<u>Mitsubishi Simple Motion Module</u> <u>MELSEC-Q Series</u> <u>QD77GF16</u>

Sample Screen Manual

Mitsubishi Electric Corporation

Using the Samples

The sample screen data and files such as the instruction manual can be used upon agreement to the following matters.

- (1) This data is available for use by customers currently using or considering use of Mitsubishi products.
- (2) The intellectual property rights of the files provided by Mitsubishi (hereinafter referred to as the "Files") belong to Mitsubishi.
- (3) Alteration, reproduction, transfer or sales of the Files is prohibited. This does not apply when the content, in part or full, is used for Mitsubishi products incorporated in a device or system created by the customer. Furthermore, this does not apply to the transfer, reproduction, reference or change of layout in the specifications, designs or instruction manuals of built-in products prepared by the customer using Mitsubishi products.
- (4) Mitsubishi will not be held liable for any damages resulting from the use of the Files or the data extracted from the Files. The customer is responsible for all use.
- (5) If any usage conditions are appended to the Files, those conditions must be observed.
- (6) The Files may be deleted or the contents changed without prior notice.
- (7) When using the Files, please always read the corresponding manuals and related manuals indicated therein. Please pay special attention to safety, and correctly handle the product.

CONTENTS

R	EVISIC	DNS	4
1.	OU	TLINE	5
2.	SYS	STEM CONFIGURATION	5
3.	GO	Т	5
	3.1	System Applications That Are Automatically Selected	5
	3.2	Controller Setting of Screen Design Software	5
	3.3	Ethernet Setting of Screen Design Software	6
	3.4	Overlap Window Setting of Screen Design Software	6
4.	SIM	IPLE MOTION MODULE	6
	4.1	Start I/O Number of Module	6
5.	SCI	REEN SPECIFICATIONS	6
	5.1	Display Language	6
	5.2	Screen List/Transition	6
	5.2. 5.2	Screen List/Transition (common) Screen List/Transition (individual)	6 7
	53	Explanation of Screens	
	5.3.	1 Menu (B-30001)	9
	5.3.	2 Operation Monitor (B-30002)	10 11
	5.3.	4 Axis Monitor 1/4 (B-30004)	
	5.3.	5 Axis Monitor 2/4 (B-30005)	
	5.3. 53	.6 Axis Monitor 3/4 (B-30006)	14 15
	5.3.	8 Cam Auto-generation Function (B-30008)	
	5.3.	9 Error & Warning History (B-30010)	17
	5.3.	10 Manual Display (B-30500)	
	5.3.	12 Language Setting (W-30002)	20
	5.3.	.13 Clock Setting (W-30003)	22
	5.3.	14 Cam Auto-generation Check Screen (W-30010)	23
	5.4	Device List	24
	5.4. 5.4	1 Devices of the controller	24 25
	5.5	Comment List	26
	5.6	Scrint List	
	5.6.	1 Project script	
	5.6.	2 Object script	27
7.	OTI	HERS	
	7.1	Changing Start I/O Number	30

REVISIONS

Sample Screen Manual

Date	Control No.*	Description
2014/1	BCN-P5999-0179	First edition
2015/2	BCN-P5999-0179-2	Device Specification for Document ID
2015/6	BCN-P5999-0179-2a	Project data improved

* The Control No. is noted at the lower right of each page.

Project data

*

Date	Project data	GT Designer3*	Description
2014/1	MITSUBISHI_QD77GF16_V_Ver1_E.GTX	1.105K	First edition
2015/2	MITSUBISHI_QD77GF16_V_Ver2_E.GTX	1.126G	Device Specification for Document ID
2015/6	MITSUBISHI_QD77GF16_V_Ver2a_E.GTX	1.128J	Incorrect description on the screen has been revised.

The version number of screen design software used to create the project data is listed. Please use the screen design software with the listed version or later.

1. OUTLINE

This manual explains the sample screens of GOT2000 connected to a MELSEC-Q Series PLC (Q06UDEHCPU) via Ethernet. The sample screens can be used for monitoring the status of each axis and the buffer memory (including current values and alarms) of Simple Motion Module (QD77GF16).

2. SYSTEM CONFIGURATION



- *1: The SD card is used for the document display function.
- *2: The battery is used for the backup of the clock data. (The battery is provided with the GOT as standard.)
- *3: For more details about the cable, please refer to the "GOT2000 Series Connection Manual (Mitsubishi Products)".

3. GOT

3.1 System Applications That Are Automatically Selected

Туре	System application name		
Standard Eurotian	Standard Syste	em Applicat	ion
Standard Function	Standard Font		Japanese
Communication Driver	Ethernet Conn	ection	Ethernet (MELSEC), Q17nNC, CRnD-700, Gateway
	Standard Font		Chinese (Simplified)
	Outline Font		Alphanumeric/Kana
Extended Function		Gothic	Japanese (Kanji)
			Chinese (Simplified)
	Document Disp	olay	

3.2 Controller Setting of Screen Design Software

Detail Setting Item Set value Remarks GOT NET No. 1 GOT Station No. 2 GOT Ethernet Setting Refer to table below GOT Communication Port No. 5001 Retry (Times) 3 3 Startup Time (Sec) 3 Timeout Time (Sec)

GOT Ethernet Setting

Delay Time (ms)

Item	Set value	Remarks
Reflect GOT Ethernet setting in the GOT	Checked	
GOT IP Address	192.168.3.18	
Subnet Mask	255.255.255.0	
Default Gateway	0.0.0.0	
Peripheral S/W Communication Port No.	5015	
Transparent Port No.	5014	

0

3.3 Ethernet Setting of Screen Design Software

	Host	Net No.	Station	Unit Type	IP Address	Port No.	Communication
1	*	1	1	QnUD(P)V/QnUDEH	192.168.3.39	5006	UDP

3.4 Overlap Window Setting of Screen Design Software

[Close the window when switching base screens] of [Detail Setting] for overlap window in [Screen Switching/Window] is enabled to close the window when switching base screens.

4. SIMPLE MOTION MODULE

4.1 Start I/O Number of Module

The module's start I/O number is set to 0H. For more details about changing the start I/O number, please refer to "7.1 Changing Start I/O Number".

5. SCREEN SPECIFICATIONS

5.1 Display Language

The language of the text displayed on the screen can be switched between Japanese, English, and Chinese (Simplified). The text strings in each language are registered in the columns No. 1 to No. 3 in the comment group No. 500 as shown below. When the column No. is set in the language switching device, the language corresponding to the column No. will appear.

Column No.	Language		
1	1 English		
2	Japanese		
3	Chinese (Simplified)		

5.2 Screen List/Transition

5.2.1 Screen List/Transition (common)







5.3 Explanation of Screens

5.3.1 Menu (B-30001)



	Operation Man	itor			6
	Operation Mon	itor		12/05/2013 r0:01	
-	Ax. 1 0	Axis Feed Rate	Emerger	stop input is ON	
	Ax. 2 0	0	Chart No.	Stop input is Ork.	
	Ax. 3 0 Ax. 4 0		Ax. 1 0	Positioning comp.	
	[µm]:×10-¹ [degree]:×10-⁵	[mm/min]:×10-2 [degree/min]:×10-3	Ax.2 0	Positioning comp.	
	Note [inch]: ×10-5 [pulse]: ×1	: ×10-2 [inch/min]: ×10-3 [pu]se/sec]: ×1	Ax.3 0 Ax.4 0	Positioning comp. Positioning comp.	
ļ	Ax. 1 Status Unconnectio	on/Amp. power OFF	Control Sys	tem Int. Acc. Dec.	
-	Err.: 0 Warning: Status Unconnection	0 Mcode: 0	Ax. 1	Axis Time Time	
,	Ax.2 Err.: 0 Warning:	0 Mcode: 0	Ax.2		
L. L	Ax.3 Status Unconnection	on/Amp. power OFF	Ax.3		
-	Status Unconnection	on/Amp. power OFF			
Ĺ	Err.: 0 Warning:	0 Mcode: 0		Prev Avis Nevt Avis	
			Cam Auto Error &		
	Menu Operation Monitor	O Monitor Axis Monitor	Generation Warning Function History	Back	
		3		4 5-	
Outline					
This is the QD7	7GF16 operation mor	itor screen.			
Description	a fallowing about avia	1 to ovia 16			
Current	Feed Val., Axis Feed	Rate			
 Status, Emorge 	Err., Warning, Mcode				
 Start No 	o., Operation Pattern				
Control Switches as	System, Int. Axis, Acc	c. Time, Dec. Time			
3. Switches to	each screen. The bl	ue switch indicates	s the currently di	splayed screen, thus	selecting this
switch will r	not switch the screen.	screen switching			
5. Switches to	the previously opene	ed screen.			
 Displays the Opens the 	e current date and tin	ne. Touch the area	to open the [Clo	ck Setting] window.	
Remarks					
 If a system al 	arm occurs, the alarm	n message will app	ear at the botton	n of the screen. When	touching the
lower. When the	ouching the other particular	rt of the message,	the [Alarm Rese	s in the order of upper t] window appears.	, center, and
		0.0	-		

5.3.3 I/O Monitor (B-30003)

	I/O Monitor			12 /05 /20 12 12 02	5
1_	00 READY 01 Synchronization 03 04 05 06 07	X 03 04 06 00 00 00 00 00 00 00 00 00 00 00 00	00 PLC READY 01 All Axis Servo ON 02 03 04 05 06 07	Y 08 09 0A 08 00 00 00 00 00 00 00 00 00	6
	10 Axis1 BUSY 11 Axis2 BUSY 12 Axis3 BUSY 13 Axis4 BUSY 14 Axis5 BUSY 15 Axis6 BUSY 16 Axis7 BUSY 17 Axis8 BUSY	X 18 Axis9 BUSY 19 Axis10 BUSY 14 Axis11 BUSY 18 Axis12 BUSY 10 Axis13 BUSY 10 Axis14 BUSY 11 Axis15 BUSY 15 Axis16 BUSY	10 Axis1 Pos. Start 11 Axis2 Pos. Start 12 Axis3 Pos. Start 13 Axis4 Pos. Start 14 Axis5 Pos. Start 15 Axis6 Pos. Start 16 Axis7 Pos. Start 17 Axis8 Pos. Start	Y 18 Axis9 Pos. Start 19 Axis10 Pos. Start 14 Axis11 Pos. Start 18 Axis12 Pos. Start 10 Axis13 Pos. Start 10 Axis14 Pos. Start 16 Axis15 Pos. Start 17 Axis16 Pos. Start	
	Menu Operation Monitor	1/O Monitor Axis Monitor	Cam Auto Generation Function History	Back	
Outline This is the QE	077GF16 I/O monito	or screen.			
 Description 1. Displays 2. Switches switch wi 3. Shows u 4. Switches 5. Displays 6. Opens the 	the input/output sta to each screen. The ill not switch the scr nused switches for to the previously of the current date an the [Language Settin	tus. he blue switch indica een. base screen switchin pened screen. d time. Touch the are g] window.	tes the currently dis ig. ea to open the [Cloc	played screen, thus s	selecting this
Remarks If a system left end of lower. Whe 	alarm occurs, the a the message, the d in touching the othe	larm message will a isplay position of the r part of the messag	ppear at the bottom message changes e, the [Alarm Reset]	of the screen. When in the order of upper window appears.	touching the , center, and

5.3.4 Axis Monitor 1/4 (B-30004)

Axis Monitor 1/4	
Ax.1 0 0 In speed 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Ax.2 0 0 Cont. mag 1 1 1 Ax.3 0 0 In speed 0	
Ax.4 0 0 chg. proc. 0 0 0 1: In	
Note	
Tarract Stid Current Stid Eand Pate	
Ax. 1 0 0 0	
Ax.2 O O O Ax.3 O O O O	
Ax. 4 0 0 0 0	
Note [inch/min]: ×10* [degree/min]: ×10* [degree/min]: ×10* [agree/min]: ×10* [pulse/sec]: ×1	
Prev. Axis Next Axis Monitor 4/4 Axis Monitor 2/4	
Operation work an Axis Cam Auto Error &	
Menu Monitor VO Monitor Monitor Generation Warning Back Function History	
3-4-5-4	
Outline This is the ODZZCE16 axis monitor serses (1/4)	
This is the QD77GF To axis monitor screen (1/4).	
Description	
 Displays the following about axis 1 to axis 16. Target Value, Machine Feed Value 	
Target Spd., Current Spd., Feed Rate	
 In speed cont. flag, In speed chg. proc. Switches axes and axis monitor screens. 	
Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting the switch will not switch the screen.	nis
 Shows unused switches for base screen switching. 	
 Switches to the previously opened screen. Displays the current date and time. Touch the area to open the [Clock Setting] window. 	
7. Opens the [Language Setting] window.	
Remarks	
• If a system alarm occurs, the alarm message will appear at the bottom of the screen. When touching the left and of the message, the display position of the message changes in the order of upper context.	he
lower. When touching the other part of the message, the [Alarm Reset] window appears.	nu

5.3.5 Axis Monitor 2/4 (B-30005)

6
Special Start Data Special Start Repetition Counter 7
Instr. Code Instr. Para. Data No. Ax. 1 Ax.2 Ax.3 Ax.4 Ax. 1 0 0 0 0 0 0 0
Ax.2 0 0 0 Control System Repetition Counter
Ax.3 0 0 0 Ax.1 Ax.2 Ax.3 Ax.4 1 Ax.4 0
Note
Data Being Executed Instruction Code
Pointer Data No. No. Position 01: Condition start
Ax. 1 0 0 0 0 0 02: Wait start 03: Simultaneous start
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Ax.4 0 0 0 0 06: NEXT
Prev. Axis Next Axis Axis Monitor 1/4 Axis Monitor 3/4
Menu Operation VO Monitor Axis Cam Auto Error & Back
Monitor Monitor Function History
Outline
This is the QD77GF16 axis monitor screen (2/4).
 Displays the following about axis 1 to axis 16. Special Start Data (Instr. Code, Instr. Para., Data No.) Data Being Executed (1st Data Pointer, Pos. Data No., Block No.), Previous Position Special Start Repetition Counter, Control System Repetition Counter Switches axes and axis monitor screens. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen. Shows unused switches for base screen switching. Switches to the previously opened screen. Displays the current date and time. Touch the area to open the [Clock Setting] window. Opens the [Language Setting] window.
Remarks
 Remarks If a system alarm occurs, the alarm message will appear at the bottom of the screen. When touching the left end of the message, the display position of the message changes in the order of upper, center, and lower. When touching the other part of the message, the [Alarm Reset] window appears.

5.3.6 Axis Monitor 3/4 (B-30006)

6
Axis Monitor 3/4
OPR Actual Error
Ax. 1 0 0 0
Ax.2 0 0 0
Ax.3 0 0 0 0 1 Ax.4 0 0 0 0
[um]: ×10 ⁻¹ [degree]: ×10 ⁻⁵ Note [inch]: ×10 ⁻⁵ [pulse]: ×1
Number of Motor
Motor Rotation Current Value
Ax.1 0 0 Ax.2 0 0
Ax.3 0 0
Noto [r/min]: ×10 ⁻¹ [%]: ×10 ⁻¹
Prev. Axis Next Axis Axis Monitor 2/4 Axis Monitor 4/4
Operation Avia Cam Auto Error &
Menu Monitor I/O Monitor Generation Warning Back Monitor Function History
3-4-45-4
Outline
This is the QD77GF16 axis monitor screen (3/4).
Description
 Displays the following about axis 1 to axis 16.
 OPR Increment, Actual Present Val., Error Counter Val. Number of Motor Rotation, Motor Current Value
Servo Amplifier S/W No. Switches area and axis monitor screens
 Switches are and axis monitor screens. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this
switch will not switch the screen. 4. Shows unused switches for base screen switching.
5. Switches to the previously opened screen.
 Displays the current date and time. Touch the area to open the [Clock Setting] window. Opens the [Language Setting] window.
Remarks If a system alarm occurs, the alarm message will appear at the bottom of the screen. When touching the
left end of the message, the display position of the message changes in the order of upper, center, and
lower. when touching the other part of the message, the [Alarm Reset] window appears.

5.3.7 Axis Monitor 4/4 (B-30007)

1	6
Axis Monitor 4/4	i2/05/20 i3 :ri 8 💽
Parameter Error No.	Servo Status
Ax. 1 Ax. 2 Ax. 3 A 0 0 0 0	0 Zero Point Passed 0 0 0
<cc-link ie=""> 1 ∼ 64: P001 ~ P064</cc-link>	Ready ON O O O O Servicion ON O O O O O O
65 ~ 128 : PB01 ~ PB64 129 ~ 192 : PC01 ~ PC64	Servo Alarm O O O O O
193 ~ 256 : PD01 ~ PD64 257 ~ 320 : PE01 ~ PE64	Torque Limit O O O O Abs. Value Cleared O O O O
321 ~ 304 - FF01 ~ FF04 385 ~ 448 : P001 ~ P664 449 ~ 512 : PS01 ~ PS64	Warning O O O O Item Ax.1 Ax.2 Ax.3 Ax.4
513 ~ 576 : PLO1 ~ PL64	Regenerative 0 0 0 0
	Load Ratio [%]
	Load Ratio
	Peak 0 0 0 0
	Prev. Axis Next Axis Axis Monitor 3/4 Axis Monitor 1/4
	Cam Auto Error &
Menu Operation I/O Monitor	Axis Ionitor Generation Warning Back Function History
3_/	4 - 5 - 1
Outline	
This is the QD77GF16 axis monitor screen (4/4).	
 Description Displays the following about axis 1 to axis 1 Parameter Error No. Servo Status Regenerative Load Ratio, Actual Load R Switches axes and axis monitor screens. Switches to each screen. The blue switch in switch will not switch the screen. Shows unused switches for base screen sw Switches to the previously opened screen. Displays the current date and time. Touch th Opens the [Language Setting] window. 	6. Ratio, Peak Load Ratio Indicates the currently displayed screen, thus selecting this ritching. The area to open the [Clock Setting] window.
Remarks If a system alarm occurs, the alarm message is 	will appear at the bottom of the screen. When touching the
left end of the message, the display position of	of the message changes in the order of upper, center, and
lower. when touching the other part of the me	ssage, me [Alarm Reset] window appears.

Cam Auto-generati	on Function	12/05/20 13 13:08	6
1	ltem	Setting Value	7
	Cam Auto-generation Cam No.	0	
Sheet Synchronization Width	Cam Resolution	0	
	Sheet Length	0	
	Sheet Synchronization Width	0	
	Synchronous Axis Length	0	
Sheet Length	Synchronization Starting Point	0	
	Synchronous Section	0	_
	Acceleration Natio	Cam Generation	2
Menu Operation I/O Monit	or Axis Cam Auto Generation	Error & Back	
3 -	Monitor Function	History 4	
Outline			
This is the QD77GF16 cam auto-generation	on screen.		
Description			
 Sets parameters that are required for Executes cam generation. Switches to each screen. The blue sw switch will not switch the screen. Shows unused switches for base scree Switches to the previously opened sci Displays the current date and time. To Opens the [Language Setting] window 	cam auto-generation. vitch indicates the curre een switching. reen. ouch the area to open th v.	ently displayed screen, thus s ne [Clock Setting] window.	electing this
 Remarks If a system alarm occurs, the alarm messive left end of the message, the display possioner. When touching the other part of t When GOT is started, the cam auto-ge details about scripts, please refer to "5.6" 	ssage will appear at the sition of the message cl he message, the [Alarm neration type device is S Script List".	bottom of the screen. When the hanges in the order of upper, n Reset] window appears. set to 1 with the project scrip	touching the center, and ot. For more



5.3.10 Manual Display (B-30500)



Remarks

• The language setting reflect documents for Manual display. The relation of the column No. of the comment group No., languages and document (Document ID) is shown below.

Column No. of the comment group No	Language	Document ID
1	English	201
2	Japanese	202
3	Chinese (Simplified)	203

• When GOT is started, the document page is set to No. "1" and the Document ID is set to "201" with the project script. For more details about scripts, please refer to "5.6 Script List".

• The page feed switches are set not to exceed the total number of document pages by object script. For more details about scripts, please refer to "5.6 Script List".

• The document data for the manual display should be prepared by the customers. For more details, please refer to "5. MANUAL DISPLAY".

• If a system alarm occurs, the alarm message will appear at the bottom of the screen. When touching the left end of the message, the display position of the message changes in the order of upper, center, and lower. When touching the other part of the message, the [Alarm Reset] window appears.

	Alarm	2
Outline This window scre	een allows resetting the system alarm.	
Description 1. Resets the s 2. Closes the w	system alarm, and closes the window screen after 1 second. vindow screen.	
Remarks		

1 Language Setting	
Outline This window screen allows selecting the GOT language. Description 1. Switches the language, and closes the window screen. 2. Closes the window screen.	
Remarks The system language and Document ID for manual display also switched corresponding to the display language. 	У

4
Clock Setting
08/05/2013 15:04:18
Year Hour 2013 TA 12 TA
Day Second Change 3
Outline This window screen allows changing the GOT clock data.
Description 1. Displays the current date and time. 2. Use Switches to shange the date and time.
 Ose was switches to change the date and time. Hold down the switches to increment of decrement the value continuously. The [Reset] switch resets the seconds. Applies the set date and time to the GOT clock data, and closes the window screen after 1 second. Closes the window screen
RemarksThe date and time at window opening are initially set as the clock data to be newly set.
 Object scripts are set for the numerical display of the year, month, date, hour, minute and second in the clock data to be newly set. For more details about scripts, please refer to "5.6 Script List".



5.4 Device List

Some of the devices specified for the on-screen switches, lamps, or others are also used for common settings of functions such as scripts. Using [Batch Edit] is recommended to change these devices in a batch. For more details about using [Batch Edit], please refer to "8.1 Changing Start I/O Number" and the "GT Designer3 (GOT2000) Help".

Туре	Device No.	Application
	X0000	Input Signal READY
	X0001	Input Signal Sync Flag
	X000F	Input Signal Module READY
	X0010	Input Signal BUSY_Axis 1
	X0011	Input Signal BUSY_Axis 2
	X0012	Input Signal BUSY_Axis 3
	X0013	Input Signal BUSY_Axis 4
	X0014	Input Signal BUSY_Axis 5
	X0015	Input Signal BUSY_Axis 6
	X0016	Input Signal BUSY_Axis 7
	X0017	Input Signal BUSY_Axis 8
	X0018	Input Signal BUSY_Axis 9
	X0019	Input Signal BUSY_Axis 10
	X001A	Input Signal BUSY_Axis 11
	X001B	Input Signal BUSY_Axis 12
	X001C	Input Signal BUSY_Axis 13
	X001D	Input Signal BUSY_Axis 14
	X001E	Input Signal BUSY_Axis 15
Bit	X001F	Input Signal BUSY_Axis 16
	Y0000	Output Signal PLC READY
	Y0001	Output Signal All Axis Servo ON
	Y0010	Output Signal Positioning Start_Axis 1
	Y0011	Output Signal Positioning Start_Axis 2
	Y0012	Output Signal Positioning Start_Axis 3
	Y0013	Output Signal Positioning Start_Axis 4
	Y0014	Output Signal Positioning Start_Axis 5
	Y0015	Output Signal Positioning Start_Axis 6
	Y0016	Output Signal Positioning Start_Axis 7
	Y0017	Output Signal Positioning Start_Axis 8
	Y0018	Output Signal Positioning Start_Axis 9
	Y0019	Output Signal Positioning Start_Axis 10
	Y001A	Output Signal Positioning Start_Axis 11
	Y001B	Output Signal Positioning Start_Axis 12
	Y001C	Output Signal Positioning Start_Axis 13
	Y001D	Output Signal Positioning Start_Axis 14
	Y001E	Output Signal Positioning Start_Axis 15
	Y001F	Output Signal Positioning Start_Axis 16
	U00-G2400+100n (n = 0 to 15)	Current Feed Val. (Axis 1 to 16)
	U00-G2402+100n (n = 0 to 15)	Machine Feed Val. (Axis 1 to 16)
	U00-G2406+100n (n = 0 to 15)	Error (Axis 1 to 16)
	U00-G2407+100n (n = 0 to 15)	Warning (Axis 1 to 16)
	U00-G2408+100n (n = 0 to 15)	M Code (Axis 1 to 16)
	U00-G2409+100n (n = 0 to 15)	Status (Axis 1 to 16)
	U00-G2410+100n (n = 0 to 15)	Current Speed (Axis 1 to 16)
Word	U00-G2412+100n (n = 0 to 15)	Axis Feed Rate (Axis 1 to 16)
	000-G2418+100n (n = 0 to 15)	larget Value (Axis 1 to 16)
	000-G2420+100n (n = 0 to 15)	larget Speed (Axis 1 to 16)
	1000-G2427+100n (n = 0 to 15)	Instr. Code (AXIS 1 to 16)
	$\frac{1000-62420+10011(11=0.10.15)}{1000-62420+10002(n-0.15)}$	Start No. (Avis 1 to 16)
	$\frac{1000-62429+10011(11=0.10.15)}{1000-62420+10002(n=0.15)}$	Juli NU. (AXIS 1 LU 10)
	100-G2430+10011 (11 = 0.0015)	In Speed Change Process (Avis 1 to 16)
	$\frac{1000-02431+10011(11=0.10.15)}{1100.02431+10011(11=0.10.15)}$	Special Start Counter (Avis 1 to 16)
1	$000^{-}02^{+}02^{+}10011(11 = 0.10.10)$	

5.4.1 Devices of the controller

Туре	Device No.	Application
	U00-G2433+100n (n = 0 to 15)	Control System Counter (Axis 1 to 16)
	U00-G2434+100n (n = 0 to 15)	1st Data Pointer (Axis 1 to 16)
	U00-G2435+100n (n = 0 to 15)	Pos. Data No. (Axis 1 to 16)
	U00-G2436+100n (n = 0 to 15)	Block No. (Axis 1 to 16)
	U00-G2437+100n (n = 0 to 15)	Previous Position (Axis 1 to 16)
	U00-G2438+100n (n = 0 to 15)	Acc. Time, Dec. Time, Operation Pattern, Control System
		(Axis 1 to 16)
	U00-G2441+100n (n = 0 to 15)	Int. Axis (Axis 1 to 16)
	U00-G2448+100n (n = 0 to 15)	OPR Increment (Axis 1 to 16)
	U00-G2450+100n (n = 0 to 15)	Actual Present Value (Axis 1 to 16)
	U00-G2452+100n (n = 0 to 15)	Error Counter Value (Axis 1 to 16)
	U00-G2454+100n (n = 0 to 15)	Number of Motor Rotation (Axis 1 to 16)
	U00-G2456+100n (n = 0 to 15)	Motor Current Value (Axis 1 to 16)
	U00-G2470+100n (n = 0 to 15)	Parameter Error No. (Axis 1 to 16)
	U00-G2476+100n (n = 0 to 15)	Zero Speed, Zero Point Passed (Axis 1 to 16)
	U00-G2477+100n (n = 0 to 15)	Ready ON, Servo ON, Servo Alarm, In-Position, Torque
		Limit, Abs. Value Cleared, Warning (Axis 1 to 16)
	U00-G2478+100n (n = 0 to 15)	Regenerative Load Ratio (Axis 1 to 16)
	U00-G2479+100n (n = 0 to 15)	Actual Load Ratio (Axis 1 to 16)
	U00-G2480+100n (n = 0 to 15)	Peak Load Ratio (Axis 1 to 16)
Word	U00-G4093+4p (p = 0 to 15)	Error History_Axis (No.0 to No.15)
Word	U00-G4094+4p (p = 0 to 15)	Error History_ Code (No.0 to No.15)
	U00-G4095+4p (p = 0 to 15)	Error History_ Day, Hour (No.0 to No.15)
	U00-G4096+4p (p = 0 to 15)	Error History_ Minute, Second (No.0 to No.15)
	U00-G4158+4p (p = 0 to 15)	Warning History_Axis (No.0 to No.15)
	U00-G4159+4p (p = 0 to 15)	Warning History_ Code (No.0 to No.15)
	U00-G4160+4p (p = 0 to 15)	Warning History_ Day, Hour (No.0 to No.15)
	U00-G4161+4p (p = 0 to 15)	Warning History_ Minute, Second (No.0 to No.15)
	U00-G4231	Emergency Stop Input
	U00-G4256+p (p = 0 to 15)	Error History_ Month (No.0 to No.15)
	U00-G4272+p (p = 0 to 15)	Warning History_ Month (No.0 to No.15)
	U00-G31300+p (p = 0 to 15)	Error History_ SV (No.0 to No.15)
	U00-G31316+p (p = 0 to 15)	Warning History_ SV (No.0 to No.15)
	U00-G53200	Cam Auto-generation Request
	U00-G53201	Cam Auto-generation Cam No.
	U00-G53202	Cam Auto-generation Type
	U00-G53204	Cam Resolution
	U00-G53206	Sheet Length
	U00-G53208	Sheet Synchronization Width
	U00-G53210	Synchronous Axis Length
	U00-G53212	Synchronization Starting Point
	U00-G53214	Synchronous Section Acceleration Ratio

5.4.2 GOT internal devices

Туре	Device No.	Application	
	GB40	Script Trigger (Always ON)	
Bit	GD60031.b13	GOT Error Reset Signal	
	GS512.b0	Time Change Signal	
	GD60000	Base Screen Switching	
	GD60001	Overlap Window 1 Screen Switching	
	GD60004	Overlap Window 2 Screen Switching	
	GD60021	Language Switching	
Word	GD60022	System Language Switching	
word	GD60031, GD60041	System Information	
	GD60080 to	Document Display	
	GD60082		
	GD61000	4 Axis Switching Offset Device (Monitor Value)	
	GD61001	4 Axis Switching Offset Device (Axis Display)	

Туре	Device No.	Application
	GD63990 to	Clock Digital Switch
	GD63995	
Word	GS513 to GS516	Changed Time
	GS650 to GS652	Current Time
	TMP950 to TMP996	For Script Operation

5.5 Comment List

5 Comment List		
Comment group No.	Comment No.	Where comments are used
	No. 1 to No. 17	B-30001 to B-30500
	No. 551 to No. 941	B-30002
	No. 951 to No. 1000	B-30003
	No. 1011 to No. 1033	B-30004
	No. 1041 to No. 1068	B-30005
	No. 1071 to No. 1086	B-30006
500	No. 1091 to No. 1118	B-30007
	No. 1121 to No. 1129	B-30010
	No. 1201 to No. 1202	W-30001
	No. 1203	W-30002
	No. 1204 to No. 1211	W-30003
	No. 1251 to No. 1262	B-30008
	No. 1351 to No. 1353	W-30010

5.6 Script List

ltem	Setting
Project Script	Specified
Screen Script	B-30500
Object script	B-30500, W-30003

5.6.1 Project script

Script No.	30001	Script name	Script30001
Comment	Initial Setting		
Data type	Signed BIN16	Trigger type	Rise, GB40
[w:GD60080]=201;	//Set Document ID to 201		
[w:GD60081]=1; /	//Set Document page No. to 1		
[w:U00-G53202] =	1; //Set Cam Auto-generation T	уре	
	-		

Base Screen 30500

Script No.	30002	Script name	Script30002
Comment	DocumentDisplayProcessOfLa	astPage	
Data type	Unsigned BIN16	Trigger type	Ordinary
//Check the total nu	imber of document pages is not	t 0.	
if([w:GD60082]!=0)	{		
//Compare the cu	rrent page number to the total	I number of document	pages to see if the current page
number exceeds th	e total number.		
if([w:GD60081]>[v	v:GD60082]){		
//Set the last pag	e to display.		
[w:GD60081]=[w	:GD60082];		
}			
}			

5.6.2 Object script Base Screen 30500

Dase Scieen SUSU			
Object	Switch	Object ID *1	20039
Script user ID	1		
Data type	Unsigned BIN16	Trigger type	Device Writing
//Do not exceed the	total number of the document	pages.	
if([u16:GD60081] >:	= [u16:GD60082]){		
[u16:GD60081] =	= [u16:GD60082] - 1;		
}			

Window screen 30003

Object	Numerical Display	Object ID *1	20018
Script user ID	1		
Data type	Unsigned BIN16	Trigger type	Rise, GB40
//Obtain Today's Yea	ar & Month from Clock Data		
[w:TMP950] = [w:G	\$650] & 0xF000; //Obtain Tenth	ns Digit of "Last 2-Digit	s of Year" from Clock Data for Setting
[w:TMP960] = [w:TN	/P950] >> 12; //Decimal Alignr	nent	
[w:TMP968] = [w:TMP968]	/IP960] * 10;//BCD->BIN		
[W: I MP951] = [W:G: G:		s Digit of "Last 2-Digits	of Year" from Clock Data for Setting
[W: W P961] = [W: W	/IP951] >> 8;//BCD->BIN	1. //Sat Vaar to TMD07	
[w:CD63990] = 2000	+ [W.1101F900] + [W.1101F901] MP073]: //Set Vear		o as din
[w.0003330] = [w.1	ini 973], //Set Teal		
[w:TMP952] = [w:G	S6501 & 0x00F0: //Obtain Tentl	ns Digit of Month from	Clock Data for Setting
[w:TMP962] = [w:TN	/P952] >> 4; //Decimal Alignm	ent	g
[w:TMP969] = [w:TN	/IP962] * 10;//BCD->BIN		
[w:TMP953] = [w:G	S650] & 0x000F; //Obtain Ones	s Digit of Month from C	lock Data for Setting
[w:TMP974] = [w:TN	/IP969] + [w:TMP953]; //Set I	Month to TMP974 as B	IN
[w:GD63991] = [w:T	MP974]; //Set Month		
[w:TMP954] = [w:GS	S651] & 0xF000; //Obtain Tentr	ns Digit of "Last 2-Digit	s of Day" from Clock Data for Setting
[W:1MP963] = [W:1MP963]	/IP954J >> 12; //Decimal Alignr	nent	
[W:1MP970] = [W:1MP970]	/IP963] * 10;//BCD->BIN		of Douill from Olook Data for Catting
[W: IWP955] = [W:G: [W:TMD064] = [W:TMD064]		s Digit of "Last 2-Digits	of Day" from Clock Data for Setting
[W.1WP904] = [W.1W	//P900] >> 0,//DCD->DIN	ov to TMD075 on RIN	
[w:GD63002] = [w:TV	MP975]: //Set Day	ay to Thir 975 as bin	
[w.0003332] = [w.1	wi 975], //Get Day		
[w:TMP956] = [w:G	S651] & 0x00F0; //Obtain Tenth	ns Digit of Hour from C	lock Data for Setting
[w:TMP965] = [w:TN	/IP956] >> 4; //Decimal Alignm	ent	<u> </u>
[w:TMP971] = [w:TN	/IP965] * 10;//BCD->BIN		
[w:TMP957] = [w:G	S651] & 0x000F; //Obtain Ones	s Digit of Hour from Clo	ock Data for Setting
[w:TMP976] = [w:TN	/IP971] + [w:TMP957]; //Set I	Hour to TMP976 as BI	N
[w:GD63993] = [w:T	MP976]; //Set Hour		
		who Digit of Ill oct 0 [Disite of Minute" from Clock Date for
[W:TMP958] = [W:G Setting	15652] & UXF000; //Obtain Te	nths Digit of Last 2-1	Digits of Minute from Clock Data for
w.TMP0661 – W.TM	1P9581 >> 12: //Decimal Alignr	nont	
[w.TMP972] – [w.TM	/P966] * 10·//BCD-\BIN	nem	
[w:TMP959] = [w:G972]	S6521 & 0x0F00: //Obtain Ones	s Digit of "Last 2-Digits	of Minute" from Clock Data for Setting
[w:TMP967] = [w:TMP967]	/P9591 >> 8·//BCD->BIN		of Minute from Clock Data for Cetting
[w:TMP977] =[w:TM	IP972] + [w:TMP967]: //Set M	linute to TMP977 as B	IN
[w:GD63994] = [w:T	MP977]; //Set Minute		
	.		
[w:TMP993] = [w:G	S652] & 0x00F0; //Obtain Tenth	ns Digit of Second from	n Clock Data for Setting
[w:TMP995] = [w:TN	/IP993] >> 4; //Decimal Alignm	ent	
[w:TMP996] = [w:TN	/IP995] * 10;//BCD->BIN		
[w:TMP994] = [w:G	652] & 0x000F; //Obtain Ones	s Digit of Second from	Clock Data for Setting
[W:IMP978] = [W:TMP978]	/IP996] + [w:TMP994]; //Set \$	Second to TMP978 as	BIN
[w:GD63995] = [w:T	INIP978]; //Set Second		

Object	Numerical Display	Object ID *1	20019
Script user ID	2		
Data type	Unsigned BIN16	Trigger type	Ordinary
//BIN -> BCD Conversion			
[w:TMP979] = [w:GD63990]	- 2000; //Last 2-Digits	of Year	
[w:TMP980] = (([w:TMP979 [w:TMP981] = (([w:GD6399 [w:TMP982] = (([w:GD6399 [w:TMP983] = (([w:GD6399 [w:TMP984] = (([w:GD6399] / 10) << 4) + ([w:TMF 1] / 10) << 4) + ([w:GD 2] / 10) << 4) + ([w:GD 3] / 10) << 4) + ([w:GD 4] / 10) << 4) + ([w:GD	P979] % 10); //Year 163991] % 10); //Mon 163992] % 10); //Day 163993] % 10); //Hou 163994] % 10); //Minu	BIN -> BCD th BIN -> BCD BIN -> BCD r BIN -> BCD ite BIN -> BCD
[w:TMP985] = (([w:GD6399	5] / 10) << 4) + ([w:GD	63995] % 10); //Seco	ond BIN -> BCD
Object	Numerical Display	Object ID *1	20020
Script user ID	3		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Year & Month Setting	g		
[w:GS513] = ([w:TMP980] <	< 8) + [w:TMP981];	//Set Year & Month to (Change Time Device
Object	Numerical Display	Object ID *1	20021
Script user ID	4		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Date & Time Setting			
[w:GS514] = ([w:TMP982] <	< 8) + [w:TMP983];	//Set Date & Time to C	hange Time Device
Object	Numerical Display	Object ID *1	20022
Script user ID	5		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Minute & Second Setting			
[w:GS515] = ([w:TMP984] <	:< 8) + [w:TMP985];	//Set Minute & Second	to Change Time Device
Object	Numerical Display	Object ID *1	20023
Script user ID	6		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Day of Week Setting			
[w:TMP986] = [w:GD63990] [w:TMP987] = [w:GD63991] [w:TMP988] = [w:GD63992]	; //Year (BIN) ; //Month (BIN) ; //Day (BIN)		
if(([w:TMP987] == 1) ([w 13th/14th Month [w:TMP986] =[w:TMP986 [w:TMP987] =[w:TMP987 }	TMP987] == 2)){ //Co 6] - 1; //Subtract 1 from 7] + 12; //Add 12 to Mo	orrection Processing to Year nth	o Calculate January and February as
[w:TMP989] = [w:TMP986]/4 [w:TMP990] = [w:TMP986]/4 [w:TMP991] = [w:TMP986]/4 [w:TMP992] = (13*[w:TMP9	4; //Create Items Requ 100; //Create Items Re 400; //Create Items Re 87]+8)/5; //Create Item	ired for Zeller's Congru equired for Zeller's Con equired for Zeller's Con ns Required for Zeller's	uence gruence gruence congruence
//Calculate Day of Week Us [w:GS516] = ([w:TMP986]+	ing Zeller's Congruenc [w:TMP989]-[w:TMP99	e and Set the Day to 0 00]+[w:TMP991]+[w:TM	Change Time Device 1P992]+[w:TMP988])%7;

*1 The Object ID might be changed when a screen is utilized.

6. MANUAL DISPLAY

Manuals can be displayed using the document display function. For more details about the document display function, please refer to the "GT Designer3 (GOT2000) Help". Please note that the document display function does not support language switching. Therefore, in the sample screens, the language of document is switched by switching the document (Document ID) specified for a display language.

6.1 Preparing Document Data for Manual Display

Example: Displaying a English manual (document) for Manual Display on the base screen B-30500

(1) Convert the manual (Word or Excel, etc.) to be displayed into the document data (JPEG file) that can be used with the document display function by using Document Converter. Set the Document Converter's [Document ID] to 201.

*For details of the relation between Document ID and Display language, please refer to the table below.

Document ID: 20	1 🕂
Document Name: Ma	anual Display(English)
File Path:	Document Converter's Document ID

Column No. of the comment group No	Language	Document ID
1	English	201
2	Japanese	202
3	Chinese (Simplified)	203

*Please use Document Converter 2.09k or later. The total number pages and pages switches cannot work properly with 2.08 or older versions.

(2) The document data is generated in the 201 folder in the DOCIMG. Save the entire DOCIMG folder into the SD card root directory without changing the folder configuration inside the DOCIMG folder.



SD card folder configuration

Note: In case the total number of pages is 100 or more.

This sample is made with the assumption that the total number of pages is up to 99 pages. If it exceeds 99 pages, please modify the format of numerical input (the number of "#") that displays the total number of pages and the page number of the currently displayed page.

7. OTHERS

7.1 Changing Start I/O Number

Follow the procedure below to change the start I/O number of the module to a value other than 0H. (Example: Changing the start I/O number from 0H to 20H)

(1) Select [Search/Replace] - [Batch Edit] - [Device] menu.



(2) In the displayed setting dialog, select [All Screens], and click [Find Now].

Device Batch Eult				
Attribute				Find Now
Oevice	Network	CH No.		Pillu NOW
Color	Shape			Replace
Target				Delete
All screens				Cloar
Editing screen				Clear
Screen range:	From:	1 To; 3276	07 ➡ Base Screen ▼	Import
© Category: S	witch			Export
 Selected area 				
Common setting	gs (excluding settin	igs of each screen.	.)	
Script Text:	All Script			
Display Types	Tadixidual 🔘 Dar			_
Display Type.		Defere	40	Deint
1 Device	3	Before	Arter	Point
				1
				Close

57

- (3) Set the [After] device and [Point], and execute the batch edit.
 - Changing the start I/O number of the buffer memory Set [Before] to U00-G2406, [After] to U02-G2406, and [Point] to 30532, and click [Replace]. U00-G2406 to U00-G32937 will be changed to U02-G2406 to U02-G32937.

ttribute				Find No.
Oevic	e O	Network 💿 CH Ne	D.	
Color	Ô	Shape		Replace
arget				Delete
All scr	reens			
🔘 Editin	g screen			Clear
Scree	en range: Fro	m; 1 🚔 To; 327	767 🚔 Base Screen	Import
Categ	ory: Switch	~		Export
Selection	ted area			Export
-				
Comn	non settinas (exc	luding settings of each scree	n.)	
 Comn Script 	non settings (exc t Text: All	luding settings of each scree Script	n.)	
Comn Script	non settings (exc t Text: All	luding settings of each scree Script -	n.)	
 Comn Script Display T 	non settings (exc t Text: All Type: © Individu	luding settings of each scree Script	n.)	
 Comn Script Display T 	non settings (exc t Text: All Type: Individu Device	luding settings of each screen Script	After	Point
© Comn © Script Display T 54	non settings (exc t Text: All Type: Individu Device Bit	luding settings of each scree Script	After Y001F	Point 1
 Comn Script Display T 54 55 	ron settings (exc t Text: All rype: Individu Device Bit Word	luding settings of each scree Script al CRange Before Y001F U00-G2406	After Y001F U00-G2406	Point 1 1
 Comn Script Display T 54 55 56 	ron settings (exc t Text: All Type: Individu Device Bit Word Word	luding settings of each scree Script al Range Before Y001F U00-G2406 U00-G2407	After Y001F U00-62406 U00-62407	Point 1 1 1
 Comn Script Display T 54 55 56 57 	ron settings (exc t Text: All Type: Type:	luding settings of each scree Script al Range Before Y001F U00-G2406 U00-G2407 U00-G2408	After Y001F U00-G2406 U00-G2407 U00-G2408	Point 1 1 1 1
Comr Cisplay T Display T 54 55 56 57 58	In settings (exc Type: In Individue Device Bit Word Word Word Word Word	luding settings of each scree Script al Range Before Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409	After Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409	Point 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 Comr Script Display T 54 55 56 57 58 59 	In settings (exc Type: In Individue Indida Individue Individue Individue Individue Individue	luding settings of each scree Script Range Before Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409 U00-G2409 U00-G2427	After Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409 U00-G2427	Point 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 Comr Script Display T 54 55 56 57 58 59 60 	In settings (exc Type: In Individue Device Bit Word Word Word Word Word Word Word Word Word	luding settings of each scree Script Range Before Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409 U00-G2427 U00-G2428	After Y001F U00-62406 U00-62407 U00-62408 U00-62409 U00-62427 U00-62428	Point 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 Comr Script Display 1 54 55 56 57 58 59 60 61 	In settings (exc Type: In Individue Indidio Individue Individue Individue Individue Individu	luding settings of each scree Script Range Before Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409 U00-G2409 U00-G2427 U00-G2428 U00-G2428 U00-G2429	After Y001F U00-G2406 U00-G2407 U00-G2408 U00-G2409 U00-G2429 U00-G2428 U00-G2429	Point 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

• Changing the start I/O number of the I/O signal

To change the input signal (X device), set [Before] to X0000, [After] to X0020, and [Point] to 32, and click [Replace]. X0000 to X001F will be changed to X0020 to X003F.

To change the output signal (Y device), set [Before] to Y0000, [After] to Y0020, and [Point] to 32, and click [Replace]. Y0000 to Y001F will be changed to Y0020 to Y003F.

Attribute			_	Find Now
Device	e 🔍 N	Network (CH N	0.	Paphra
Color	09	Shape		Replace
Farget				Delete
All sci	reens			
Continue	ig screen			Clear
Scree	en range: From	m; 1 🚔 To; 32	767 🚔 Base Screen	Import
Categ	ory: Switch			
Selection	ted area			Export
Com	non settings (excl	uding settings of each scree	n)	
© Script Display 1	t Text: All S	script v		
© Script Display 1	t Text: All S Type: Individu Device	al Range Before	After	Point
© Script Display 1	t Text: All S Type: Individu Device Word	al © Range Before GD63995	After GD63995	Point 1
© Script Display 1 14 15	Type: Individu Device Word Bit	al © Range Before GD63995 X0000	After GD63995 X0000	Point 1 1
© Script	t Text: All S Type: Individu Device Word Bit Bit	al Range Before GD63995 X0000 X0001	After GD63995 X0000 X0001	Point 1 1 1
© Script Display 1 14 15 16 17	t Text: All S Type: Individu Device Word Bit Bit Bit	al C Range Before GD63995 X0000 X0001 X0004	After GD63995 X0000 X0001 X0004	Point 1 1 1 1
© Script Display 1 14 15 16 17 18	t Text: All S Type: Individu Device Word Bit Bit Bit Bit Bit	al C Range Before GD63995 X0000 X0001 X0001 X0004 X0005	After GD63995 X0000 X0001 X0004 X0005	Point 1 1 1 1 1 1
© Script Display 1 14 15 16 17 18 19	t Text: All S Type: Individu Device Word Bit Bit Bit Bit Bit Bit Bit	al Range Before GD63995 X0000 X0001 X0004 X0005 X0006	After GD63995 X0000 X0001 X0004 X0005 X0006	Point 1 1 1 1 1 1 1 1
© Script Display 1 14 15 16 17 18 19 20	t Text: All S Type: Individu Device Word Bit Bit Bit Bit Bit Bit Bit Bit	al Range Before GD63995 X0000 X0001 X0004 X0005 X0006 X0007	After GD63995 X0000 X0001 X0004 X0005 X0006 X0007	Point 1 1 1 1 1 1 1 1 1 1 1
© Script Display 1 14 15 16 17 18 19 20 21	t Text: All S Type: Individu Device Word Bit Bit Bit Bit Bit Bit Bit Bit	al Range Before GD63995 X0000 X0001 X0004 X0005 X0006 X0007 X0008	After GD63995 X0000 X0001 X0004 X0005 X0006 X0007 X0008	Point 1 1 1 1 1 1 1 1 1 1 1 1 1 1