed due to the difference of the device range. If the simulation cannot be performed, create a project (END ladder) for the CPU to be simulated with the GX Developer and specify the program to perform simulation.

Remark

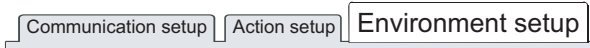
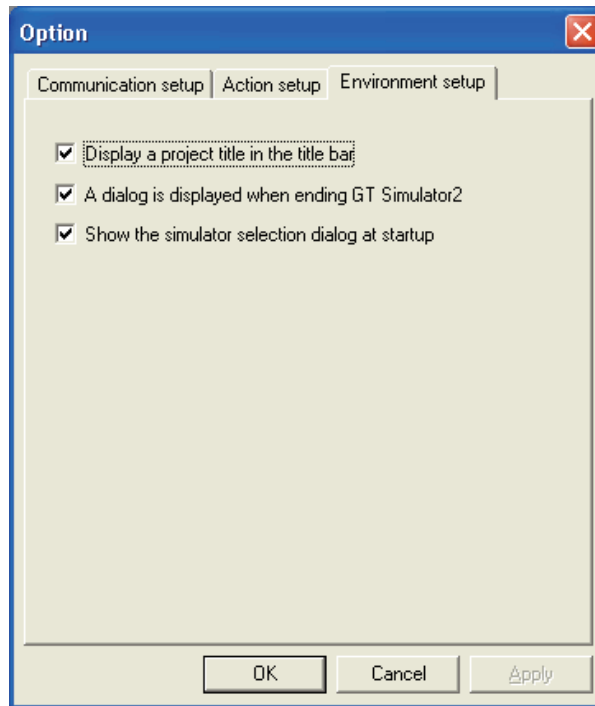
Recipe files

The changes on a recipe file (made by GT Designer2) will not be reflected (over written) if another recipe file of the same name already exists in the GT Simulator2. Accordingly, reading/writing of the device values cannot be performed with the changed setting.

In the above case, check [All delete user data after reading project data].

3 Environment setup tab

Sets title bar, exit dialog box and main menu display.

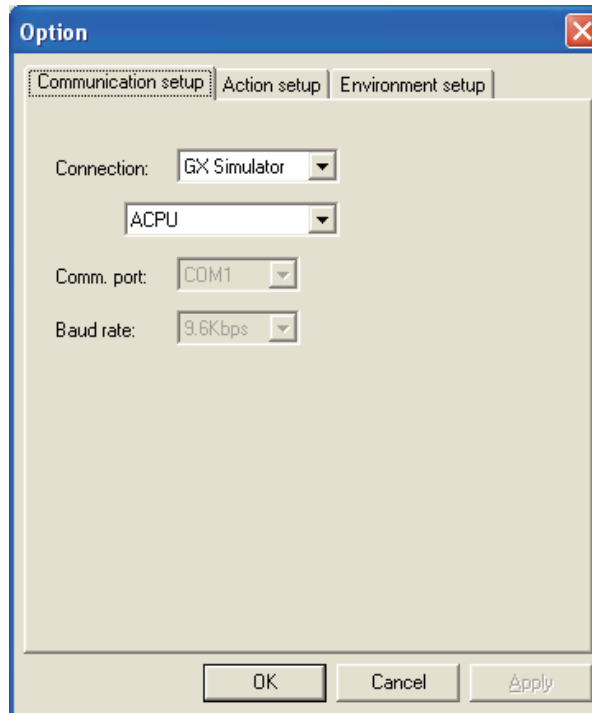


Item	Description
Display a project title in the title bar	Check this to display title of project data on the title bar.
A dialog is displayed when ending GT Simulator2	Check this to display the exit confirmation dialog box when exiting GT Simulator2.
Show the simulator selection dialog at startup	Check this to display GT Simulator2 Main Menu dialog box when GT Simulator2 is started.

5.3.2 Setting items (GOT-A900 series simulator)

1 Communication setup tab

Sets the connection target, PLC CPU type, communication port, and baud rate.



Item	Description		
Connection	Selects a GT Simulator2 connection type.		
	GX Simulator : Set when simulating with GX Simulator.		
	CPU : Set when simulating with the PLC CPU connected.		
	Sets the CPU type used in GX Simulator and the PLC CPU connected.		
	Connection	CPU type	Description
	GX Simulator	ACPU	Set when use the following PLC CPU. • ACP • Motion controller CPU (A series) • Third party PLC
QnACPU, MELDAS C6*		Set when use QnACPU or MELDAS C6/C64.	
QCPU		Set when use QCPU (Q mode).	
QCPU-A		Set when use QCPU (A mode).	
FX		Set when use FXCPU.	

(Continued to next page)

Item	Description		
Connection	CPU	ACPU	Set when use ACPUs or motion controller CPU (A series).
		QnACPU, MELDAS C6*	Set when use QnACPU or MELDAS C6/C64.
		QCPU	Set when use QCPU (Q mode).
		QCPU-A	Set when use QCPU (A mode).
		FX	Set when use FXCPU.
Comm. port	Sets the PC side communication ports (COM1 to COM6). Selectable only when [CPU] is selected for [Connection].		
Baud rate	Sets the transmission speed to/from the CPU (9.6kbps to 115.2kbps). Selectable only when [CPU] is selected for [Connection]. The setting range differs depending on the CPU type set on [Connection].		

Point

(1) [Connection] of [Option]

The setting of [Connection] is reset to [GX Simulator] (Default) after exiting GT Simulator2.

When connecting GT Simulator2 and PLC CPU, set [Connection] to [CPU] again after starting GT Simulator2.

(2) Setting of [Baud rate]

For connecting to MELDAS C6/C64 or FXCPU, make the following setting.

- For connection to the MELDAS C6/C64

Set the baud rate to "19.2Kbps".

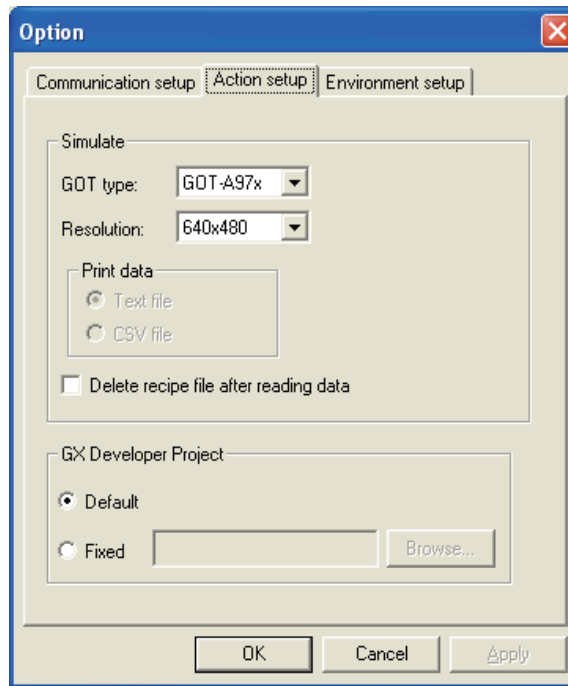
- For connecting to FXCPU.

Make setting of the baud rate supported by the connected FXCPU.

When the set baud rate is not supported, communication is made at 9.6kbps.

2 Action setup tab

Sets GOT type, resolution, print data and others.



Item	Description
GOT type	<p>Sets GOT type for simulating.</p> <p>GOT-A950 : Simulates as A950GOT (320 × 240 dots)</p> <p>GOT-A956W : Simulates as A956WGOT (480 × 234 dots)</p> <p>GOT-A960 : Simulates as A960GOT (640 × 400 dots)</p> <p>GOT-A97* : Simulates as A97*GOT (640 × 480 dots)</p> <p>GOT-A985 : Simulates as A985GOT (-V) (800 × 600 dots)</p> <p>SoftGOT : Simulates as GT SoftGOT2.</p>
Resolution	<p>Sets Screen Size of GT Simulator2 (640 × 480 to 1280 × 1024 dots).</p> <p>Selectable only when [SoftGOT2] is selected for [GOT type].</p>
Print data	<p>Select data format for printing/saving in MemCard Folder of Alarm History, report and recipe function.</p> <p>Selectable only when [SoftGOT2] is selected for [GOT type].</p> <p>Text file : Data is saved as a Text file.</p> <p>Resolution CSV file: Data is saved as a CSV file</p>
Delete recipe file after reading data	<p>Turn on this check box to delete the recipe data in the MemCard folder after monitor data reading.</p>
GX Developer project	<p>Sets the sequence program to be used for simulating.</p> <p>Default : Simulation is performed with the sequence program with one END instruction.</p> <p>Fixed : Simulation is performed with any sequence program.</p> <p>Click the Browse... button and select a GX Developer project.</p>

Point

GX Developer Project

When [Default] is selected, the GT Simulator2 performs simulations assuming the following CPUs.

- QCPU : Q25HCPU
- QnACPU : Q4ACPU
- ACPU : A4UCPU
- FXCPU : FX2N(C) series

When the project data has been created assuming a CPU other than the above, a normal simulation may not be performed due to the difference of the device range. If the simulation cannot be performed, create a project (END ladder) for the CPU to be simulated with the GX Developer and specify the program to perform simulation.

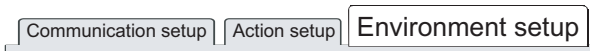
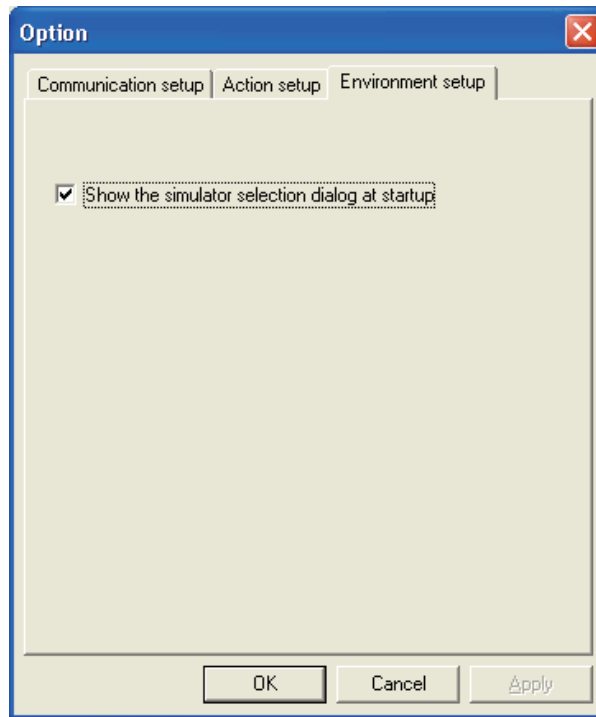
Remark

Recipe files

The changes on a recipe file (made by GT Designer2) will not be reflected (over written) if another recipe file of the same name already exists in the GT Simulator2. Accordingly, reading/writing of the device values cannot be performed with the changed setting.

In the above case, check [Delete recipe file after reading data].

3 Environment setup tab
Sets the main menu display.




Item	Description
Show the simulator selection dialog at startup	Check this to display GT Simulator2 Main Menu dialog box when GT Simulator2 is started.

5.4 Executing a simulation

This section describes how to perform the simulation with the project data simulated previously.

1 Perform either of the following operations.

- Click  (Start).
- Choose [Simulate] → [Start].
- Right-click the mouse and select [Start].

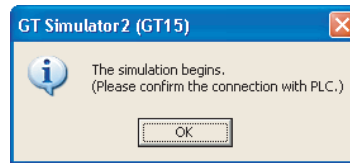
2 Confirmation dialog box is displayed.

The message displayed changes with the setting contents in [Option].

After confirming the displayed contents, click the button or the button.

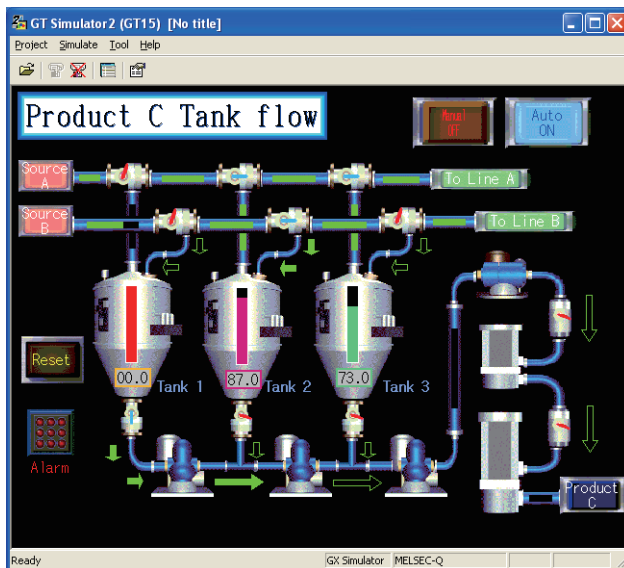


When connecting to GX Simulator



When connecting to CPU directly

3 The simulation of the project data simulated previously.




Point

- (1) If simulation is performed for the first time
Select [Project] → [Open] and set a project data to be simulated.

 Section 5.5 Opening the Project

When simulation is performed for the first time, performing the operation in this section causes GT Simulator2 to show the Utility.


- (2) When project data has been changed after previous simulation
Select [Project] → [Open] and set the project data to be simulated before starting the simulation.

 Section 5.5 Opening the Project

5.5 Opening the Project

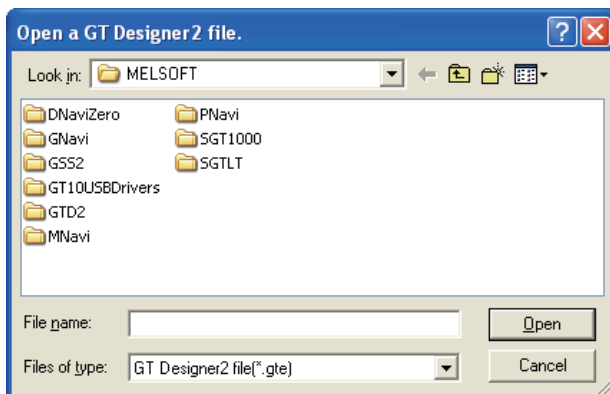
Project data for simulating is set and start simulating.

1 Perform either of the following operations.

- Click  (Open a GT Designer2 file.).
- Select [Project] → [Open].
- Right-click the mouse and select [Open].

2 The GT Designer2 File dialog box is displayed.

Set up the following items and click the button.



Item	Description
Look in	Selects the area where the project data is saved.
File name	Sets project data name for simulating.
Files of type	Selects project data type. <ul style="list-style-type: none"> ▪ For [GOT1000 series (GT16/GT15/GT11) simulator] <ul style="list-style-type: none"> GT Designer2 file (*.gte) : Selected when using GOT1000 series (GT16/GT15/GT11) project data created with GT Designer2. ▪ For [GOT-A900 series simulator] <ul style="list-style-type: none"> GT Designer2 file (*.gtd) : Selected when using project data of GOT-A900 series created with GT Designer2. GT Designer file(A9gotp.got) : Selected when using project data of GOT-A900 series created with GT Designer.

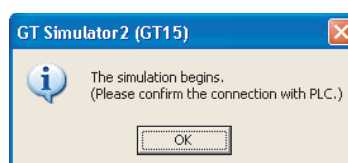
3 Confirmation dialog box is displayed.

The message displayed changes with the setting contents in [Option].

After confirming the displayed contents, click the button or the button.



When connecting to GX Simulator



When connecting to CPU directly

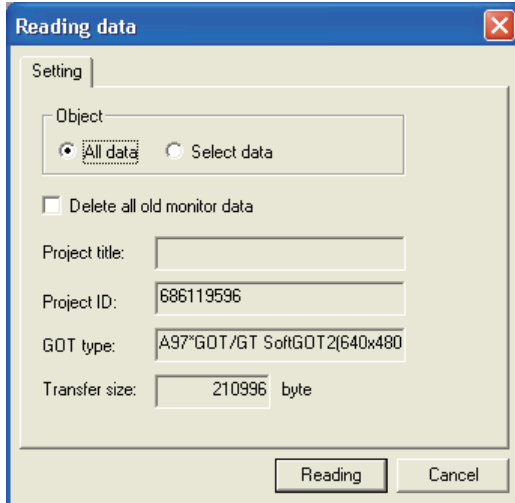
- 4 When using [GOT-A900 series simulator], the Reading data dialog box is displayed.

After setting each items, click the **Reading** button.

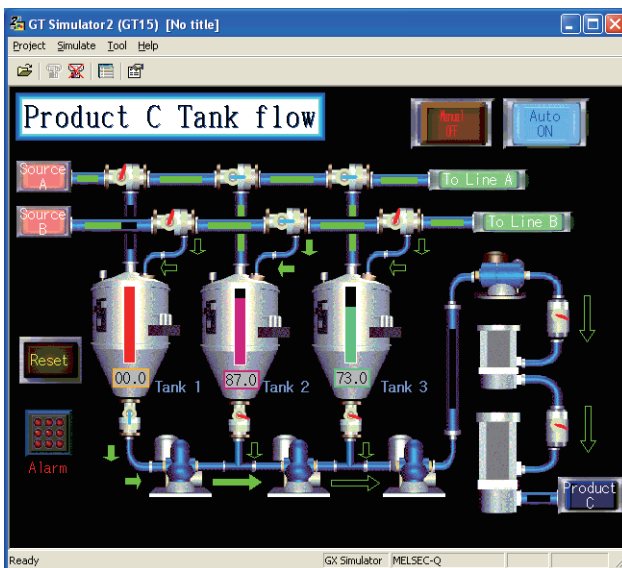
Refer to the below for details.



➔ Section 5.6 Setting Reading Data (GOT-A900 Series Simulator)



- 5 The simulation starts.



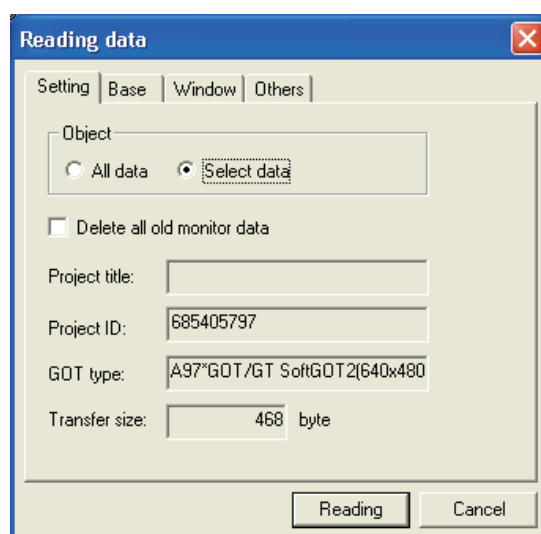
5.6 Setting Reading Data (GOT-A900 Series Simulator)



This section describes how to set monitor data to be simulated.

1 Setting tab

Monitor data to be read is set.

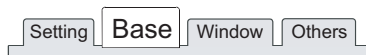
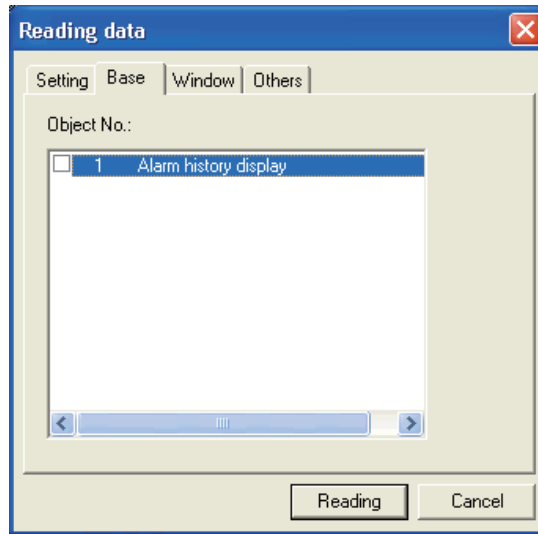



Item	Description
Object	Sets monitor data to be read. All data : Set when reading all data in monitor data. Select data : Set when reading a part of monitor data. Select data to be read on the Base, Window or Others tab.
Delete all old monitor data	Turn on the check box when reading the monitor data of the selected project after deletion of the already read monitor data.
Project title	Title of monitor data is displayed.
Project ID	Project ID of monitor data is displayed.
GOT type	GOT type of monitor data is displayed.
Transfer size	The settings and data size of the monitor data to be read appear.
Reading	Reads the monitor data and start the simulation.
Cancel	Closes this dialog box without reading monitor data. Clicking the Cancel button displays Utility on [GOT-A900 series simulator].

2 Base tab

Sets base screen to read.

This tab is displayed by selecting [Select data] in [Object] of setting tab.

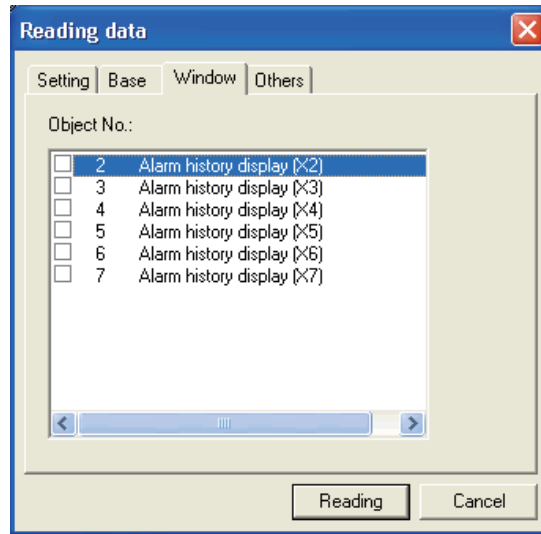


Item	Description
Object No.	The Screen No. and screen title of window screen are displayed. Check base screen to be read.
Reading	
Cancel	( 1 Setting tab in this section)

3 Window tab

Sets window screen to be read.

This tab is displayed by selecting [Select data] in [Object] of the setting tab.

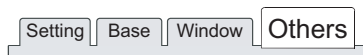
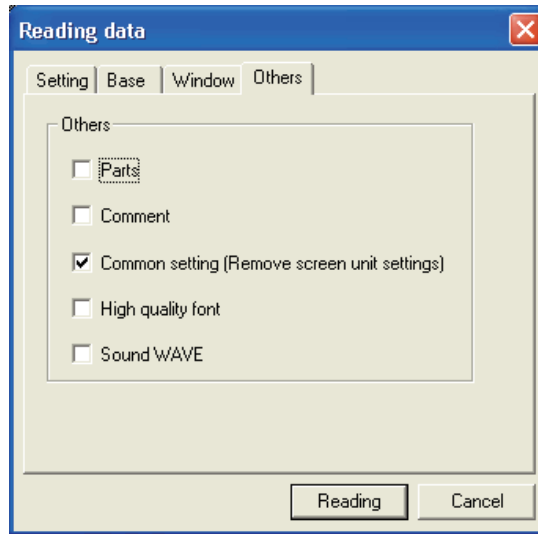



Item	Description
Object No.	The screen No. and screen title of window screen are displayed. Check window screen to be read.
	1 Setting tab in this section)

4 Others tab

Sets object other than base screen or window screen to be read.

This tab is displayed by selecting [Select data] in [Object] of the setting tab.

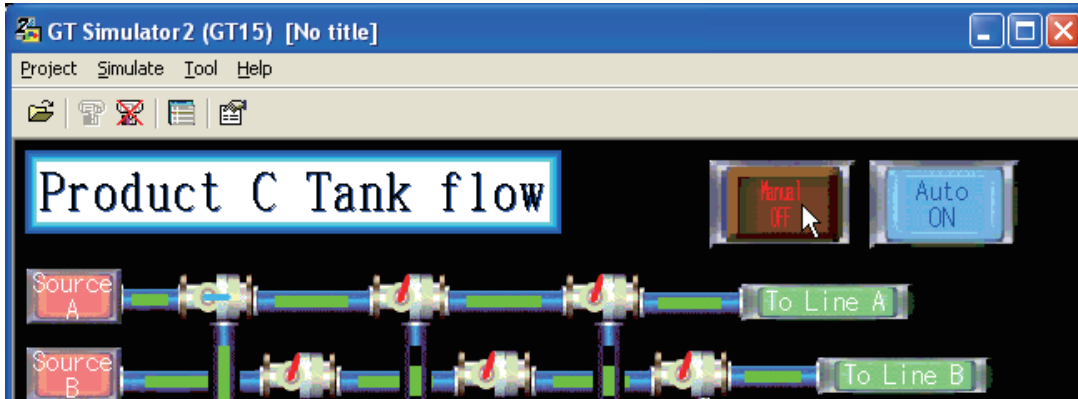


Item	Description
Others	<p>Checks item to be read.</p> <p>The Common setting is always read. ([Common setting (Remove screen unit settings)] cannot be unchecked.)</p> <p>Parts : Checked when reading Parts data.</p> <p>Comment : Checked when reading Comment data.</p> <p>High quality font: Checked when reading High quality font data.</p> <p>Sound WAVE : Checked when reading Sound WAVE data.</p>
Reading	
Cancel	 Setting tab in this section)

5.7 Simulating Operation

On GT Simulator2, touching the touch keys is performed by pressing the mouse button.

As the input range of the touch key is narrower than that of the GOT, confirm the input with the buzzer sound after inputting.



Point

Buzzer sound

When the sound card is fitted, the sound set in [Default sound] after choosing [Control Panel] → [Sounds] beeps on Windows® 98, Windows® Me.

Remark

Examples of using GT Simulator2

For using method of GT Simulator2 using the sample data of GT Designer2, refer to the below.

☞ App. Examples of using GT Simulator2



5.8 Exiting from GT Simulator2

This section describes how to exit from GT Simulator2.

- 1 When using the Device Monitor, exit it.

 Section 7.4 Device Monitor Operation Method

- 2 Perform either of the following operations.

- Click  (Close).
- Select [Project] → [Exit]
- Select [Simulate] → [Exit]
- Click the  on the tool bar.
- Right-click the mouse and select [Exit]

- 3 GT Simulator2 is exited.

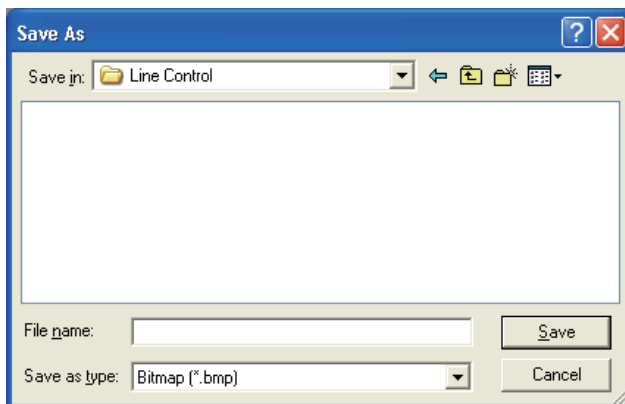
6. FUNCTIONS OF GT SIMULATOR2

6.1 Snap Shot

The screen image being simulated is saved into BMP or JPG format file.

- 1 Perform the following operation.
 - Select [Project] → [Snap Shot] menu.
- 2 Save As dialog box is displayed.

Set the following items and click the **Save** button.



Item	Description
Save in	Selects the area where the file is saved.
File name	Selects the file name to be saved.
Save as type	<ul style="list-style-type: none">▪ For [GOT1000 series (GT16/GT15/GT11) simulator] Saves into BMP(*.bmp) or JPEG (*.jpg) format file.▪ For [GOT-A900 series simulator] Saves into BMP(*.bmp) format file.

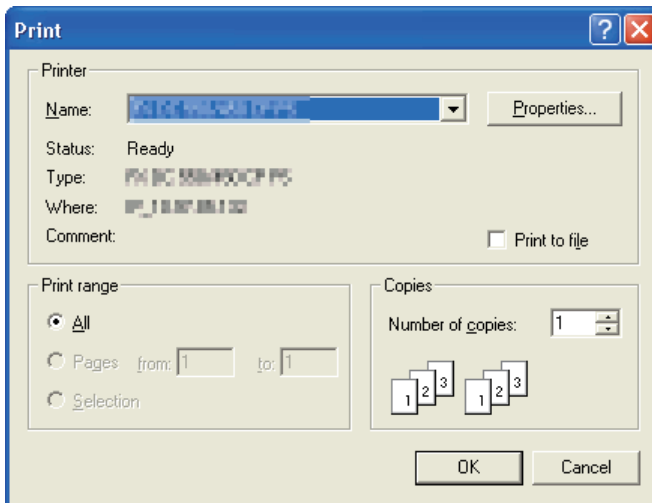
6.2 Print

The screen image being simulated is printed to a printer.

6.2.1 Printing

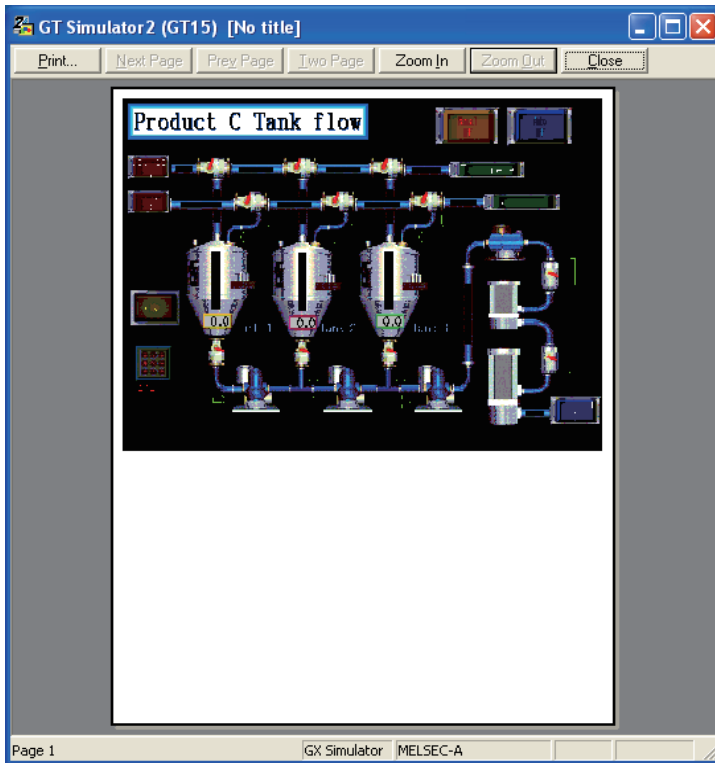
- 1 Perform the following operation.
 - Select [Project] → [Print] menu.
- 2 Print dialog box of Windows® is displayed.

Click the **OK** button to start printing.



6.2.2 Performing print preview

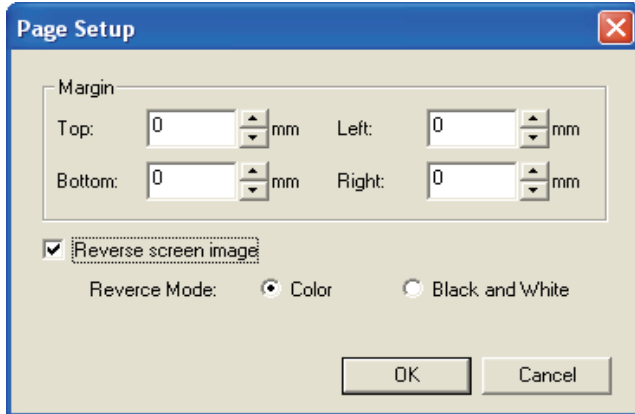
- 1 Perform the following operation.
 - Select [Project] → [Print Preview] menu.
- 2 Print Preview is displayed.



6.2.3 Performing page setup

- 1 Perform the following operation.
 - Select [Project] → [Page Setup] menu.
- 2 Page Setup dialog box is displayed.

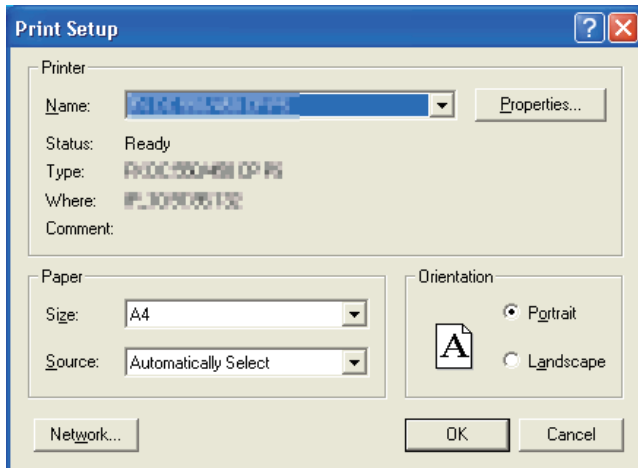
Set the following items and click the **OK** button.



Item	Description
Margin	Set the margins on a page to be printed.
Reverse screen image	Select this item to reverse the colors of screen image when printing.
Reverse Mode	Set the reverse mode for screen image. <ul style="list-style-type: none"> • Color : Reverse all the colors of screen image to be printed. • Black and White : Reverse the black and white colors of screen image to be printed.

6.2.4 Performing print setup

- 1 Perform the following operation.
 - Select [Project] → [Print Setup] menu.
- 2 Print dialog box of Windows® is displayed.
Set printer settings (selection of printer, paper size and Printing direction).
Click the **OK** button to start printing.

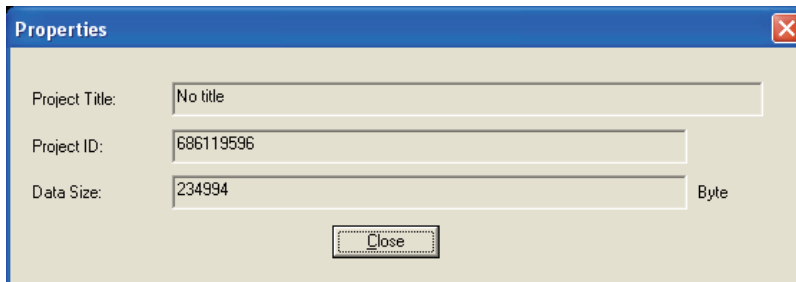


6.3 Property



Project title, Project ID and Data Size of project data being simulated are displayed.

- 1 Perform the following operation.
 - Select [Project] → [Property] menu.
- 2 Property dialog box is displayed.



Item	Description
Project Title	Project title is displayed.
Project ID	Project ID is displayed.
Data Size	Data Size of project data is displayed.

Remark

When property dialog box is displayed before starting simulation.

When property dialog box is displayed before starting simulation, project title, project ID and Data Size of project data simulated previously are displayed.
 (If project data has not been loaded, project title, project ID and Data Size are not displayed.)

1	OVERVIEW
2	SYSTEM CONFIGURATION
3	SPECIFICATIONS
4	SCREEN CONFIGURATION OF GT SIMULATOR2
5	GT SIMULATOR2 OPERATING METHOD
6	FUNCTIONS OF GT SIMULATOR2
7	DEVICE MONITOR
8	TROUBLESHOOTING

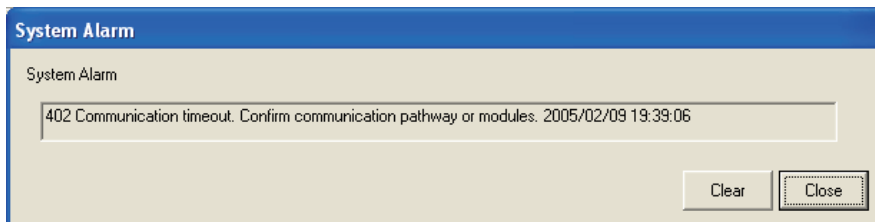
6.4 System Alarm



System alarm is displayed.

If system alarm is not set to project data, it can be confirmed with this dialog box.

- 1 Perform the following operation.
 - Select [Tool] → [System alarm] menu.
- 2 System alarm dialog box is displayed.



Item	Description
System alarm	Error contents are displayed.
<input type="button" value="Clear"/>	Displayed error message is cleared. However, it is redisplayed when the error keeps occurring.

*1 Refer to the following manual for list of system alarm.

GT□User's Manual

Point

About system alarm to be displayed.

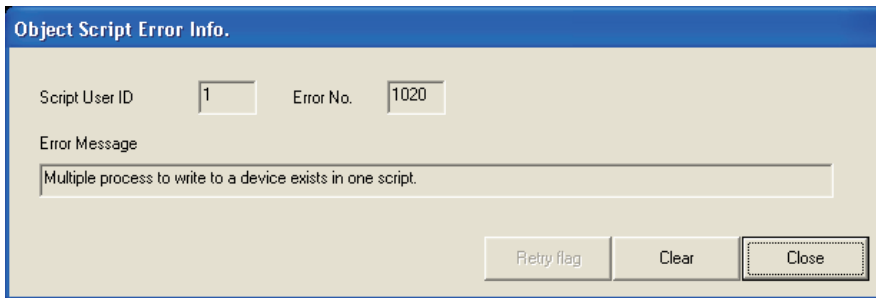
- Only the error detected by GOT is displayed on the system alarm dialog box.
Set the system alarm to project data for confirming error of PLC CPU and network.
- Error messages are displayed in English.
To display them in other languages, set system alarm in the project data.

6.5 Script Error



Script error information is displayed.

- 1 Perform the following operation.
 - Select [Tool] → [Script Error] menu.
- 2 Script error information dialog box is displayed.



Item	Description
Script No. *1	Script No. where error occurs is displayed.
Error No.	Error code of occurring error is displayed.
Error Message	Error contents are displayed.
<input type="button" value="Retry flag"/>	Script is executed again.
<input type="button" value="Clear"/>	Displayed error message is cleared. However, it is redisplayed when the error keeps occurring.

*1 Refer to the following manual for script function.

GT Designer2 Version Screen Design Manual

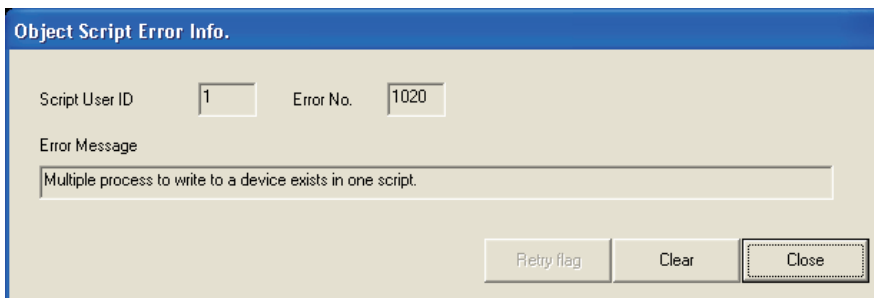
1	OVERVIEW
2	SYSTEM CONFIGURATION
3	SPECIFICATIONS
4	SCREEN CONFIGURATION OF GT SIMULATOR2
5	GT SIMULATOR2 OPERATING METHOD
6	FUNCTIONS OF GT SIMULATOR2
7	DEVICE MONITOR
8	TROUBLESHOOTING

6.6 Object Script Error



Object script error information is displayed.

- 1 Perform the following operation.
 - Select [Tool] → [Object script Error] menu.
- 2 Object script error information dialog box is displayed.



Item	Description
Script user ID *1	User ID of the object script where error occurs is displayed.
Error No.	Error code of occurring error is displayed.
Error Message	Error contents are displayed.
<input type="button" value="Retry flag"/>	Object script is executed again.
<input type="button" value="Clear"/>	Displayed error message is cleared. However, it is redisplayed when the error keeps occurring.

*1 Refer to the following manual for object script function.

GT Designer2 Version□ Screen Design Manual

6.7 Full Screen Mode Function (GT16**-X, GT15**-X only)

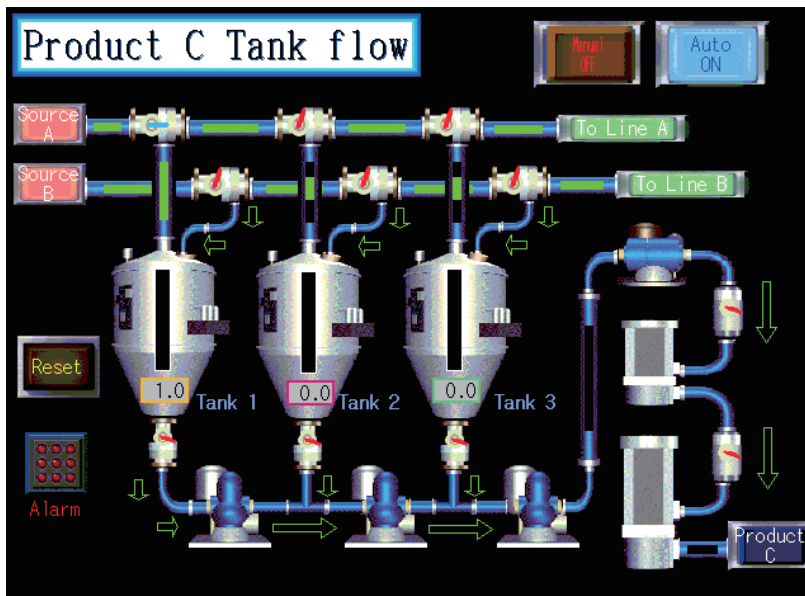
When selecting GT16**-X, GT15**-X (Resolution: 1024×768 dots), the GT Simulator2 screen can be displayed in full screen mode on a PC display.

When the resolution of the PC display is 1024×768 dots, hiding the parts including menu bar with this function is recommended.

When not using this function, the top/bottom/left/right side on the display are hidden.


1 Executing full screen display

- 1 Perform either of the following operations.
 - Alt + F9
 - Right-click the mouse and select [Full Screen Mode] from the menu.
- 2 The full screen mode dialog box is displayed.
Clicking the button displays the GT Simulator2 in full screen mode.



2 Canceling full screen mode

- 1 Perform either of the following operations.
 - Alt + F9
 - Right-click the mouse and select [Full Screen Mode] from the menu.
- 2 Full screen mode cancel dialog box is displayed.
Clicking the button cancels the full screen mode.

- "In full screen mode, [Open], [Start], [Stop] and [Option] can be operated. When operating other than the above, cancel the full screen mode. (Refer to  for how to cancel full screen mode.)"
- When full screen mode has been set before executing simulation, the project data of other than GT16**-X, GT15**-X (Resolution: 1024×768 dots) cannot be opened.
- When using full screen mode under the environment that the resolution of the PC display is greater than 1024×768 dots, GT Simulator2 display position is fixed on the upper-left. (The display position cannot be changed.)

7. DEVICE MONITOR

7.1 Overview



The device values of project data simulated on GT Simulator 2 can be monitored or tested by Device Monitor function. The debugging can be performed efficiently since the display can be checked on GT Simulator by this function.

Object	Position	Device Kind	Device	Type	Value	Change
Numerical Display	25, 430	Monitor Device	0-FF D181	Word(16)	0000	Input
Lamp	514, 210	Monitor Device	0-FF G8251	Bit	0	OFF
Lamp	514, 124	Monitor Device	0-FF G8252	Bit	0	OFF
Lamp	515, 328	Monitor Device	0-FF G8250	Bit	0	OFF
Lamp	99, 238	Monitor Device	0-FF M410	Bit	0	OFF
Lamp	243, 239	Monitor Device	0-FF M186	Bit	0	OFF
Lamp	100, 124	Monitor Device	0-FF M185	Bit	0	OFF
Lamp	243, 125	Monitor Device	0-FF M185	Bit	0	OFF
Touch Switch	388, 124	Write Device(Bit)	0-FF G8252	Bit	0	OFF
Touch Switch	388, 210	Write Device(Bit)	0-FF G8251	Bit	0	OFF
Touch Switch	387, 328	Write Device(Bit)	0-FF G8250	Bit	0	OFF
Touch Switch	130, 355	Write Device(Word)	0-FF D181	Word(16)	0000	Input
Touch Switch	197, 355	Write Device(Word)	0-FF D181	Word(16)	0000	Input
Touch Switch	197, 355	Indirect Device	0-FF D181	Word(16)	0000	Input
Touch Switch	263, 355	Write Device(Word)	0-FF D181	Word(16)	0000	Input
Touch Switch	263, 355	Indirect Device	0-FF D181	Word(16)	0000	Input
Touch Switch	130, 412	Write Device(Word)	0-FF D181	Word(16)	0000	Input

7.2 Precautions



Instructions for use of GT Simulator2

Refer to the following for the instructions for use of GT Simulator2.

Section 3.3 Precautions

1 Starting multiple device monitors

Multiple device monitors can not be start up at the same time.

2 When referring the device value GT Simulator2 does not show on the screen

The Device Monitor shows the device list by the screen.

For the device value GT Simulator2 does not show on the screen, set the device with [Free Registration screen] of GT Simulator2 and refer the device value.

Section 7.5.3 Registering/Deleting device (Free Registration screen)

3 When using screen call function

The device set on the called function will not be shown when screen call function is used.

For the device value on the called function, set the device on [Free Registration screen] of GT Simulator2 and refer the device value.

Section 7.5.3 Registering/Deleting device (Free Registration screen)

4 Switching station No. at the direct CPU connection

The monitored device cannot be switched by using switching station No. at the direct CPU connection. For the monitored device, set the device with [Free Registration screen] and refer the device value.

Section 7.5.3 Registering/Deleting device (Free Registration screen)

5 Connection to GT Simulator

In regard to the devices out of the GX Simulator's support, the values are not shown.

6 When simulating the project data of which PC type is third party PLC (Connection to GT Simulator)

In regard to the devices out of the simulation available range, the values are not shown. Refer to the following for the device ranges that can be simulated.

Section 3.4 Device Ranges that Can Be Simulated

7 When using object scripts

The temporary device area (TMP) for object scripts cannot be confirmed with the Device Monitor (GT Simulator2).

7.3 Screen Configuration of Device Monitor

7.3.1 Screen configuration and various Tools

This section describes the configuration and various tools of device monitor.

Title bar

Tool bar

Section 7.3.3
Tool Bar

Device Monitor screen

Section 7.3.4
Device Monitor screen

Status Bar

Section 7.3.5 Status Bar

Menu Bar

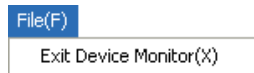
Section 7.3.2
Menu Bar

Object	Position	Device Kind	Device	Type	Value	Change
Comment	344, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	428, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	514, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	372, 164	Monitor Device	0-FF GD201	Word(16)	0000	Input
Lamp	64, 320	Monitor Device	0-FF X0031	Bit	0	OFF
Touch Switch	224, 368	Write Device(Bit)	0-FF X0031	Bit	0	OFF
Touch Switch	144, 320	Write Device(Bit)	0-FF X0031	Bit	0	OFF
Touch Switch	344, 352	Display Switching	0-FF G81000	Bit	0	OFF
Touch Switch	344, 352	Write Device(Bit)	0-FF G81000	Bit	0	OFF
Touch Switch	428, 352	Display Switching	0-FF G81001	Bit	0	OFF
Touch Switch	428, 352	Write Device(Bit)	0-FF G81001	Bit	0	OFF
Touch Switch	512, 352	Display Switching	0-FF G81002	Bit	0	OFF
Touch Switch	512, 352	Write Device(Bit)	0-FF G81002	Bit	0	OFF
Touch Switch	384, 432	Write Device(Word)	0-FF GD200	Word(16)	0001	Input
Touch Switch	440, 432	Write Device(Word)	0-FF GD200	Word(16)	0001	Input
Touch Switch	496, 432	Write Device(Word)	0-FF GD200	Word(16)	0001	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D100	Word(16)	0046	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D101	Word(16)	0014	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D102	Word(16)	0032	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D103	Word(16)	000F	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D104	Word(16)	0050	Input
Touch Switch	32, 156	Write Device(Bit)	0-FF X0031	Bit	0	OFF
Touch Switch	372, 224	Display Switching	0-FF G81003	Bit	0	OFF

7.3.2 Menu Bar

The commands assigned to the menu bar are described below.

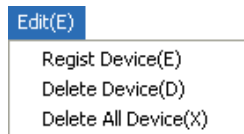
File



File menu includes the function to exit the Device Monitor.


 • Section 7.4 Device Monitor Operation Method

Edit

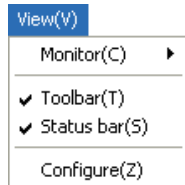


Edit menu includes the functions to register or delete devices in [Free Registration screen].


(This menu becomes available when [Free Registration screen] is selected on the Device Monitor.)

 • Section 7.3.4 Device Monitor screen
• Section 7.4 Device Monitor Operation Method

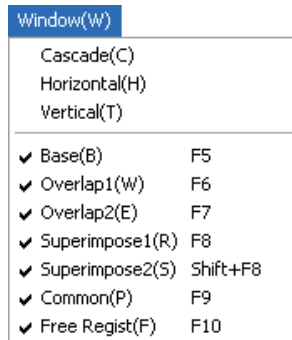
View




View menu includes the functions such as starting/stopping monitoring and setting the Device Monitor.

 • Section 7.3.3 Tool Bar
• Section 7.3.5 Status Bar
• Section 7.4 Device Monitor Operation Method

Window



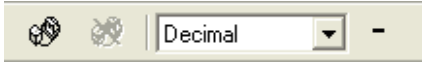
Window menu includes the functions such as aligning the Device Monitor screens and selecting display screens.


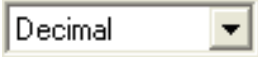



 • Section 7.3.4 Device Monitor screen
• Section 7.4 Device Monitor Operation Method

7.3.3 Tool Bar

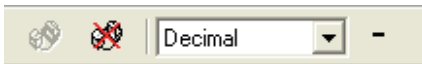
This section describes the tool bar.


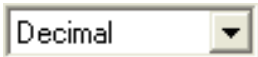



1 Before monitoring



Name	Description
	<p>Start</p> <p>Executes device monitoring.</p>
	<p>Change the display format of the device value.</p> <p>Choose the device value display format in the list box.  Section 7.3.4 2 (1) Display of [Value]</p>
	<p>With/Without a sign</p> <p>Make selection when handling the device value as signed binary value. The [Changes of display of device value] can only be selected when [Decimal] is chosen.  Section 7.3.4 2 (1) Display of [Value]</p>

2 While monitoring



Name	Description
	<p>Stop</p> <p>Stops device monitoring.</p>
	<p>Change the display format of the device value.</p> <p>Choose the device value display format in the list box.  Section 7.3.4 2 (1) Display of [Value]</p>
	<p>With/Without a sign</p> <p>Make selection when handling the device value as signed binary value. The [Changes of display of device value] can only be selected when [Decimal] is chosen.  Section 7.3.4 2 (1) Display of [Value]</p>

7.3.4 Device Monitor screen

This section describes the Device Monitor screen.

1 Device Monitor types

The Device Monitor is available in the following four types which show the different contents and items in the screen.

Object	Position	Device Kind	Device	Type	Value	Change
Comment	144, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	428, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	514, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	372, 164	Monitor Device	0-FF GD201	Word(16)	0000	Input
Lamp	64, 320	Monitor Device	0-FF X0031	Bit	0	OFF
Touch Switch	224, 368	Write Device@B0	0-FF X0031	Bit	0	OFF
Touch Switch	144, 320	Write Device@B0	0-FF X0031	Bit	0	OFF
Touch Switch	344, 352	Display Switching	0-FF CB1000	Bit	0	OFF
Touch Switch	344, 352	Write Device@B0	0-FF CB1000	Bit	0	OFF
Touch Switch	428, 352	Display Switching	0-FF CB1001	Bit	0	OFF
Touch Switch	428, 352	Write Device@B0	0-FF CB1001	Bit	0	OFF
Touch Switch	512, 352	Display Switching	0-FF CB1002	Bit	0	OFF
Touch Switch	512, 352	Write Device@B0	0-FF CB1002	Bit	0	OFF
Touch Switch	384, 432	Write Device@Word	0-FF GD200	Word(16)	0001	Input
Touch Switch	440, 432	Write Device@Word	0-FF GD200	Word(16)	0001	Input
Touch Switch	496, 432	Write Device@Word	0-FF GD200	Word(16)	0001	Input
Touch Switch	623, 0	Write Device@Word	0-FF D100	Word(16)	0046	Input
Touch Switch	623, 0	Write Device@Word	0-FF D101	Word(16)	0014	Input
Touch Switch	623, 0	Write Device@Word	0-FF D102	Word(16)	0052	Input
Touch Switch	623, 0	Write Device@Word	0-FF D103	Word(16)	0018	Input
Touch Switch	623, 0	Write Device@Word	0-FF D104	Word(16)	0050	Input
Touch Switch	32, 156	Write Device@B0	0-FF X0031	Bit	0	OFF
Touch Switch	372, 224	Display Switching	0-FF CB1003	Bit	0	OFF

(Base Screen)

Object	Position	Device Kind	Device	Type	Value	Change
Bar	28, 15	Monitor Device	0-FF D100	Word(16)	0046	Input
Bar	28, 15	Monitor Device	0-FF D101	Word(16)	0014	Input
Bar	28, 15	Monitor Device	0-FF D102	Word(16)	0052	Input
Bar	28, 15	Monitor Device	0-FF D103	Word(16)	0018	Input
Bar	28, 15	Monitor Device	0-FF D104	Word(16)	0050	Input
Line	60, 15	Monitor Device	0-FF D100	Word(16)	0046	Input
Line	60, 15	Monitor Device	0-FF D101	Word(16)	0014	Input
Line	60, 15	Monitor Device	0-FF D102	Word(16)	0052	Input
Line	60, 15	Monitor Device	0-FF D103	Word(16)	000F	Input
Line	60, 15	Monitor Device	0-FF D104	Word(16)	0050	Input
Line	60, 15	Monitor Device	0-FF D110	Word(16)	0028	Input
Line	60, 15	Monitor Device	0-FF D111	Word(16)	0032	Input
Line	60, 15	Monitor Device	0-FF D112	Word(16)	0018	Input
Line	60, 15	Monitor Device	0-FF D113	Word(16)	0048	Input
Line	60, 15	Monitor Device	0-FF D114	Word(16)	001E	Input

(Window Screen)

Function	Device Kind	Device	Type	Value	Change
Language Switch	Language Switch	0-FF GD200	Word(16)	0001	Input
Project Script	Start Trigger Device	0-FF GD0 b4	Bit	1	ON
Project Script	Operator Device	0-FF GD200	Word(16)	0001	Input
Project Script	Operator Device	0-FF D114	Word(16)	001E	Input
Project Script	Operator Device	0-FF D113	Word(16)	0048	Input
Project Script	Operator Device	0-FF D112	Word(16)	0014	Input
Project Script	Operator Device	0-FF D111	Word(16)	0032	Input
Project Script	Operator Device	0-FF D110	Word(16)	0028	Input
Project Script	Operator Device	0-FF D104	Word(16)	0050	Input
Project Script	Operator Device	0-FF D103	Word(16)	000F	Input
Project Script	Operator Device	0-FF D102	Word(16)	0032	Input
Project Script	Operator Device	0-FF D101	Word(16)	0014	Input
Project Script	Operator Device	0-FF D100	Word(16)	0046	Input
Project Script	Operator Device	0-FF D22	Word(16)	0032	Input
Project Script	Operator Device	0-FF D21	Word(16)	002D	Input
Switching Screen/Switching Superior	0-FF GD103	Word(16)	0001	Input	
Switching Screen/Switching Overlap	0-FF GD102	Word(16)	0000	Input	
Switching Screen/Switching Overlap	0-FF GD101	Word(16)	0001	Input	
Switching Screen/Switching Base ser	0-FF GD100	Word(16)	0000	Input	

(Common screen)

Register	Device	Type	Value	Change
0-FF D0	Word(16)	0000	Input	
0-FF D1	Word(16)	0032	Input	
0-FF D2	Word(16)	0001	Input	
0-FF D3	Word(16)	0000	Input	
0-FF GB10	Bit	1	ON	
0-FF GB11	Bit	0	OFF	
0-FF GD0	Word(32)	00000000	Input	
0-FF GD2	Word(32)	00002547	Input	
0-FF GD4	Word(32)	00000025	Input	
0-FF GD6	Word(32)	00000000	Input	
0-FF M0	Bit	0	OFF	
0-FF M1	Bit	1	ON	
0-FF M2	Bit	0	OFF	
0-FF M3	Bit	0	OFF	

(Free Registration screen)

Screen	Description
Base Screen	Confirms/Tests the device used on the Base Screen. Device for each Base Screen is displayed.
Window Screen	Confirms/Tests the device used on the Overlap window (1, 2) or the Superimpose window (1, 2). Device for each Window Screen is displayed.
Common screen	Confirms/Tests the contents set with the common setting of GT Designer2.
Free Registration screen	Registers any device and confirms/tests the device value. Since all devices (including GOT's internal devices) can be registered, devices not set in the data can be registered and confirmed/tested. Refer to the following for device registration. Section 7.5.3 Registering/Deleting device (Free Registration screen)



Remark

Synchronization for the Monitor Mode of Device Monitor and GT Simulator2

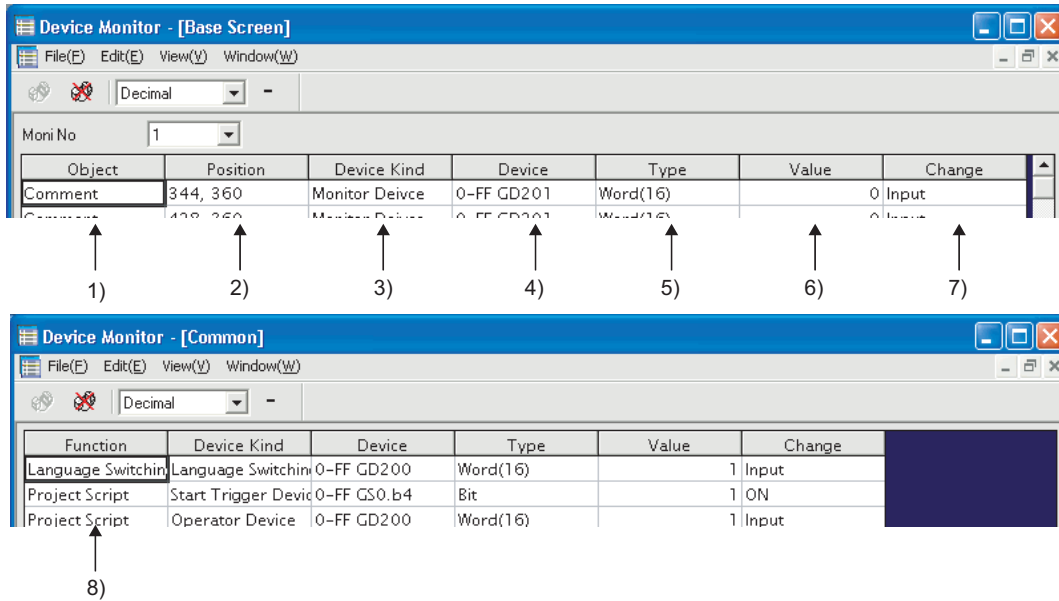
The Monitor Mode of Device Monitor and GT Simulator2 can be disabled from synchronizing.

For details, refer to the following.

Section 7.6.1 3 Monitor Mode tab

2 Items displayed on the Device Monitor

The items displayed on the Device Monitor will be described below.



Number	Item	Description
1)	Object	Shows the preset object names.
2)	Position	Displays the displayed object positions (coordinates).
3)	Device Kind	Shows the device types.
4)	Device	Shows the devices set for the objects. The devices are represented as on GT Designer2.
5)	Type	Shows the used device types. Bit : When bit device is used Word (16) : When word device (16bit) is used Word (32) : When word device (32bit) is used
6)	Value	Shows the device values. (☞ 2) (1) Display of [Value] in this section)
7)	Change	Changes the device values. (☞ Section 7.5.2 Testing device value)
8)	Function	Shows the Common screen name with GT Designer2.

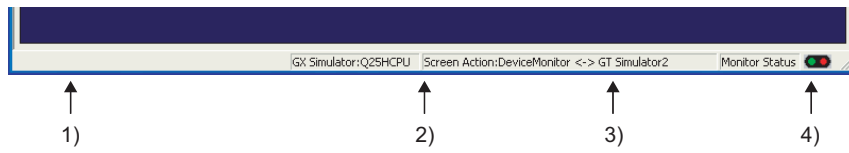
(1) Display of [Value]

Display of [Value] is shown in the following table depending on the selection of [Changes of display of device value] and [With/Without a sign] on the tool bar.

Setting of [Changes of display of device value] and [With/Without a sign]		Display of [Value]		
		When [Type] is [Bit]	When [Type] is [Word (16)]	When [Type] is [Word (32)]
Binary	0, 1(1 digit)	0000 ... 0000 to 1111 ... 1111(16 digits)	0000 ... 0000 to 1111 ... 1111(32 digits)	
Octal		0 to 177777	0 to 3777777777	
Decimal		Signed	-32768 to 32767	-2147483648 to 2147483647
		Unsigned	0 to 65535	0 to 4294967295
Hexadecimal		0 to FFFF	0 to FFFFFFFF	

7.3.5 Status Bar

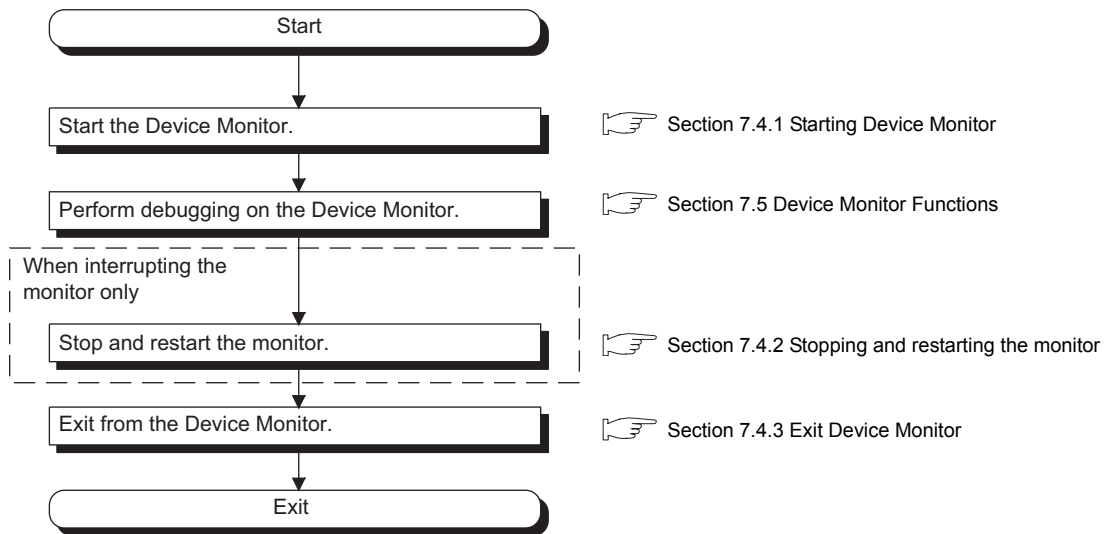
The status bar will be described below.




Number	Description
1)	Shows the descriptions of button and menu at the mouse cursor.
2)	Shows the PLC CPU type currently connected. With the direct CPU connection : "CPU: <Connected PLC CPU type>" With GX Simulator : "CPU: <Connected PLC CPU type>"
3)	Shows the setting contents of Monitor Mode. (☞ Section 7.6 Setting Display)
4)	Indicates the monitor status with the lamps. Lamps flickering : Monitor is in progress. Both lamps are lit green : Monitor is at a stop.

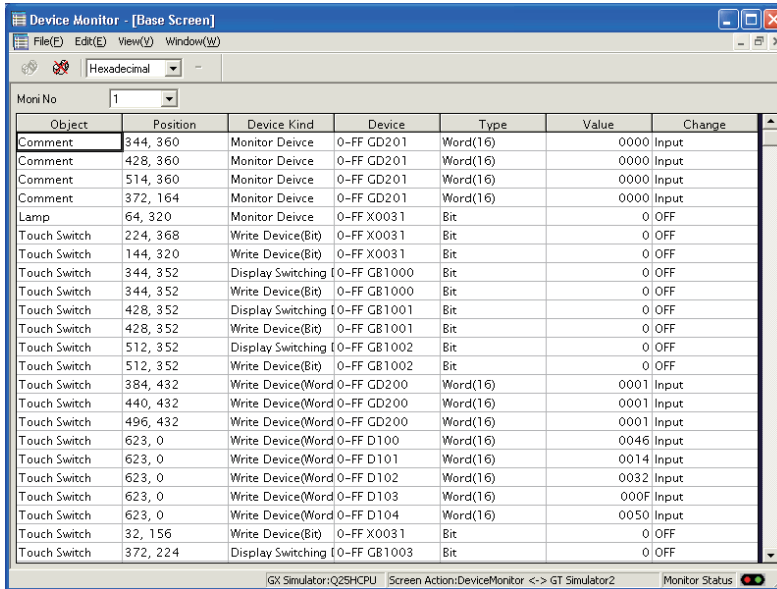
7.4 Device Monitor Operation Method

The device monitor operation method will be shown below.



7.4.1 Starting Device Monitor

- 1 The Simulation in GT Simulator2 do either of the following operations.
 - Click  (Start of Device Monitor) of GT Simulator2.
 - Select [Tool] → [Start of Device Monitor] menu of GT Simulator2.
- 2 The Device Monitor starts, and then executes monitoring.



Object	Position	Device Kind	Device	Type	Value	Change
Comment	344, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	428, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	514, 360	Monitor Device	0-FF GD201	Word(16)	0000	Input
Comment	372, 164	Monitor Device	0-FF GD201	Word(16)	0000	Input
Lamp	64, 320	Monitor Device	0-FF X0031	Bit	0	OFF
Touch Switch	224, 368	Write Device(Bit)	0-FF X0031	Bit	0	OFF
Touch Switch	144, 320	Write Device(Bit)	0-FF X0031	Bit	0	OFF
Touch Switch	344, 352	Display Switching	0-FF GB1000	Bit	0	OFF
Touch Switch	344, 352	Write Device(Bit)	0-FF GB1000	Bit	0	OFF
Touch Switch	428, 352	Display Switching	0-FF GB1001	Bit	0	OFF
Touch Switch	428, 352	Write Device(Bit)	0-FF GB1001	Bit	0	OFF
Touch Switch	512, 352	Display Switching	0-FF GB1002	Bit	0	OFF
Touch Switch	512, 352	Write Device(Bit)	0-FF GB1002	Bit	0	OFF
Touch Switch	384, 432	Write Device(Word)	0-FF GD200	Word(16)	0001	Input
Touch Switch	440, 432	Write Device(Word)	0-FF GD200	Word(16)	0001	Input
Touch Switch	496, 432	Write Device(Word)	0-FF GD200	Word(16)	0001	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D100	Word(16)	0046	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D101	Word(16)	0014	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D102	Word(16)	0032	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D103	Word(16)	000F	Input
Touch Switch	623, 0	Write Device(Word)	0-FF D104	Word(16)	0050	Input
Touch Switch	32, 156	Write Device(Bit)	0-FF X0031	Bit	0	OFF
Touch Switch	372, 224	Display Switching	0-FF GB1003	Bit	0	OFF





Start of Device Monitor

Start the Device Monitor while simulating on GT Simulator2.

The Device Monitor cannot be started before executing or after stopping of the simulation on GT Simulator2.


7.4.2 Stopping and restarting the monitor

- 1 Choose either of the following operations to stop the monitor.
 - Click  (Stop) of the Device Monitor.
 - Select [View] → [Monitor] → [Stop] menu of the Device Monitor.
- 2 Choose either of the following operations to restart the monitor after stopping.
 - Click  (Start) of the Device Monitor.
 - Select [View] → [Monitor] → [Start] menu of the Device Monitor.



Remark

About Stop monitor /Exit devcie monitor

If monitor is stopped, the Device Monitor is not exited.
Refer to the following manual to exit device monitor

 Section 7.4.3 Exit Device Monitor

7.4.3 Exit Device Monitor

- 1 Exit Device Monitor with any of the following operations.
 - Select [File] → [Exit Device Monitor] menu of the Device Monitor.
 - Click  on the title bar of the Device Monitor.
 - Click  (Start/Exit of Device Monitor) of GT Simulator2.
 - Select [Tool] → [Exit Device Monitor] menu of GT Simulator2.

Remark

Exiting and Message of GT Simulator2/Device Monitor

Exit from GT Simulator after exiting from the Device Monitor.
If exiting GT Simulator while monitoring with the Device Monitor, the following message may be displayed under other screens.



If having exited GT Simulator while monitoring with the Device Monitor, operate after carrying on a process such as moving the other screens.

7.5 Device Monitor Functions

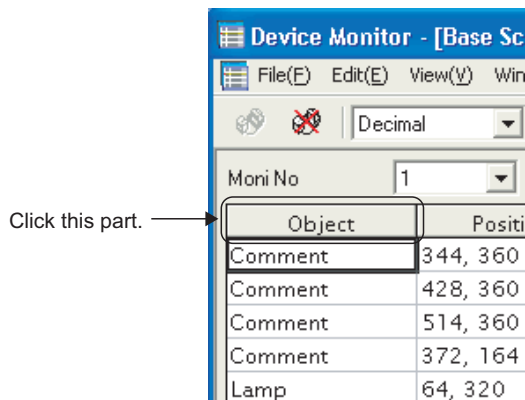
This section describes the device monitoring functions.

7.5.1 Sorting the data


This function allows the data displayed in the Device Monitor to be arranged in ascending or descending order of character code.

By default, the column data on the left of the corresponding screen are displayed in ascending or descending order of character code.

- 1 Clicking the title of the corresponding column rearranges the column data in ascending or descending order of character codes.



Point

- (1) The sorting order of [Object]
[Object] can be set the sorting order by users.
For details, refer to the following.
 Section 7.6 Setting Display
- (2) The sorting order of [Change]
[Change] cannot be rearranged the sorting order.
Rearrange with the other column data.

7.5.2 Testing device value

The device value can be tested with this function.

You can check how the indication of the tested device value changes on GT Simulator2.

1 Values that can be tested

The range of values that can be tested is the same as the display range.
For details, refer to the following.

☞ Section 7.3.4 **2** (1) Display of [Value]

2 Testing method

How to test a device value is given below.

(1) When testing a bit device with the mouse

- 1 By clicking [ON] or [OFF] with the mouse, the device value is reflected to [Value] and [Change].

Value	Change
161 Input	
0 OFF	
0 OFF	

Click this part.

(2) When testing a bit device with the keyboard.

- 1 By choosing [Value] and entering 0 or 1 with the personal computer keyboard, the device value is reflected to [Value] and [Change].

Value	Change
161 Input	
0 OFF	
0 OFF	

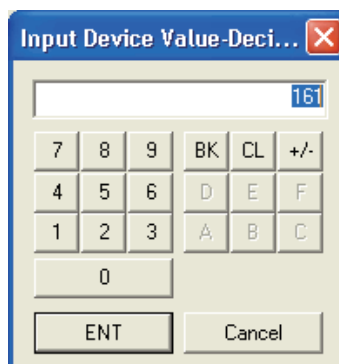
(3) When testing a word device with the mouse

- 1 Device value input window

Value	Change
161 Input	
0 OFF	
0 OFF	

Click this part.

- 2 By setting the device value with the **[0]** to **[F]** **[BK]** **[CL]** button and pressing the **[ENT]** button, the device value is reflected to [Value] and [Change]. (You can also input the device value directly.)



(4) When editing a word device with the keyboard.

- 1 By choosing and directly editing [Value], the device value is reflected to [Value] and [Change].

Value	Change
161 Input	
0 OFF	
0 OFF	

7.5.3 Registering/Deleting device (Free Registration screen)

You can register any device on the Free Registration screen and test the device.

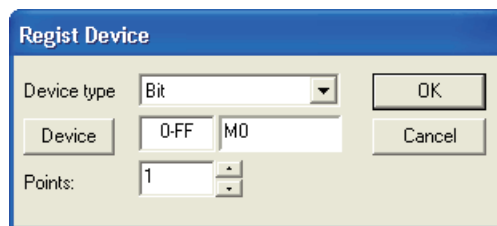
By registering a device not set in the project data and testing the value, you can make an operation check after the change.


1 How to register a device

- 1 Choose either of the following operations.
 - Select [Edit] → [Register Device] menu of the Device Monitor.
 - Click the button of [Free Registration screen]

- 2 The Regist Device dialog box appears.

By setting the following items and clicking the button, the device is registered.



Item	Description
Device type	Selects the Device type.
<input type="button" value="Device"/>	Sets the device. For setting the device, refer to the following.  GT Designer2 Version <input type="checkbox"/> Screen Design Manual (Section 5.1 Device Setting)
Points	Sets the point of the device to be registered from the device set with the <input type="button" value="Device"/> button consecutively.

Point

- (1) Display order of the devices
The devices are displayed from top to bottom in registration order.
- (2) Operation for discarding the registered contents
If the [PLC Type] of the simulated project data is changed, the registered contents will be discarded.

2 How to delete the devices

- 1 Display the device to be deleted on [Free Registration screen].
- 2 By choosing either of the following operations, the device is deleted.
 - Select [Edit] → [Delete Device] menu of the Device Monitor.
 - Click the button of [Free Registration screen]

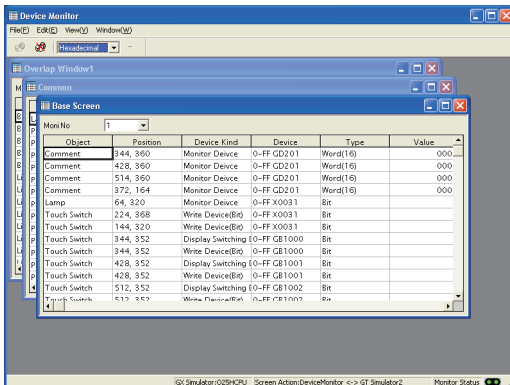
3 How to delete all devices

- 1 Display the [Free Registration screen].
- 2 By choosing either of the following operations, all devices are deleted.
 - Select [Edit] → [Delete All Device] menu of the Device Monitor.
 - Click the button of [Free Registration screen]

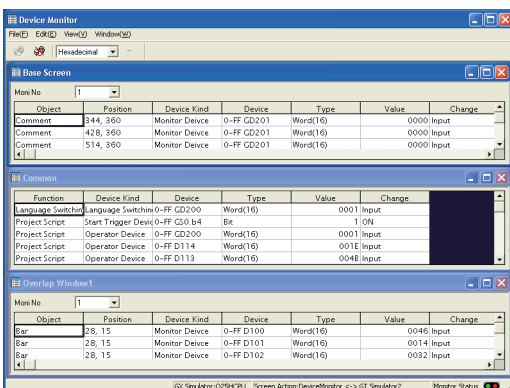
7.5.4 Displaying screens with cascade/tile

You can display all screens with cascade/tile.

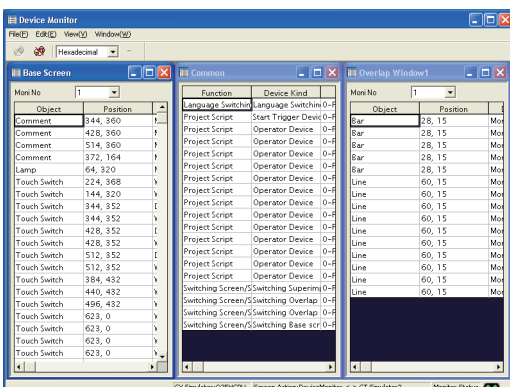
- 1 Select [Window] → [Cascade] / [Horizontal] / [Vertical] menu of the Device Monitor.
- 2 The screens are displayed as follows.
 - When selecting the [Cascade] menu



- When selecting the [Horizontal] menu



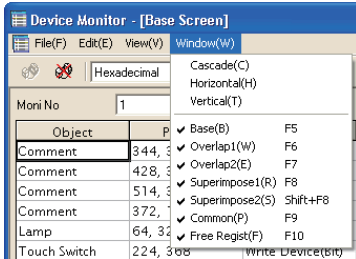
- When selecting the [Vertical] menu



7.5.5 Changing Device Monitor screen

1 When changing the Device Monitor screen

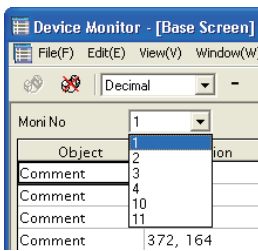
- 1 Select the screen to be displayed on the Device Monitor with the [Window] menu.



2 When changing the Screen No. of the screen to be displayed

- 1 If displaying the Base Screen, the selection for the Screen No. of the screen to be displayed is available with [Moni No.].


If displaying the Window Screen, the selection for the Screen No. of the screen to be displayed and Non-Display setting for the screen is available with [Moni No.] .



7.6 Setting Display

The display of the Device Monitor can be customized.

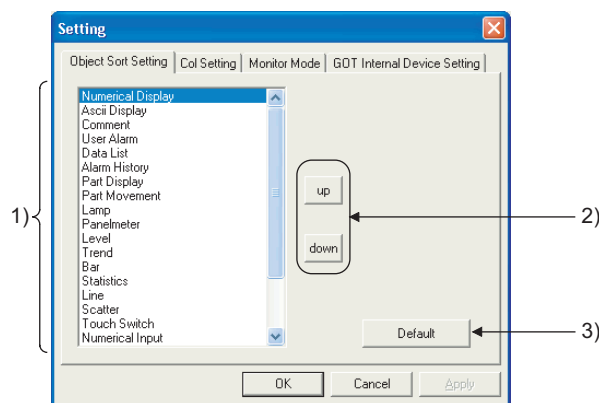
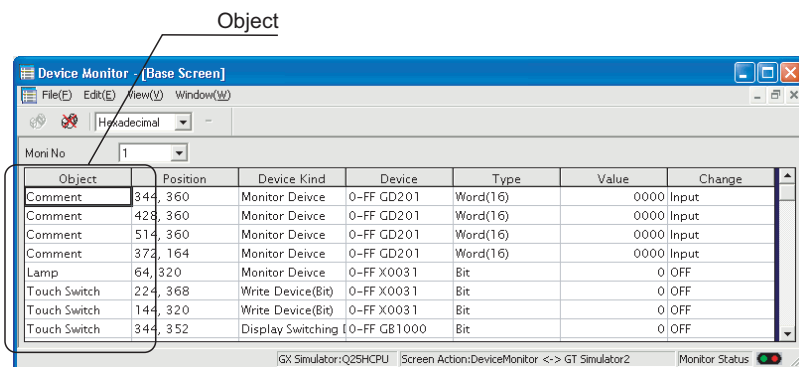
- 1 Perform the following operation.
 - Select [View] → [Configure] menu of the Device Monitor.
- 2 The Setting dialog box is displayed.
 - Set each item and click the button.
 - For details of the Setting dialog box, refer to the following.

 Section 7.6.1 Setting items

7.6.1 Setting items

1 Object Sort Setting tab

You can set the display order of the [Object] column data shown on base or window screen.

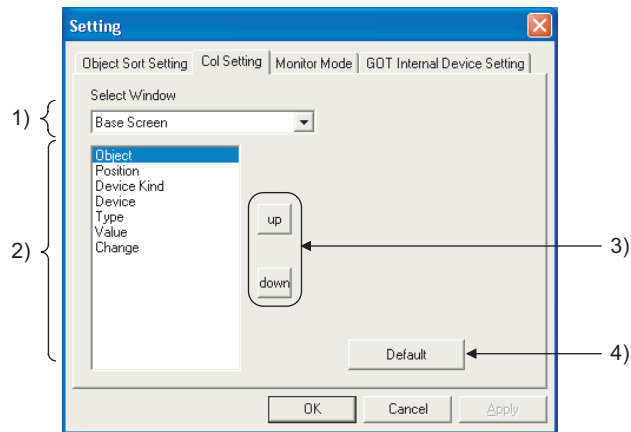
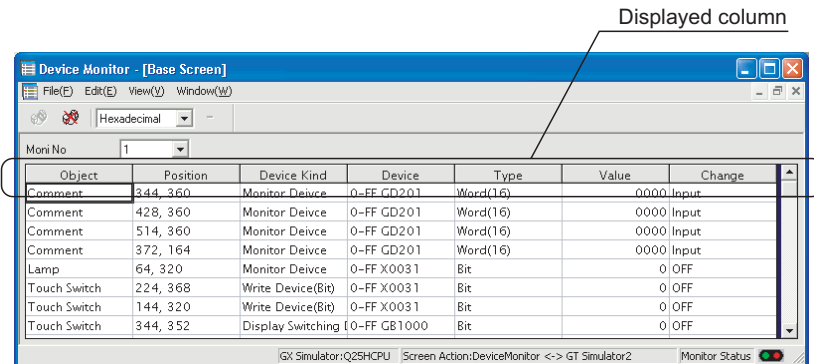


Object Sort Setting | Col Setting | Monitor Mode | GOT Internal Device Setting

No.	Item	Description
1)	Object item	Choose the object item you want to move.
2)	up, down	Used to move the object selected in the object item.
3)	Default	Used to select the standard (default) setting of the object item display order.

2 Col Setting tab

You can set the displayed column data order on the Base, Window, Common or Free Registration screen.

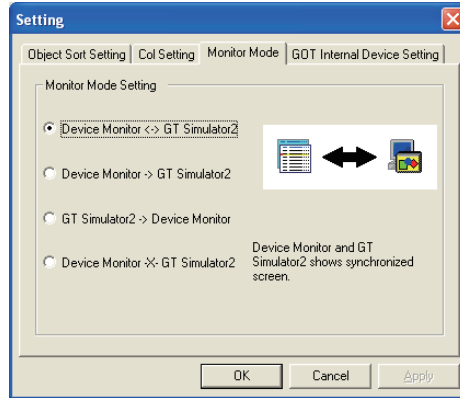


Object Sort Setting | **Col Setting** | Monitor Mode | GOT Internal Device Setting

No.	Item	Description
1)	Select Window	Choose the Device Monitor screen where you want to change the displayed column data order.
2)	Displayed column item	Choose the displayed column item you want to move.
3)	up, down	Used to move the object selected in the displayed column item.
4)	Default	Used to select the standard (default) setting of the displayed column item display order.

3 Monitor Mode tab

You can set the Monitor Mode pattern for synchronizing/not synchronizing the Device Monitor and GT Simulator2 screen (Base Screen, Window Screen).



Item	Description
Monitor Mode Setting	<p>Choose the screen switching pattern.</p> <ul style="list-style-type: none"> • Device Monitor <-> GT Simulator2 Changing either of the Device Monitor screen and GT Simulator2 screen also changes the other. • Device Monitor -> GT Simulator2 Changing the Device Monitor screen changes the GT Simulator2 screen. If you change the GT Simulator2 screen, the Device Monitor does not change. • GT Simulator2 -> Device Monitor Changing the GT Simulator2 screen changes the Device Monitor screen. If you change the Device Monitor screen, the GT Simulator2 screen does not change. • Device Monitor -X- GT Simulator2 Changing either of the Device Monitor screen and GT Simulator2 screen does not change the other.



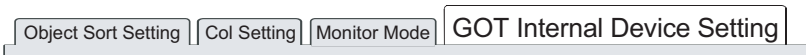
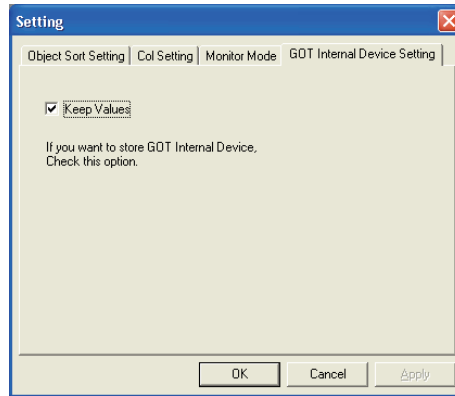
Testing of device value

If you test device value without regarding of this setting, any changes are reflected on the Device Monitor and GT Simulator2.

When you do not want to reflect device value changes, stop the monitor and then test the device value. (☞ Section 7.4 Device Monitor Operation Method)

4 GOT internal Device Setting tab

When exiting from GT Simulator2, save the internal device (GD, GB, GS) states and set Display/Non-Display of the states at the previous exit when monitoring next time.



Item	Description
Keep Values	Check this check box to save the internal device values at monitor stop or end, and display the saved internal device values at the time of next monitoring.

8. TROUBLESHOOTING

8.1 Troubleshooting for File Save Problems

Problem	Definition and Cause	Corrective action
No files are output when the hard copy command is executed from the monitor screen of the GT SoftGOT1000.	The file cannot be saved due to problems with the output destination disk.	<ul style="list-style-type: none"> • Confirm that the folder that is designated as a virtual drive does exist. • Check the access right for the folder that is designated as a virtual drive. • Confirm that there is enough free space in the folder that is designated as a virtual drive.
	The file cannot be saved, since file number external control device value is set to a value outside of the range 1 to 9999.	<ul style="list-style-type: none"> • Confirm that the file number external control device value is set to a value in the range 1 to 9999.

8.2 Error Message (GOT1000 series (GT16/GT15/GT11) simulator)

The following table indicates the error messages occurred in [GOT1000 series (GT16/G15/GT11) simulator] themselves, the Descriptions and resolutions.

1 Error messages displayed when GT Simulator2 is used.

Error message	Definition and cause	Corrective action
Adobe Reader is not installed correctly. Please install Adobe Reader.	<ul style="list-style-type: none"> • Adobe® Reader® is not installed. • Adobe® Reader® is not installed correctly. 	After uninstalling Adobe® Reader®, reinstall it.
Easysocket is not installed.	Perhaps GT Simulator2 is not installed correctly.	After uninstalling GT Simulator2, reinstall it.
'GT Simulator2' is not correctly installed.	Can not find the Windows® registry for GT Simulator2.	After uninstalling GT Simulator2, reinstall it.
PLC type of 'GT Simulator2' setting and 'GX Developer' setting is different. Please confirm the content of 'GX Developer' setting or change the PLC type of option setting.	These two CPU type settings are different.	Change the CPU type in the GX Developer project.
'GT Simulator2' cannot work, since language version for 'GT Simulator2' is different from one for 'GX Simulator'.	GT Simulator2 doesn't work, since the language version of 'GT Simulator2' is different from that of 'GX Simulator'.	Install the same language version GX Simulator and GT Simulator2.
Installation path of 'GT Simulator2' cannot be acquired.	Perhaps GT Simulator2 is not installed correctly.	After uninstalling GT Simulator2, reinstall it.
Please do logoff/the termination of Windows after ending 'GT Simulator2'.	Close 'GT Simulator2' before log out or shut down the Windows®.	Close 'GT Simulator2' before log out or shut down the Windows®.


(Continue to the following page)

Error message	Definition and cause	Corrective action
Project Information of 'GX Developer' was not be acquired. GPPW.GPS or GPPW.GPJ is not found.	Set a wrong GX Developer project.	In Option setting, set the project of GX Developer again.
Project path of 'GX Developer' cannot acquired. <cause> • 'GT Simulator2' is not correctly installed. • Unsupport PLC type is selected. • Registry is destroyed.	<ul style="list-style-type: none"> • Registry information on the project path of GX Developer was corrupted. • Unsupport CPU type was specified. 	In Option dialog box, set the project of GX Developer again.
	GT Simulator2 is not installed correctly.	After uninstalling GT Simulator2, reinstall it.
An illegal project of 'GX Developer' is selected.	The project specified in [GX Developer Project] of Option dialog box does not exist.	Check whether the specified GX Developer project exists.
'GX Simulator' is not installed.	<ul style="list-style-type: none"> • GX Simulator is not installed. • GX Simulator is not installed correctly. 	Install GX Simulator.
An illegal project of 'GX Developer' is selected. (SFC program) Project cannot be forwarded to 'GX Simulator'.	Specified a SFC type GX Developer project.	In Option setting, set the project of GX Developer again.
Failed in the start of 'GX Simulator'. <ES: ****> ***** error (2 different messages in all)	GX Simulator may be not installed correctly.	<ul style="list-style-type: none"> • After uninstalling GT Simulator, reinstall it. • Reinstall the update versions of GT Simulator2, GX Simulator and/or GX Developer.
Insufficient memory to starting 'GX Simulator'.	Not enough Dynamic memory to start up GT Simulator.	<p>Secure memory space.</p> <ul style="list-style-type: none"> • Close unnecessary applications. • Check free hard disk space.
Failed in the start of Shared memory server. <ES: ****> ***** error (2 different messages in all)	<ul style="list-style-type: none"> • GT Simulator2, GX Simulator or GX Developer was not closed properly. • Illegal process is running. 	<ul style="list-style-type: none"> • After restarting the personal computer, restart GT Simulator2. • Reinstall the update versions of GT Simulator2, GX Simulator and/or GX Developer.
This function can't be used now.	Selected a unavailable function in GT Simulator2.	Press <input type="button" value="OK"/> .
The version of installed Easysocket is illegal.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
The version of installed 'GX Simulator' is illegal.	Installed a old version of GX Simulator.	Install GX Simulator of Version 5E or later.

(Continued to next page)

Error message	Definition and cause	Corrective action
The simulation cannot be ended. Please retry after shutting Dialogue on the simulation screen.	Since the message such as "This function cannot be used now" was displayed on the screen, GT Simulator2 could not be exit correctly.	After selecting <input type="button" value="OK"/> in the dialog box to erase the on-screen message, exit from GT Simulator2 again.
	There was the other internal cause than the above that did not allow to exit from the software.	After selecting <input type="button" value="OK"/> in the dialog box, wait for some time and exit from GT Simulator2 again.
There is no response from 'GX Simulator' for termination request. 'GX Simulator' is canceled. Please end 'GT Simulator2' at once and do the PC in Shutdown.	<ul style="list-style-type: none"> The GT Simulator2, GX Simulator or GX Developer was closed illegally last time. Illegal process is running. 	<ul style="list-style-type: none"> Restart GT Simulator2. After restarting the personal computer, restart GT Simulator2.
Fail in the Snap Shot.	<ul style="list-style-type: none"> The GT Simulator2 was closed illegally last time. Illegal process is running. 	<ul style="list-style-type: none"> Restart GT Simulator2. After restarting the personal computer, restart GT Simulator2.
Vertical project data is not supported.	The project data for vertical display type has been read.	Simulate after changing [GOT type] of the project data to "GT16/GT15".
Communication error occurred. Retry : Communication begins again. Cancel : Communication is interrupted. Please reexecute 'GT Simulator2(GT15)', if communicate again. <ES: ****>	<ul style="list-style-type: none"> Cable was disconnected. Cable was broken. 	After checking for the left causes, select the button in the displayed dialog box.
	Transmission speed (Baud rate) is incorrect.	[Retry] Restarts communication.
	The PLC CPU type is different from that of the project setting.	[Cancel] After Cancel is selected, all communications will not be made. When performing simulation, restart GT Simulator2.
Failed in the start of Device Monitor.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
Failed in the end of Device Monitor.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
Failed to build operating environment. Please retry after checking the following. <ul style="list-style-type: none"> Capacity of free disk. File access. 	Not enough free disk space.	Increase the free space of hard disk to more than 200M bytes.
	Can not access the necessary file for GT Simulator's operation.	Check whether GT Simulator has been operated already.
	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
The path name size is too long.	Save the GX Developer under too many directory levels.	In Option setting, set the project of GX Developer again.
Parameter file is not found.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
	Set a wrong GX Developer project.	Create a new project of GX Developer.
An illegal PLC type is selected.	In the project of GX Developer, incompatible CPU type was specified.	Change the CPU type of the project for GX Developer.
An illegal project of 'GX Developer' is selected. Project cannot be forwarded to 'GX Simulator'.	Illegal program exists in the GX Developer project folder.	Create a new project of GX Developer.
Program file is not found.	GT Simulator2 may have not been installed correctly.	After uninstalling GT Simulator2, reinstall it.
	Illegal project of GX Developer may have been set.	Create a new project of GX Developer.

(Continued to next page)

Error message	Definition and cause	Corrective action
GOT type of the project is different from setting 'GT Simulator2'.	The GOT type set in the project is different from that in GT Simulator2.	Make correction so that the GOT type of the project created on GT Designer2 is the same as the GOT type of GT Simulator2.
PLC type of the project is different from setting 'GT Simulator2'.	The PLC type set in the project is different from that in GT Simulator2.	Make correction so that the PLC type of the project created on GT Designer2 is the same as the CPU type of GT Simulator2.
Project file is not found.	Project file is not available.	Specify the path of which project data exist.
Cannot access the project file.	Access to the specified project data could not be made.	Check the access privilege of the project data.
Manual file cannot be found. Please install manuals.	<ul style="list-style-type: none"> • GT Manual is not installed. • GT Manual is not installed correctly. 	After uninstalling GT Manual, reinstall it.
Unsupport PLC type is selected.	CPU type setting of GT Simulator2 was the unsupported CPU type.	Change the CPU type and restart monitoring.
Fail in the delete of user data. <ul style="list-style-type: none"> • Please close user data if it is opened. • Check the file access privilege. 	Failed in erasing user data after loading screen data.	<ul style="list-style-type: none"> • If there is a user's data opened by another software, close that file. • Check the file access privilege.
Failed in initialize for reading. Please retry after checking the following. <ul style="list-style-type: none"> • Please close Dialogue if it is displayed. • Waiting for 'Offline mode'. Please wait at several seconds. 	Since the message such as "This function cannot be used now" was displayed on the screen, this funciton can not be loaded.	After selecting <input type="checkbox"/> OK in the dialog box to erase the on-screen message, re-load the function.
	Waiting for completion of internal process.	re-load the function after a few minutes.
Failed in reading. Please retry after checking the following. <ul style="list-style-type: none"> • Data size and number of the data. • Capacity of free disk. • File access privilege of the project file. • Project file is illegal or destroyed. 	Screen data size was too large.	Check the screen data size. ( Section 3.1 GOT that Can Be Simulated)
	Not enough free disk space.	Increase the free space of hard disk to more than 200M bytes.
	Can not access the project data.	Check the access privilege of the project data.
	Not compatible with the project setting.	Check whether setting is correct on GT Designer2.
	<ul style="list-style-type: none"> • This data is not for GOT project. • The project data was corrupted. 	Use a correct project data or normal project data.

2 Error messages displayed when Device Monitor is used.

Error message	Definition and cause	Corrective action
Device Monitor files not exists!	The installation file for device monitor has been deleted.	After uninstalling GT Simulator2, reinstall it.
Memory is not enough.	Shared memory creation failed.	Secure enough memory, start GT Simulator2, and use device monitor.
Fail application setting.	The environment setting file for Device Monitor has been corrupted.	After uninstalling GT Simulator2, reinstall it.
Value is over range.	The input Device Number was outside the range.	Enter Device Number within the range.
Cannot read Data files Try to read data on GT Simulator2	GT Simulator2 did not read project data.	After using GT Simulator2 to read the project data, start the Device Monitor.
Invalid Device Number!	The input Device Number was an odd number.	Enter an even number as the Device Number.
Already exist Device Monitor.	The Device Monitor has already started.	Check the taskbar and select the Device Monitor which has already started. From Task Manager or the like, terminate the hidden Device Monitor and restart it.
Over registered count.	There are more than 65535 free register items.	Delete some registered free registration items and reregister the desired one.
Invalid NetWork or Station No.	The network input data is not correct.	Enter a value which is suitable for the network setting.
In Multiples of 16 for Word of Bit Device.	When the word was specified for the bit, the Device Number entered was not a multiple of 16.	Enter the value as a multiple of 16.
In Multiples of 16+1 for Word of Bit Device.	When the word was specified for the entry of the bit device for Yaskawa GL, the Device Number entered was not a multiple of 16+1.	Enter the value as a multiple of 16+1.
Invalid string for device.	The data input for Device is not correct.	Check the device representation characters, device number and bit position entered and register the device.
Monitoring Error(Status bar)	Communication initialization failed.	Connecting to PLC CPU after exiting Device Monitor and GT Simulator2, restart them.
□□ is invalid value.	The input Device Number has an illegal format or is outside the range.	<ul style="list-style-type: none"> • Enter the Device Number in a correct format. • Enter the value within the range.
□□ is over □□.	The input vale is outside the range.	Enter the value in accordance with the message instruction.

8.3 Error Message (GOT-A900 series simulator)

The following table indicates the error messages occurred in [GOT-A900 series simulator] themselves, the Descriptions and resolutions.

1 Error messages displayed when GT Simulator2 is used.

Error message	Definition and cause	Corrective action
Adobe Reader is not installed correctly. Please install Adobe Reader.	<ul style="list-style-type: none"> • Adobe® Reader® is not installed. • Adobe® Reader® is not installed correctly. 	After uninstalling Adobe® Reader®, reinstall it.
Easysocket is not installed.	Perhaps GT Simulator2 is not installed correctly.	After uninstalling GT Simulator2, reinstall it.
Cannot terminate 'GT Simulator2'. Close every dialog and the print preview that are currently displayed.	<ul style="list-style-type: none"> • Dialog boxes and the print preview are displayed. 	Close all dialog boxes and the print preview.
'GT Simulator2' is not correctly installed.	Can not find the Windows® registry for GT Simulator2.	After uninstalling GT Simulator2, reinstall it.
PLC type of 'GT Simulator2' setting and 'GX Developer' setting is different. Please confirm the content of 'GX Developer' setting or change the PLC type of option setting.	These two CPU type settings are different.	Change the CPU type in the GX Developer project.
Installation path of 'GT Simulator2' cannot be acquired.	Perhaps GT Simulator2 is not installed correctly.	After uninstalling GT Simulator2, reinstall it.
This operating environment is unapplicable for 'GT Simulator2'.	Access could not be made to the file necessary to operate GT Simulator2.	<ul style="list-style-type: none"> • Check whether you logged on to Windows® XP professional or Windows® XP Home Edition as the user who has the attributes of the administrator (for computer management). • Check whether "user's easy function" of Windows® XP Professional or Windows® XP Home Edition is being used or not.
	<ul style="list-style-type: none"> • GT Simulator2 was not closed propety. • Illegal process is running. 	Resart GT Simulator2 after reboot the computer.
Please do logoff/the termination of Windows after ending 'GT Simulator2'.	Close 'GT Simulator2' before log out or shut down the Windows® .	Close 'GT Simulator2' before log out or shut down the Windows® .
Project Information of 'GX Developer' was not be acquired. GPPW.GPS or GPPW.GPJ is not found.	Set a wrong GX Developer project.	In Option setting, set the project of GX Developer again.


(Continued to next page)

Error message	Definition and cause	Corrective action
Project path of 'GX Developer' cannot be acquired. <cause> • 'GT Simulator2' is not correctly installed. • Unsupport PLC type is selected. • Registry is destroyed.	<ul style="list-style-type: none"> Registry information on the project path of GX Developer was corrupted. Unsupport CPU type was specified. 	In Option dialog box, set the project of GX Developer again.
	GT Simulator2 is not installed correctly.	After uninstalling GT Simulator2, reinstall it.
An illegal project of 'GX Developer' is selected.	The project specified in [GX Developer Project] of Option dialog box does not exist.	Check whether the specified GX Developer project exists.
'GX Simulator' is not installed.	<ul style="list-style-type: none"> GX Simulator is not installed. GX Simulator is not installed properly. 	Install GX Simulator.
An illegal project of 'GT Developer' is selected. (SFC program) Project cannot be forwarded to 'GX Simulator'	Specified a SFC type GX Developer project.	In Option setting, set the project of GX Developer again.
Failed in the start of 'GX Simulator'. <ES: ****> ***** (2 different messages in all)	GX Simulator may be not installed correctly.	<ul style="list-style-type: none"> After uninstalling GX Simulator, reinstall it. Reinstall the update versions of GT Simulator2, GX Simulator and/or GX Developer.
Insufficient memory to starting 'GX Simulator'.	Not enough Dynamic memory to start up GT Simulator.	Secure memory space. <ul style="list-style-type: none"> Close unnecessary applications. Check free hard disk space.
	GX Simulator may be not installed correctly.	After uninstalling GX Simulator, reinstall it.
Failed in the initialization of 'GX Simulator'. <ES: ****> ***** (32 different messages in all)	<ul style="list-style-type: none"> GT Simulator2, GX Simulator or GX Developer was not closed properly. Illegal process is running. 	<ul style="list-style-type: none"> Restart GT Simulator2. After restarting the personal computer, restart GT Simulator2. Reinstall the update versions of GT Simulator2, GX Simulator and/or GX Developer.
Failed in the start of Shared memory server. <ES: ****> ***** (2 different messages in all)	<ul style="list-style-type: none"> GT Simulator2, GX Simulator or GX Developer was not closed properly. Illegal process is running. 	<ul style="list-style-type: none"> After restarting the personal computer, restart GT Simulator2. Reinstall the update versions of GT Simulator2, GX Simulator and/or GX Developer.
This function can't be used now.	Selected a unavailable function in GT Simulator2.	Press <input type="button" value="OK"/> .
The version of installed Easysocket is illegal.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
	Installed a old version of GX Simulator.	Install GX Simulator of Version 5E or later.
The version of installed 'GX Simulator' is illegal.	GT Simulator2 could not work, since language version for GT Simulator2 was different from one for GX Simulator.	Install GX Simulator which is compatible with the same language version as GT Simulator2.

(Continued to next page)


Error message	Definition and cause	Corrective action
There is no response from 'GX Simulator' for termination request. 'GX Simulator' is canceled. Please end 'GT Simulator2' at once and do the PC in Shutdown.	<ul style="list-style-type: none"> The GT Simulator2, GX Simulator or GX Developer was closed illegally last time. Illegal process is running. 	<ul style="list-style-type: none"> Restart GT Simulator2. After restarting the personal computer, restart GT Simulator2.
The simulation cannot be ended. Please retry after shutting Dialogue on the simulation screen.	Since the message such as "This function cannot be used now" was displayed on the screen, GT Simulator2 could not be exit correctly.	After selecting <input type="button" value="OK"/> in the dialog box to erase the on-screen message, exit from GT Simulator2 again.
	There was the other internal cause than the above that did not allow to exit from the software.	After selecting <input type="button" value="OK"/> in the dialog box, wait for some time and exit from GT Simulator2 again.
Fail in the Snap Shot.	<ul style="list-style-type: none"> The GT Simulator2 was closed illegally last time. Illegal process is running. 	<ul style="list-style-type: none"> Restart GT Simulator2. After restarting the personal computer, restart GT Simulator2.
Communication error occurred. Retry : Communication begins again. Cancel : Communication is interrupted. Please reexecute 'GT Simulator2', if simulate again. <ES: ****>	<ul style="list-style-type: none"> Cable was disconnected. The cable was broken. 	After checking for the left causes, choose the button in the displayed dialog box.
	Transmission speed (Baud rate) is incorrect.	[Retry] Restarts communication.
	The PLC CPU type is different from that of the project setting.	[Cancel] After Cancel is selected, all communications will not be made. When performing simulation, restart GT Simulator2.
Check communication.	<ul style="list-style-type: none"> Cable was disconnected. The cable was broken. 	Check the cable.
	Transmission speed (Baud rate) is incorrect.	Check the transmission speed (Baud rate) of the CPU.
	The PLC CPU type is different from that of the project setting.	Check the connection target PLC.
Failed in the start of Device Monitor.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
Failed in the end of Device Monitor.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
The path name size is too long.	Save the GX Developer under too many directory levels.	In Option setting, set the project of GX Developer again.
Parameter file is not found.	GT Simulator2 may be not installed correctly.	After uninstalling GT Simulator2, reinstall it.
	Set a wrong GX Developer project.	Create a new project of GX Developer.
An illegal PLC type is selected.	In the project of GX Developer, incompatible CPU type was specified.	Change the CPU type of the project for GX Developer.
An illegal project of 'GX Developer' is selected. Project cannot be forwarded to 'GX Simulator'.	Illegal program exists in the GX Developer project folder.	Create a new project of GX Developer.
Program file is not found.	GT Simulator2 may have not been installed correctly.	After uninstalling GT Simulator2, reinstall it.
	Illegal project of GX Developer may have been set.	Create a new project of GX Developer.

(Continued to next page)

Error message	Definition and cause	Corrective action
GOT type of the project is not correct.	The GOT type set in the project is other than the GOT-A900 series (GOT-F900 series).	Change the GOT type of the project created in GT Designer or GT Designer2 to the GOT-A900 series.
PLC type of the project is different from setting 'GT Simulator2'.	The PLC type set in the project is different from that in GT Simulator2.	Make correction so that the PLC type of the project created on GT Designer or GT Designer2 is the same as the CPU type of GT Simulator2.
Project file is not found.	Project file is not available.	Specify the path of which project data exist.
Cannot access the project file.	Access to the specified project data could not be made.	Check the access privilege of the project data (e.g. a9gotp.got).
Manual file cannot be found. Please install manuals.	<ul style="list-style-type: none"> GT Manual is not installed. GT Manual is not installed correctly. 	After uninstalling GT Manual, reinstall it.
Unsupport PLC is selected.	CPU type setting of GT Simulator2 was the unsupported CPU type.	Change the CPU type and restart monitoring.
Failed in reading. Please retry after checking the following. <ul style="list-style-type: none"> Capacity of free disk. File access privilege of the project file. Project file is illegal or destroyed. 	Not enough free disk space.	Increase the free space of the hard disk to 100MB or more.
	GT Simulator2 cannot access the project data.	Check the access privilege of the project data (e.g. a9gotp.got).
	<ul style="list-style-type: none"> This data is not for GOT project. The project data was corrupted. 	Use a correct project data or normal project data.
Failed in reading. Please retry after checking the following. <ul style="list-style-type: none"> Data size and number of the data. Capacity of free disk.. Please close Dialogue if it is displayed. Waiting for 'Offline mode'. Please wait at several seconds. File access privilege of the project file. Project file is illegal or destroyed. 	Screen data size is too large.	Check the screen data size.  Section 3.1 GOT that Can Be Simulated)
	Not enough user memory.	After deleting all, download all user data.
	Not enough free disk space.	Increase the free space of the hard disk to 200MB or more.
	Since the message such as "This function can't be used now." is displayed on the screen, read cannot be performed.	After choosing "OK" in the dialog box to erase the on-screen message, perform read again.
	Waiting for the end processing of the script function. (Waiting for offline mode)	After the message "Off-Line processing execution" appears on the screen, perform read again.
	GT Simulator2 cannot access the project data.	Check the access privilege of the project data (e.g. a9gotp.got).
	<ul style="list-style-type: none"> This data is not for GOT project. The project data was corrupted. 	Use a correct project data or normal project data.
Fall to delete recipe files. <ul style="list-style-type: none"> Please close recipe file if it is opened. Check the file access privilege. 	Failed in erasing user data after loading screen data.	<ul style="list-style-type: none"> If there is a user's data opened by another software, close that file. Check the file access privilege.

2 Error messages displayed when Device Monitor is used.

The same error messages are displayed as those of when [GOT1000 series (GT15/GT11) simulator] is used.





 Section 8.2 Error Message (GOT1000 series (GT16/GT15/GT11) simulator)

APPENDICES

Appendix 1 Examples of using GT Simulator2

The sample project data supplied by GT Designer2 is used to explain how to use GT Simulator2 specifically. As GT Designer2, GT Simulator2, GX Developer and GX Simulator are used in these examples, install these software programs into the personal computer.

Refer to the following manuals to install and startup the software.

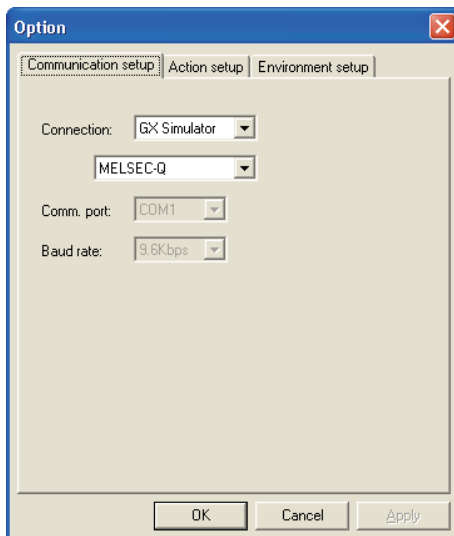
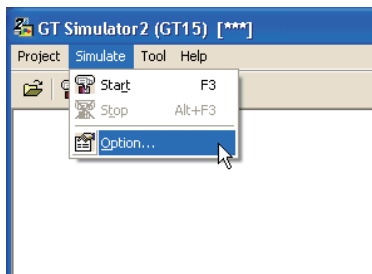
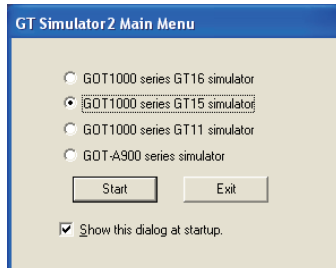
Software	Reference manual
GT Designer2	<ul style="list-style-type: none">▪ For GOT 1000 (GT16/GT15/GT11) series  GT Designer2 Version□ Basic Operation/Data Transfer Manual (Section 2.2 Installing the Software Programs)
GT Simulator2	<ul style="list-style-type: none">▪ For GOT-A900 series  GT Works2 Version□ /GT Designer2 Version□ Operating Manual (Startup•Introductory Manual)
GX Developer	 GX Developer Version□ Operating Manual (Start up)
GX Simulator	 How to install MELSOFT series *1

*1 Packed with the CD-ROM of GX Simulator

Appendix 1.1 Simulating the sample project data

Use the following procedure to perform simulation on GT Simulator using the GT Designer2 (For GT15).

1 Executing the simulation



(Continued to next page)

Start of GT Simulator2

- 1 The screen on the left pops up after startup GT Simulator.
Select [GOT1000 series GT15 simulator] and click the [Start] button.

Setting of [Option]

- 2 Select [Simulate] → [Option]

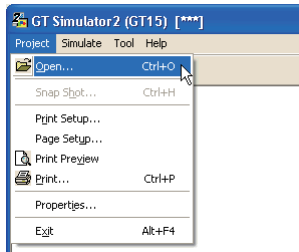
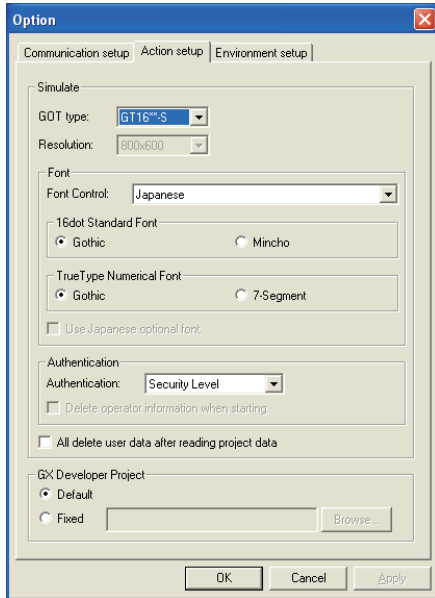
- 3 Setting the options.

Click the Communication setup tab and set the following contents.

Setting contents

[Connection] : [GX Simulator]
: [MELSEC-Q]

(From the previous page)



(Continued to next page)

- 4 Click the Action tab and set the following contents.

Click the button after setting.

Setting contents

[GOT type] : [GT15**-V]

[Font Control] : [Japanese]

[16dot Standard Font]
: [Gothic]

[TrueType Numerical Font]
: [Gothic]

[Authentication] : [Security Level]

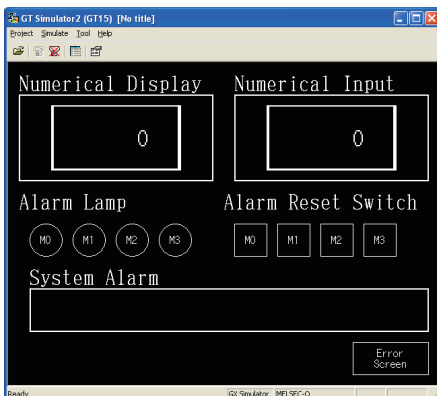
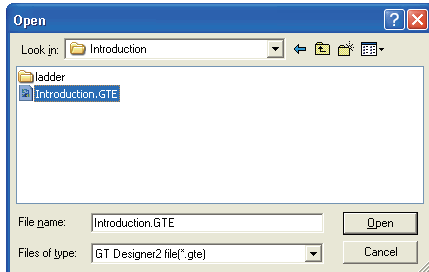
[KANA KANJI Conversion]
: [Standard]

[All delete user data after reading project data]
: Unchecked

[GX Developer project]
: [Default]

- 5 Select [Project] → [Open] menu.

(From the previous page)



- 6 Select the sample project data to be read to GT Simulator2.

The sample data (Introduction.GTE) for GOT1000 series is stored in the following folder.

<Folder>

(Install destination folder^{*1}

\GTD2\Example1000\Introduction

<File name>

Introduction.GTE

Click the button after selecting.

*1 Default is "C:\Program Files\MELSOFT".

- 7 The left screen is displayed.

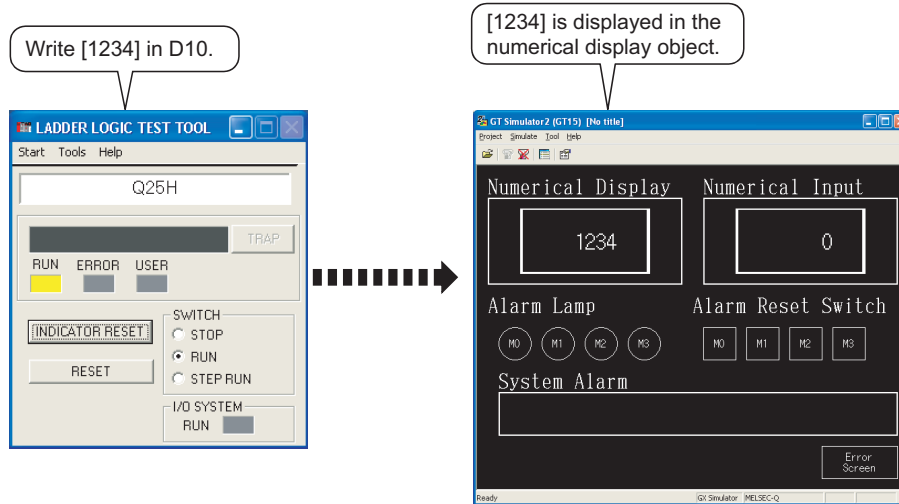
Click the button.

- 8 After completion of reading, the sample project data appears and simulation starts.

2 Performing the debug

(1) Operation overview

Write the value on the device memory of GX Simulator and confirm whether it is displayed on GT Simulator2 properly.



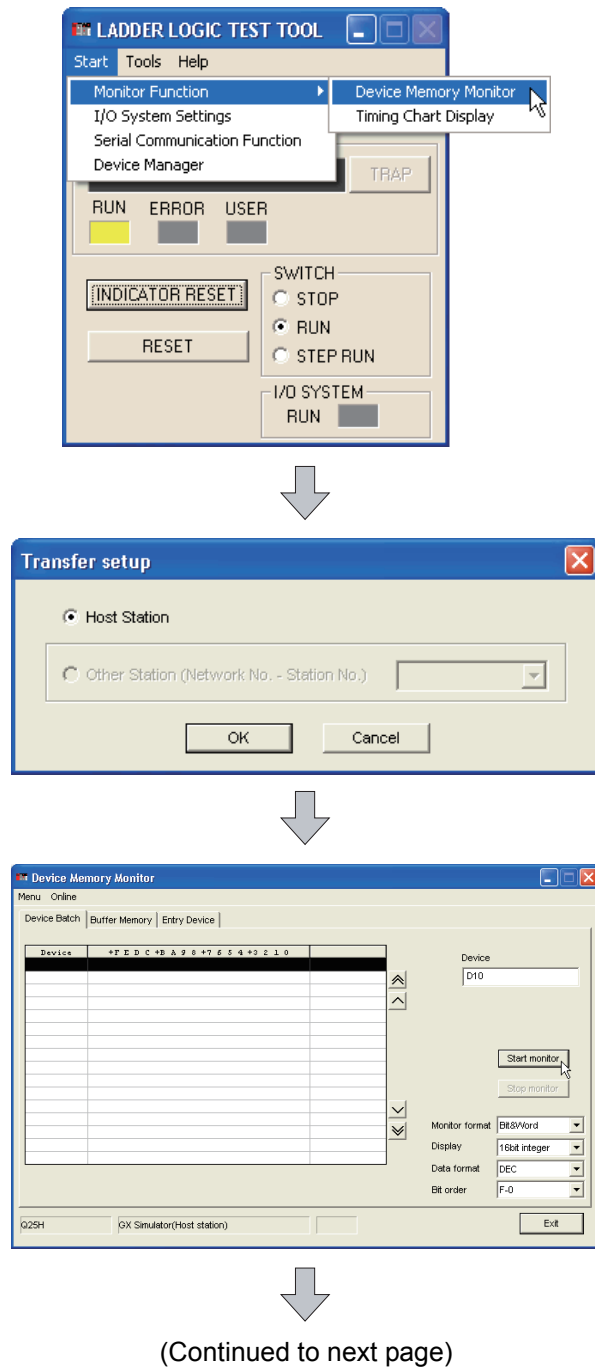
Remark

For GX Simulator

This section describes with using GX Simulator Version 7.03D.

(Screens, menu items and others vary according to the version of GX Simulator.)

(2) Operation procedure



Start of the device memory monitor

- 1 Select [Start] → [Monitor Function] → [Device Memory Monitor] menu of GX Simulator.

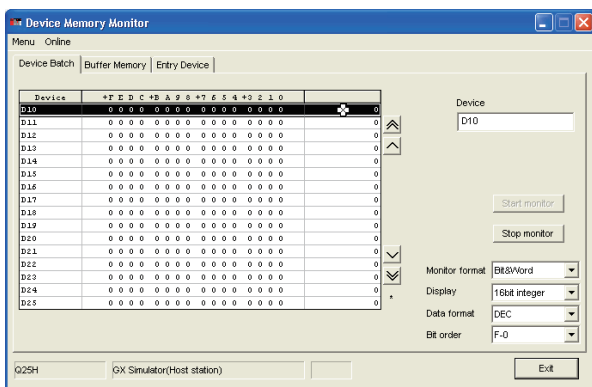
Determination of the connect destination

- 2 The connect destination setting dialog box is displayed.
Select [Host] and click the **OK** button.

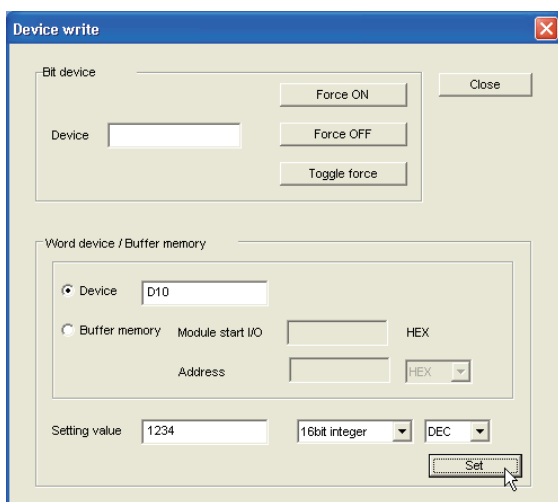
Input of the device value

- 3 The device memory monitor dialog box is displayed.
Select the device multiple monitor tab. After inputting [D10] to [Device], click the **Start monitor**.

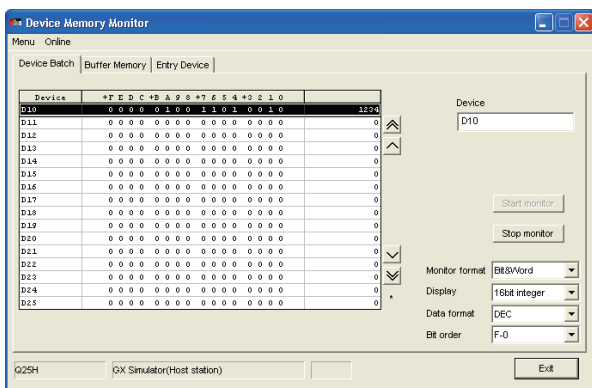
(From the previous page)



- 4 The monitor of device starts after the operation of 3. Double-click the column of which [Device] is [D10].



- 5 The device writing dialog box is displayed. Input [1234] to [Setting value] and click the **Set**.

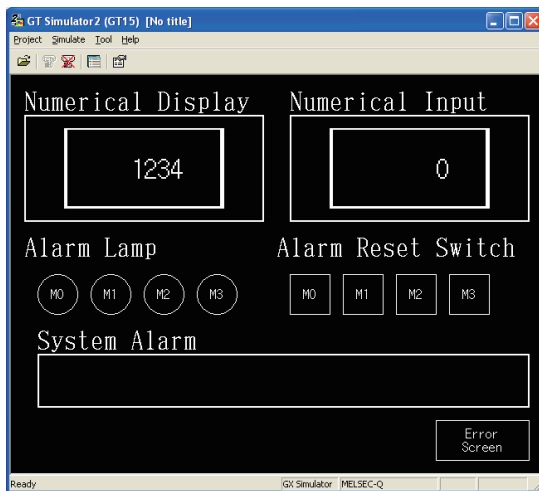


- 6 After the operation of 5, the value (1234) is written in D10 of GX Simulator.



(Continued to next page)

(From the previous page)



Display confirmation of GT Simulator2

- 7 After the operation of 5, [1234] is displayed in the numerical display object of GT simulator2.

Remark

Changing the device value from GT Simulator2

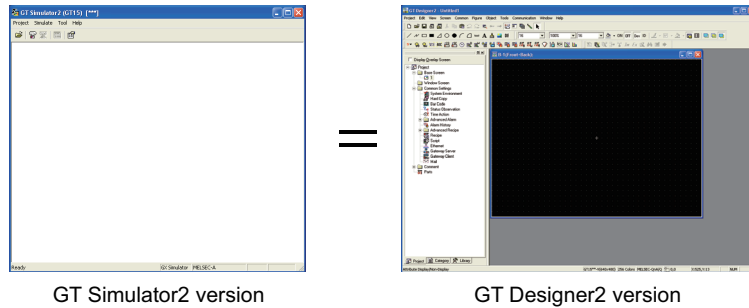
Changing the device value on simulating is also available by using the Device Monitor of GT Simulator.

For details of Device Monitor, refer to the following.

 Chapter 7 DEVICE MONITOR

Appendix 2 Applicable Project Data

Use the same version of GT Simulator2 as that of GT Designer2 that the project data is created. When the version of GT Simulator is different from that of GT Designer2, install the same version of GT Simulator2 and GT Designer2.




Hint!

When using project data created on GT Designer2 that the version is earlier than that of GT Simulator2

Open the project data on GT Designer2 that the version is the same as that of GT Simulator2, and save the project data.

Refer to the following for point of cautions on using the project data converted with GT Designer before SW3D5C-GOTR-Pack or with GT Converter.

 Section 3.3.1 Precautions for using the GT Simulator2

Appendix 3 List of Functions Added by GT Simulator2 Version Upgrade



For version upgrade of GT Simulator2

The GT Simulator2 complies with the GT Designer2 version upgrade (Common settings/object functions/GOT main unit functions).

For version upgrade of GT Simulator2, refer to the following manuals.

• For GOT1000 (GT16/GT15/GT11) series

☞ GT Designer2 Version □ Screen Design Manual

• For GOT-A900 series

☞ GT Designer2 Version □ Reference Manual

1 Added function

The following functions are added to GT Simulator2 Version2.

Item	Description	Version of GT Simulator2
GOT1000 series (GT15)	Project data for GT15 can be simulated.	2.09K
GOT1000 series (GT11)	Project data for GT11 can be simulated.	2.18U
GOT1000 series (GT15**-X)	Project data for GT15**-X can be simulated.	
GOT1000 series	MELDAS C6* is added to the controller.	
GOT1000 series (GT15)	Object script error information can be displayed.	
GOT1000 series (GT15**-X)	Full screen mode function is added.	2.27D
GOT1000 series	Setting of Font Control is available.	
GOT1000 series (GT15**-Q)	Project data for GT15**-Q can be simulated.	2.32J
GOT1000 series	Storage destination of a hard copy data (file storage) is stored into the folder set in GT Designer2.	2.43V
GOT1000 Series (GT155*-V)	Project data for GT155*-V can be simulated.	2.58L
GOT1000 Series	The settings regarding the authentication are added to the action setup.	
GOT1000 series (GT16)	Project data for GT16 can be simulated.	2.90U
GOT 1000 series	The following PLC CPUs are added to the controller. Q00UCPU, Q00UCPU, Q01UCPU, Q02UCPU, Q03UDCPU, Q04UDHCPU, Q06UDHCPU, Q10UDHCPU, Q13UDHCPU, Q20UDHCPU, Q26UDHCPU, Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q10UDEHCPU, Q13UDEHCPU, Q20UDEHCPU, Q26UDEHCPU	2.96A
GOT1000 series (GT16)	Project data for GT16**-V can be simulated.	

INDEX

[A]		Error message	
Action setup		GOT1000 series (GT16/GT15/GT11) simulator	
GOT 1000 series (GT16/GT15/GT11) simulator	5-7	GOT-A900 series simulator	8-6
GOT-A900 series simulator	5-12	Examples of using GT Simulator2	App-1
Applicable CPU	2-5	Executing a simulation	5-15
Applicable project data	App-9	Exit	4-4,5-24
[B]		[F]	
Basic operation	4-1	Functions	6-1
[C]		[G]	
Cable	2-9	GOT that can be simulated	3-1
Communication setup		GX Simulator	2-4
GOT1000 series (GT16/GT15/GT11) simulator	5-5	[H]	
GOT-A900 series simulator	5-10	Hard disk space	2-3
Connection type	2-7	How to use HELP	4-5
Converter	2-10	[M]	
[D]		Main menu	5-3
Device monitor	7-1	Menu bar	4-3
Cascade	7-15	[O]	
Changing Device Monitor screen	7-16	Object script errorr	6-9,6-10
Delete device	7-14	Open a GT Designer2 file.	4-4,5-17
Exit	7-11	Operating procedure	
Free Registration screen	7-14	When connecting to GX Simulator2	5-1
Functions	7-12	When connecting to PLC CPU	5-2
Menu bar	7-4	Operation	5-23
Horizontal	7-15	Option	4-4,5-4
Operation environment	2-3	[P]	
Operation method	7-9	Personal computer	2-3
Precautions	7-2	Precautions	
Register device	7-14	Precautions for connecting PLC CPU	3-18
Restart	7-11	Precautions for connecting to GX Simulator	3-17
Screen configuration	7-3	Precautions for using the GT Simulator2	3-10
Setting	7-17	Print	6-2
Sort	7-12	Property	6-6
Starts	7-10	[R]	
Status bar	7-8	Read Monitor data	5-19
Stop	7-11		
Testing device value	7-13		
Tool Bar	7-5		
Type	7-6		
Device ranges that can be simulated			
Connecting to GX Simulator	3-20		
Connecting to PLC CPU	3-19		
[E]			
Environment setup			
GOT 1000 series (GT16/GT15/GT11) simulator	5-9		
GOT-A900 series simulator	5-14		

[S]

Screen configuration	4-1
Script error	6-8
Snap shot	6-1
Specifications	3-1
Start.....	4-4,5-3,5-15
System alarm	6-7
System configuration	
When installing GT Simulator2.....	2-1
When executing GT Simulator2	2-2

[T]

Tool bar	4-4
Troubleshooting	8-1
Troubleshooting for file save problems	8-1

Microsoft, Windows, Windows NT, Windows Vista are registered trademarks of Microsoft Corporation in the United States and other countries.

Adobe and Adobe Reader are registered trademarks of Adobe Systems Incorporated.

Pentium and Celeron are a registered trademarks of Intel Corporation in the United States and other countries.

Ethernet is a trademark of Xerox Co., Ltd. in the United States.

MODBUS is a trademark of Schneider Electric SA.

Other company and product names herein are either trademarks or registered trademarks of their respective owners.

HEADQUARTERS

MITSUBISHI ELECTRIC EUROPE B.V. EUROPE
 German Branch
 Gothaer Straße 8
D-40880 Ratingen
 Phone: +49 (0)2102 / 486-0
 Fax: +49 (0)2102 / 486-1120

MITSUBISHI ELECTRIC EUROPE B.V. CZECH REPUBLIC
 Czech Branch
 Avenir Business Park, Radlická 714/113a
CZ-158 00 Praha 5
 Phone: +420 (0)251 551 470
 Fax: +420 (0)251-551-471

MITSUBISHI ELECTRIC EUROPE B.V. FRANCE
 French Branch
 25, Boulevard des Bouvets
F-92741 Nanterre Cedex
 Phone: +33 (0)1 / 55 68 55 68
 Fax: +33 (0)1 / 55 68 57 57

MITSUBISHI ELECTRIC EUROPE B.V. IRELAND
 Irish Branch
 Westgate Business Park, Ballymount
IRL-Dublin 24
 Phone: +353 (0)1 4198800
 Fax: +353 (0)1 4198890

MITSUBISHI ELECTRIC EUROPE B.V. ITALY
 Italian Branch
 Viale Colleoni 7
I-20041 Agrate Brianza (MB)
 Phone: +39 039 / 60 53 1
 Fax: +39 039 / 60 53 312

MITSUBISHI ELECTRIC EUROPE B.V. SPAIN
 Spanish Branch
 Carretera de Rubí 76-80
E-08190 Sant Cugat del Vallés (Barcelona)
 Phone: 902 131121 // +34 935653131
 Fax: +34 935891579

MITSUBISHI ELECTRIC EUROPE B.V. UK
 UK Branch
 Travellers Lane
UK-Hatfield, Herts. AL10 8XB
 Phone: +44 (0)1707 / 27 61 00
 Fax: +44 (0)1707 / 27 86 95

MITSUBISHI ELECTRIC CORPORATION JAPAN
 Office Tower "Z" 14 F
 8-12,1 chome, Harumi Chuo-Ku
Tokyo 104-6212
 Phone: +81 3 622 160 60
 Fax: +81 3 622 160 75

MITSUBISHI ELECTRIC AUTOMATION, Inc. USA
 500 Corporate Woods Parkway
Vernon Hills, IL 60061
 Phone: +1 847 478 21 00
 Fax: +1 847 478 22 53

EUROPEAN REPRESENTATIVES

AUSTRIA
 GEVA
 Wiener Straße 89
AT-2500 Baden
 Phone: +43 (0)2252 / 85 55 20
 Fax: +43 (0)2252 / 488 60

BELARUS
 TEHNIKON
 Oktyabrskaya 16/5, Off. 703-711
BY-220030 Minsk
 Phone: +375 (0)17 / 210 46 26
 Fax: +375 (0)17 / 210 46 26

BELGIUM
 ESCO DRIVES & AUTOMATION
 Culliganlaan 3
BE-1831 Diegem
 Phone: +32 (0)2 / 717 64 30
 Fax: +32 (0)2 / 717 64 31

BELGIUM
 Koning & Hartman b.v.
 Woluwelaan 31
BE-1800 Vilvoorde
 Phone: +32 (0)2 / 257 02 40
 Fax: +32 (0)2 / 257 02 49

BOSNIA AND HERZEGOVINA
 INEA BH d.o.o.
 Aleja Lipa 56
BA-71000 Sarajevo
 Phone: +387 (0)33 / 921 164
 Fax: +387 (0)33 / 524 539

BULGARIA
 AKHNATON
 4 Andrej Ljapchev Blvd. Pb 21
BG-1756 Sofia
 Phone: +359 (0)2 / 817 6004
 Fax: +359 (0)2 / 97 44 06 1

CROATIA
 INEA CR d.o.o.
 Losinjska 4 a
HR-10000 Zagreb
 Phone: +385 (0)1 / 36 940 -01 / -02 / -03
 Fax: +385 (0)1 / 36 940 -03

CZECH REPUBLIC
 AutoCont C.S. s.r.o.
 Technologická 374/6
CZ-708 00 Ostrava-Pustkovec
 Phone: +420 595 691 150
 Fax: +420 595 691 199

CZECH REPUBLIC
 B:ELECTRIC, s.r.o.
 Mladoboleslavská 812
CZ-197 00 Praha 19 - Kbely
 Phone: +420 286 850 848, +420 724 317 975
 Fax: +420 286 850 850

DENMARK
 Beijer Electronics A/S
 Lykkegårdsvej 17, 1.
DK-4000 Roskilde
 Phone: +45 (0)46 / 75 76 66
 Fax: +45 (0)46 / 75 56 26

ESTONIA
 Beijer Electronics Eesti OÜ
 Pärnu mnt.160i
EE-11317 Tallinn
 Phone: +372 (0)6 / 51 81 40
 Fax: +372 (0)6 / 51 81 49

FINLAND
 Beijer Electronics OY
 Jaakonkatu 2
FIN-01620 Vantaa
 Phone: +358 (0)207 / 463 500
 Fax: +358 (0)207 / 463 501

GREECE
 UTECO A.B.E.E.
 5, Mavrogenous Str.
GR-18542 Piraeus
 Phone: +30 211 / 1206 900
 Fax: +30 211 / 1206 999

HUNGARY
 MELTRADE Ltd.
 Fertő utca 14.
HU-1107 Budapest
 Phone: +36 (0)1 / 431-9726
 Fax: +36 (0)1 / 431-9727

LATVIA
 Beijer Electronics SIA
 Vestienas iela 2
LV-1035 Riga
 Phone: +371 (0)784 / 2280
 Fax: +371 (0)784 / 2281

LITHUANIA
 Beijer Electronics UAB
 Savanorių Pr. 187
LT-02300 Vilnius
 Phone: +370 (0)5 / 232 3101
 Fax: +370 (0)5 / 232 2980

EUROPEAN REPRESENTATIVES

MALTA
 ALFATRADE Ltd.
 99, Paola Hill
Malta- Paola PLA 1702
 Phone: +356 (0)21 / 697 816
 Fax: +356 (0)21 / 697 817

MOLDOVA
 INTEHSIS srl
 bld. Traian 23/1
MD-2060 Kishinev
 Phone: +373 (0)22 / 66 4242
 Fax: +373 (0)22 / 66 4280

NETHERLANDS
 HIFLEX AUTOM.TECHNIEK B.V.
 Wolweverstraat 22
NL-2984 CD Ridderkerk
 Phone: +31 (0)180 - 46 60 04
 Fax: +31 (0)180 - 44 23 55

NETHERLANDS
 Koning & Hartman b.v.
 Haarerbergweg 21-23
NL-1101 CH Amsterdam
 Phone: +31 (0)20 / 587 76 00
 Fax: +31 (0)20 / 587 76 05

NORWAY
 Beijer Electronics AS
 Postboks 487
NO-3002 Drammen
 Phone: +47 (0)32 / 24 30 00
 Fax: +47 (0)32 / 84 85 77

POLAND
 MPL Technology Sp. z o.o.
 Ul. Krakowska 50
PL-32-083 Balice
 Phone: +48 (0)12 / 630 47 00
 Fax: +48 (0)12 / 630 47 01

ROMANIA
 Sirius Trading & Services srl
 Aleea Lacul Morii Nr. 3
RO-060841 Bucuresti, Sector 6
 Phone: +40 (0)21 / 430 40 06
 Fax: +40 (0)21 / 430 40 02

SERBIA
 Craft Con. & Engineering d.o.o.
 Bulevar Svetog Cara Konstantina 80-86
SER-18106 Nis
 Phone: +381 (0)18 / 292-24-4/5
 Fax: +381 (0)18 / 292-24-4/5

SERBIA
 INEA SR d.o.o.
 Izletnicka 10
SER-113000 Smederevo
 Phone: +381 (0)26 / 617 163
 Fax: +381 (0)26 / 617 163

SLOVAKIA
 AutoCont Control s.r.o.
 Radlinského 47
SK-02601 Dolny Kubin
 Phone: +421 (0)43 / 5868210
 Fax: +421 (0)43 / 5868210

SLOVAKIA
 CS MTrade Slovensko, s.r.o.
 Vajanského 58
SK-92101 Piestany
 Phone: +421 (0)33 / 7742 760
 Fax: +421 (0)33 / 7735 144

SLOVENIA
 INEA d.o.o.
 Stegne 11
SI-1000 Ljubljana
 Phone: +386 (0)1 / 513 8100
 Fax: +386 (0)1 / 513 8170

SWEDEN
 Beijer Electronics AB
 Box 426
SE-20124 Malmö
 Phone: +46 (0)40 / 35 86 00
 Fax: +46 (0)40 / 35 86 02

SWITZERLAND
 Econotec AG
 Hinterdorfstr. 12
CH-8309 Nürensdorf
 Phone: +41 (0)44 / 838 48 11
 Fax: +41 (0)44 / 838 48 12

TURKEY
 GTS
 Bayraktar Bulvarı Nutuk Sok. No:5
TR-34775 Yukari Dudullu-Umraniye-ISTANBUL
 Phone: +90 (0)216 526 39 90
 Fax: +90 (0)216 526 39 95

UKRAINE
 CSC Automation Ltd.
 4-B, M. Raskovoyi St.
UA-02660 Kiev
 Phone: +380 (0)44 / 494 33 55
 Fax: +380 (0)44 / 494-33-66

EURASIAN REPRESENTATIVES

KAZAKHSTAN
 Kazpromautomatiks Ltd.
 Mustafina Str. 7/2
KAZ-470046 Karaganda
 Phone: +7 7212 / 50 11 50
 Fax: +7 7212 / 50 11 50

MIDDLE EAST REPRESENTATIVES

ISRAEL
 ILAN & GAVISH Ltd.
 24 Shenkar Str., Kiryat Arie
IL-49001 Petah-Tiqva
 Phone: +972 (0)3 / 922 18 24
 Fax: +972 (0)3 / 924 0761

LEBANON
 CEG INTERNATIONAL
 Cebaco Center/Block A Autostrade DORA
Lebanon - Beirut
 Phone: +961 (0)1 / 240 430
 Fax: +961 (0)1 / 240 438

AFRICAN REPRESENTATIVE

SOUTH AFRICA
 CBI Ltd.
 Private Bag 2016
ZA-1600 Isando
 Phone: +27 (0)11 / 928 2000
 Fax: +27 (0)11 / 392 2354