

IAI Corporation Robot Controller
X-SEL Series
X-SEL-K

Sample Screen Manual

Mitsubishi Electric Corporation

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REVISIONS

Sample Screen Manual

Date	Control No.*	Description
2014/8	BCN-P5999-0413	First edition

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

Project Data

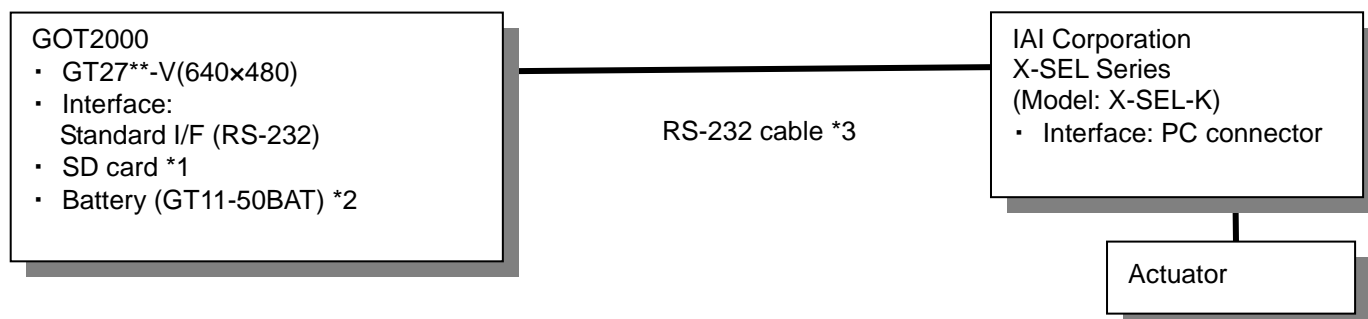
Date	Project data	GT Designer3*	Description
2014/8	IAI_X-SEL_V_Ver1_E.GTX	1.117X	First edition

* 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 an X-SEL(X-SEL-K) manufactured by IAI Corporation in serial (RS-232) communication. The sample screens can be used to monitor the system status or axis status, or change the point data of the robot controller.

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 and the alarm data in the SRAM user area. (The battery is provided with the GOT as standard.)

*3: For more details about the cable, please refer to the "GOT2000 Series Connection Manual (Non Mitsubishi Product 1)".

3. GOT

3.1 System Applications That Are Automatically Selected

Type	System application name	
Standard Function	Standard System Application	
	Standard Font	Japanese
Communication Driver	IAI X-SEL	
Extended Function	Standard Font	Chinese (Simplified)
	Outline Font	Alphanumeric/Kana
		Japanese (Kanji)
		Chinese (Simplified)
	Device data transfer	
	Document Display	

3.2 Controller Setting of Screen Design Software

Item	Set value	Remarks
Transmission Speed (BPS)	38400 bps	
Data Bit	8 bit	
Stop Bit	1 bit	
Parity	None	
Retry (Times)	3	
Timeout Time (Sec)	3	
Host Address	153	Sets the station code of the robot controller.
Delay Time (ms)	10	

3.3 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. Robot Controller

4.1 Communication Settings for the Robot Controller

Item	Set value	Remarks
Transmission speed (bps)	3.84kbps	Can be changed by the parameter.
Bit length	8 bit	Can be changed by the parameter.
Stop bit	1 bit	Can be changed by the parameter.
Parity	None	Can be changed by the parameter.
Station code	153	Can be changed by the parameter.

4.2 Parameter Settings for the Robot Controller

The followings are the setting values at our operation check. (K type parameters are shown.)

(1) Parameter setting *1

Item	Set value	Remarks
Usage of SIO channel opened to user (AUTO mode)	2	2: IAI protocol B (Slave)
Station code of SIO channel 1 opened to user	153	
Baud rate type of SIO channel 1 opened to user	2	2: 38.4kbps
Data length of SIO channel 1 opened to user	8	
Stop bit length of SIO channel 1 opened to user	1	
Parity type of SIO channel 1 opened to user	0	
IAI-protocol minimum response delay for SIO channel 1 opened to user	0	
Other setting bit pattern 1	200F	Bit0 to 3 = 1 (fixed)

*1: For more details about types other than K type, please refer to the Manual of the robot controller currently used.

(2) Switch setting for the robot controller

Item	Set value	Remarks
Mode switch	AUTO	Set with an alternate switch. *1

*1: For more details about types other than K type, please refer to the Manual of the robot controller currently used.

5. SCREEN SPECIFICATIONS

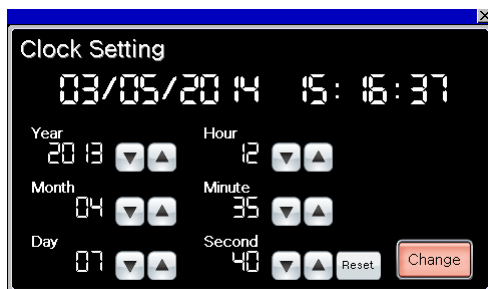
5.1 Display Language

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 groups No. 498 to 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.

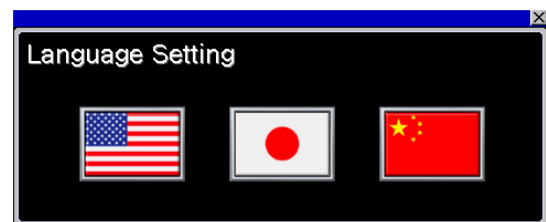
Column No.	Language
1	English
2	Japanese
3	Chinese (Simplified)

5.2 Screen List/Transition

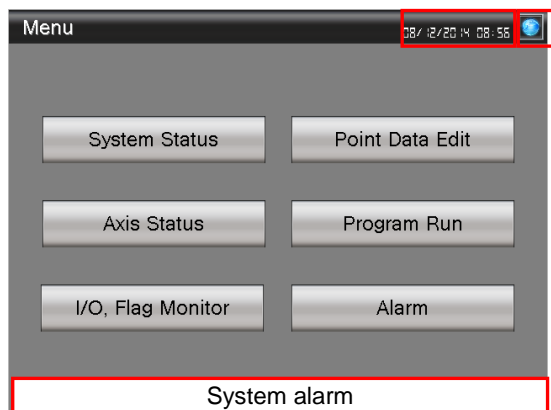
5.2.1 Screen list/transition (common)



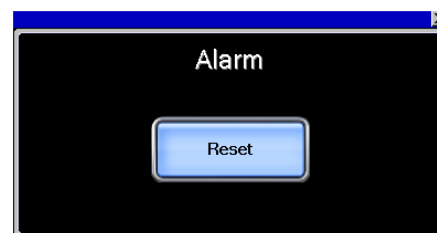
Window screen W-30003: Clock Setting



Window screen W-30002: Language Setting



Base screen B-30001:
Menu and other base screens



Window screen W-30001: Alarm Reset

5.2.2 Screen list/transition (individual)

[illegible]

Base screen B-30002: System Status

[illegible]

Base screen B-30003: Axis Status

Menu

20/ 2/25 09:58

System Status

Point Data Edit

Axis Status

Program Run

I/O, Flag Monitor

Alarm

Base screen B-30001: Menu

Base screen B-30004:
Input Port Monitor

[illegible]

Window screen W-30010 to 16:
Input Port 1 to 7

Output Port Monitor 2/2/20 10:28:12

Port Name	Output Port Name	Pin Number	Run
Port 0	General-purpose Output	General-purpose Output	
Port 1	General-purpose Output	General-purpose Output	
Port 2	General-purpose Output	General-purpose Output	
Port 3	General-purpose Output	General-purpose Output	
Port 4	General-purpose Output	General-purpose Output	
Port 5	General-purpose Output	General-purpose Output	
Port 6	General-purpose Output	General-purpose Output	
Port 7	General-purpose Output	General-purpose Output	
Port 8	General-purpose Output	General-purpose Output	
Port 9	General-purpose Output	General-purpose Output	
Port 10	General-purpose Output	General-purpose Output	
Port 11	General-purpose Output	General-purpose Output	
Port 12	General-purpose Output	General-purpose Output	
Port 13	General-purpose Output	General-purpose Output	
Port 14	General-purpose Output	General-purpose Output	
Port 15	General-purpose Output	General-purpose Output	

Min: 0.000 Max: 0.000 Average: 0.000 Data Rate: 0.000 Min: 0.000 Max: 0.000 Average: 0.000 Signal: 0.000 Alerts: 0.000

Base screen B-30005:
Output Port Monitor

[illegible]

Window screen W-30018 to 24:
Output Port 1 to 7

[illegible]

Base screen B-30006:
Flag Monitor

City	Year	City	Year	City	Year	City	Year	City	Year
600	615	620	645	650	675	680	695	700	710
601	616	621	646	651	676	681	696	701	711
602	617	622	647	652	677	682	697	702	712
603	618	623	648	653	678	683	698	703	713
604	619	624	649	654	679	684	699	704	714
605	620	625	650	655	680	685	700	705	715
606	621	626	651	656	681	686	701	706	716
607	622	627	652	657	682	687	702	707	717
608	623	628	653	658	683	688	703	708	718
609	624	629	654	659	684	689	704	709	719
610	625	630	655	660	685	690	705	710	720
611	626	631	656	661	686	691	706	711	721
612	627	632	657	662	687	692	707	712	722
613	628	633	658	663	688	693	708	713	723
614	629	634	659	664	689	694	709	714	724

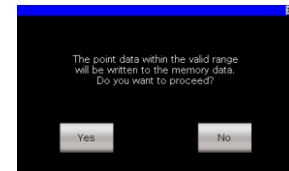
Window screen W-30025 to 27:
Flag 1 to 3

To next
page

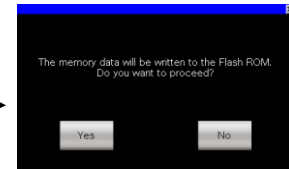
From
previous
page



Base screen B-30007:
Point Data Edit



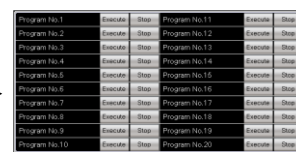
Window screen W-30028:
Write Confirmation Window



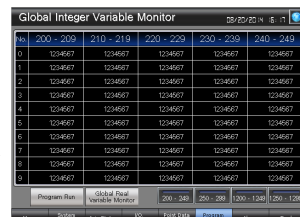
Window screen W-30029:
ROM Write Confirmation Window



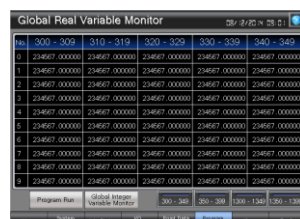
Base screen B-30008:
Program Run



Window screen W-30030 to 36:
Program Run1 to 7



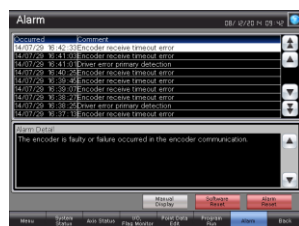
Base screen B-30009:
Global Integer Variable Monitor



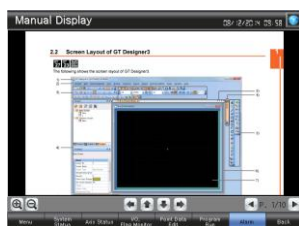
Base screen B-30010:
Global Real Variable Monitor

To next
page

From
previous
page



Base screen B-30011: Alarm



Base screen B-30500:
Manual Display – Language 1



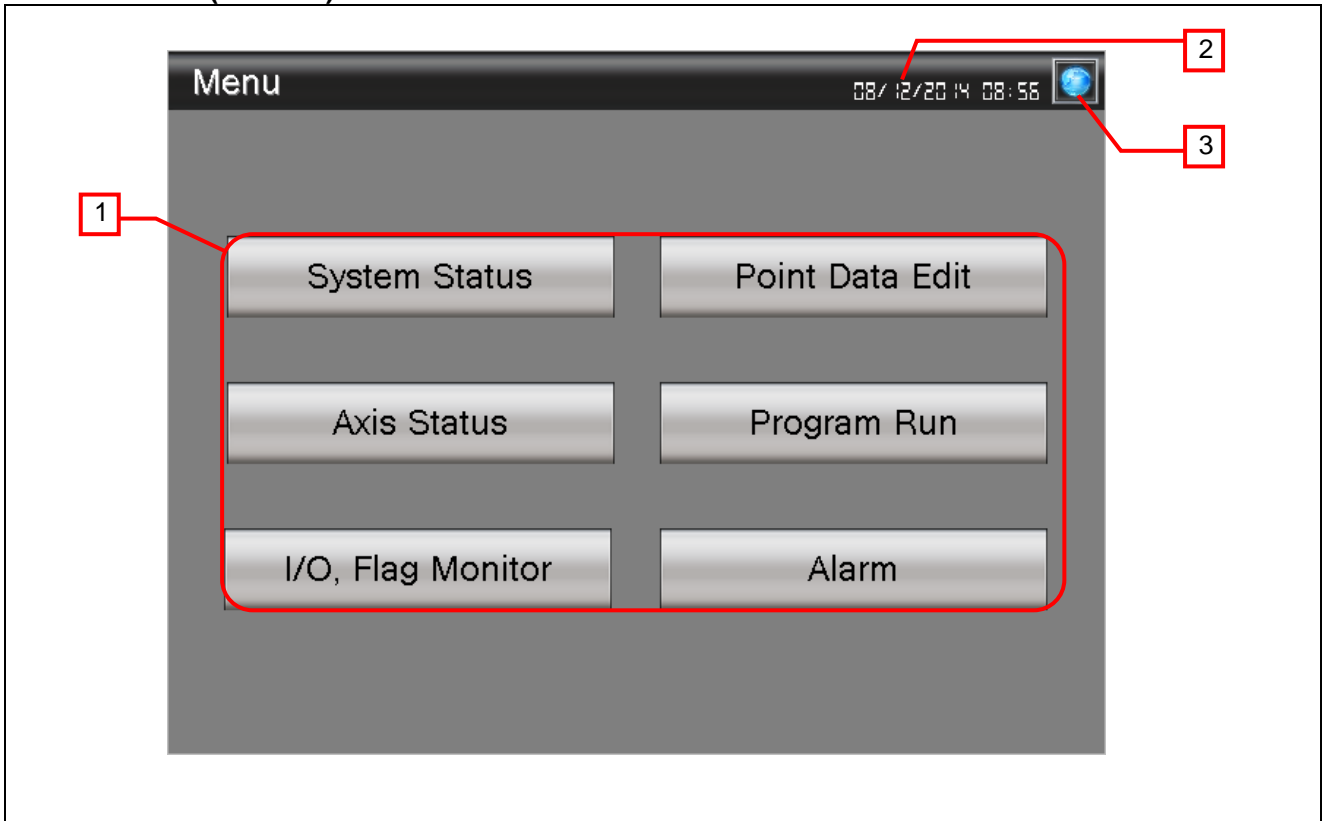
Base screen B-30501:
Manual Display – Language 2



Base screen B-30502:
Manual Display – Language 3

5.3 Explanation of Screens

5.3.1 Menu (B-30001)



Outline

This is the Menu screen.

Description

1. Switches to each screen.
2. Displays the current date and time. Touch the button to open the [Clock Setting] window.
3. 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.

5.3.2 System Status (B-30002)



Outline

This screen displays the system status and program status of the robot controller.

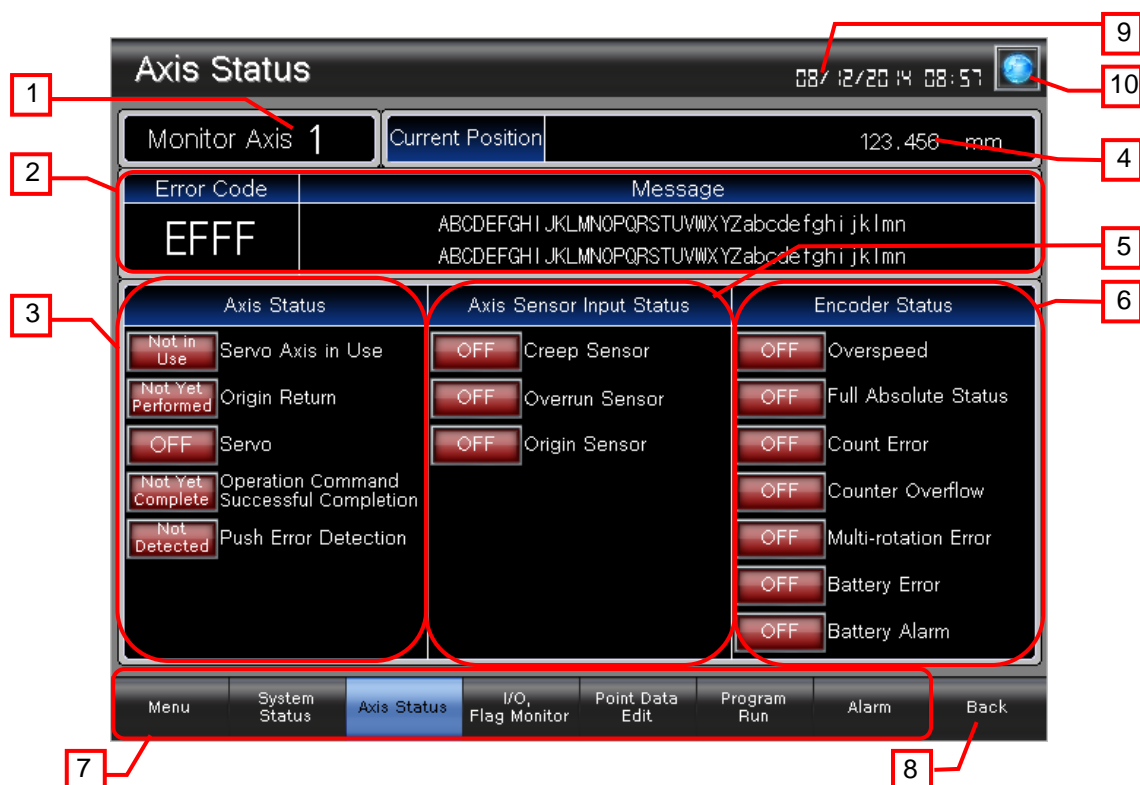
Description

1. Displays the system status.
2. Sets the program No. to be monitored.
3. Displays the program status.
4. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
5. Switches to the previously opened screen.
6. Displays the current date and time. Touch the button to open the [Clock Setting] window.
7. Opens the [Language Setting] window.

Remarks

- When GOT is started, the program No. is set to "1" with the project script. Moreover, the offset is applied with the project script.. For more details about scripts, please refer to "5.7 Script List".
- 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.

5.3.3 Axis Status (B-30003)



Outline

This screen displays the axis status of the robot controller.

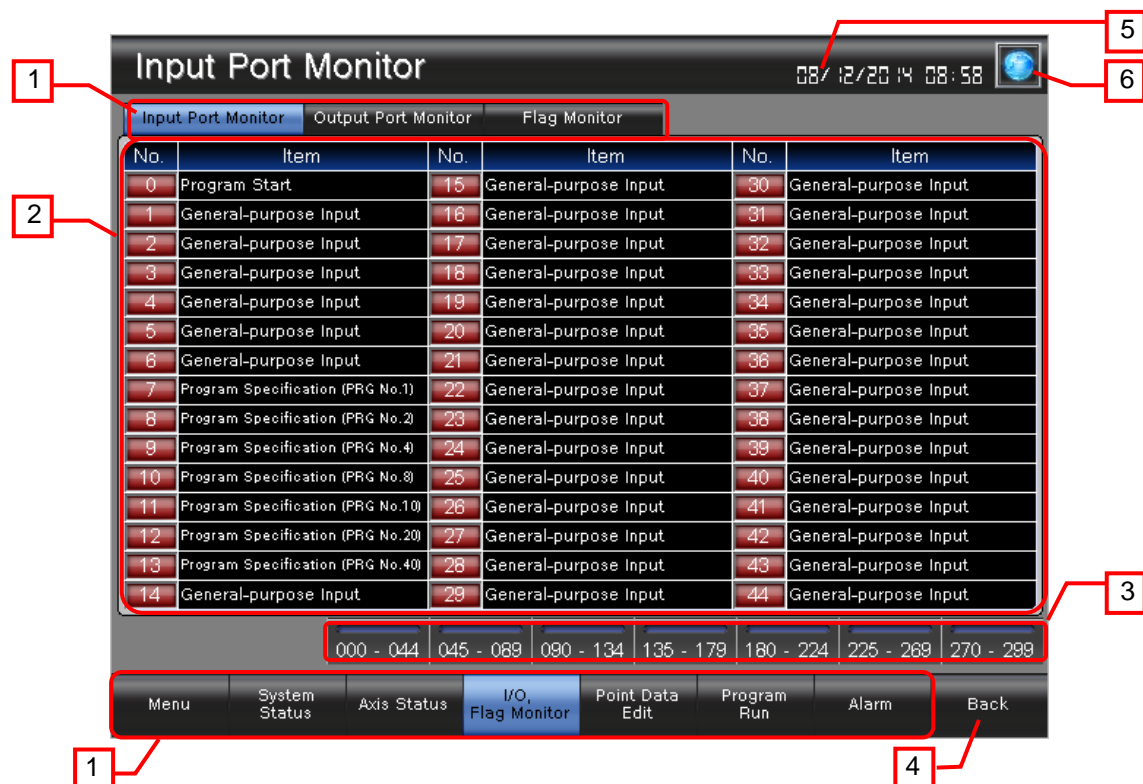
Description

1. Sets the axis to be monitored.
2. Displays the axis error details occurring on the monitored axis.
3. Displays the axis status of the monitored axis.
4. Displays the current position of the actuator which is connected to the monitored axis.
5. Displays the axis sensor input status of the monitored axis.
6. Displays the encoder status of the monitored axis.
7. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
8. Switches to the previously opened screen.
9. Displays the current date and time. Touch the button to open the [Clock Setting] window.
10. Opens the [Language Setting] window.

Remarks

- When GOT is started, the program No. is set to "1" with the project script. Moreover, the offset is applied with the project script. For more details about scripts, please refer to "5.7 Script List".
- The device data transfer function and a screen script are used for controlling the axis error. For more details about the device data transfer function, please refer to "5.6 Device Data Transfer List" and for more details about scripts, please refer to "5.7 Script List".
- 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.

5.3.4 Input Port Monitor (B-30004)



Outline

This screen displays the input port status of the robot controller.

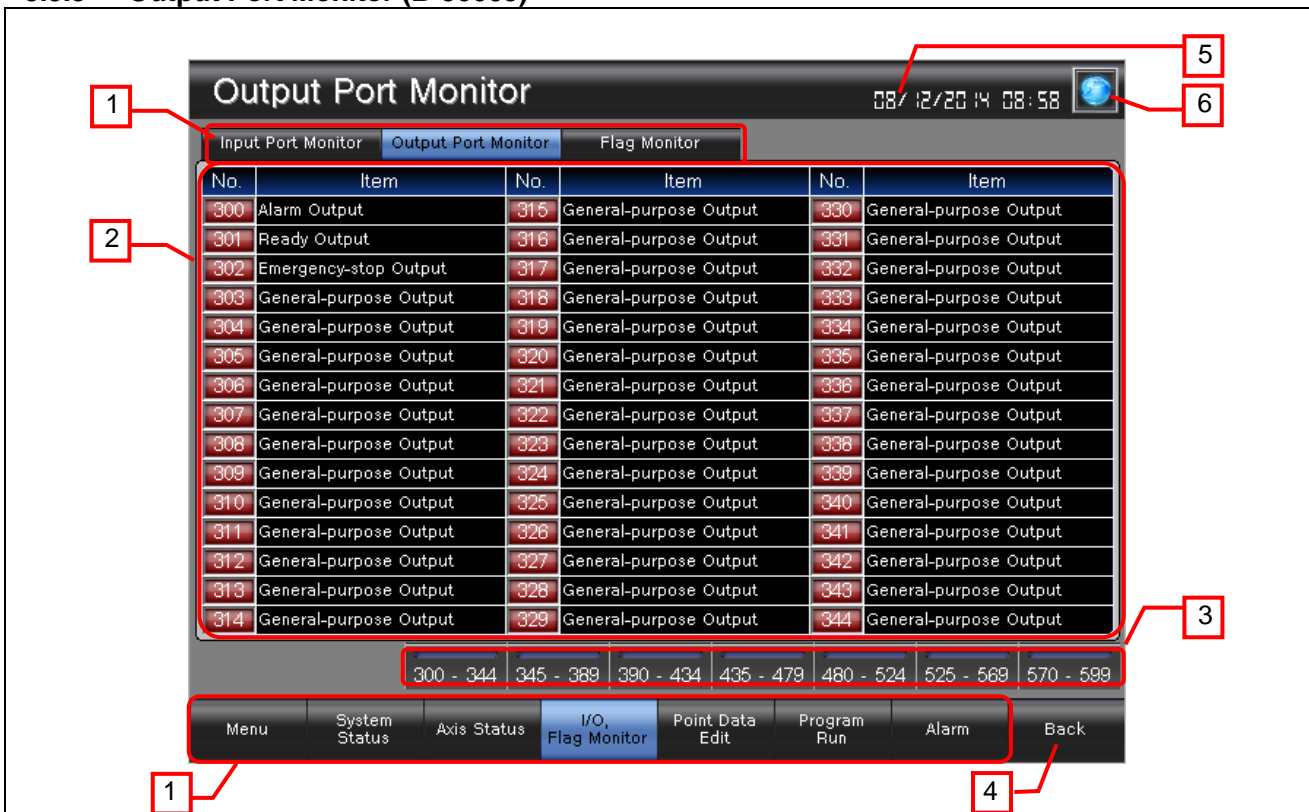
Description

1. Switches to each screen. The blue switch indicates the currently display screen, thus selecting this switch will not switch the screen.
2. Displays the input port status.
3. Switches the input port No. to be monitored.
4. Switches to the previously opened screen.
5. Displays the current date and time. Touch the button to open the [Clock Setting] window.
6. Opens the [Language Setting] window.

Remarks

- A project script is used for clearing superimpose windows. Moreover, a screen script is used for displaying superimpose windows. For more details about scripts, please refer to "5.7 Script List".
- 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.

5.3.5 Output Port Monitor (B-30005)



Outline

This screen displays the output port status of the robot controller.

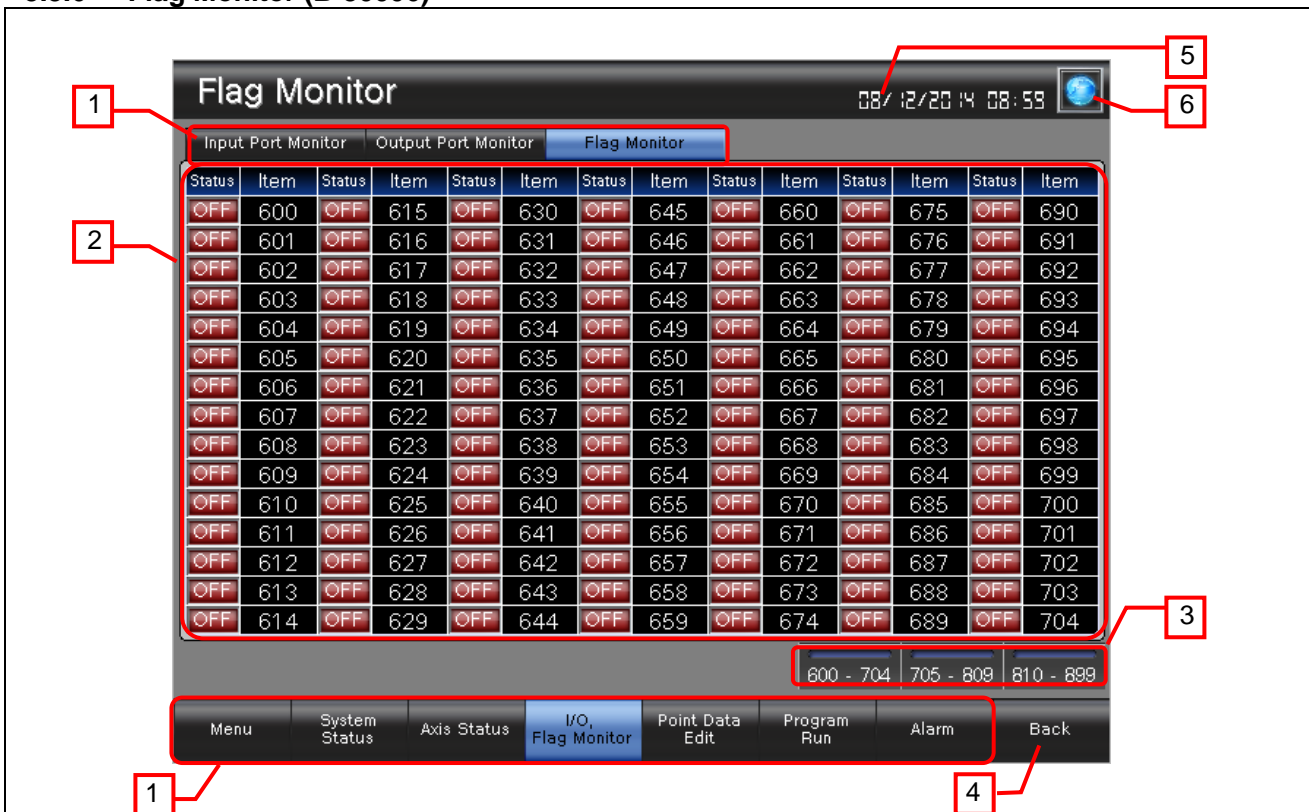
Description

1. Switches to each screen. The blue switch indicates the currently display screen, thus selecting this switch will not switch the screen.
2. Displays the output port status.
3. Switches the output port No. to be monitored.
4. Switches to the previously opened screen.
5. Displays the current date and time. Touch the button to open the [Clock Setting] window.
6. Opens the [Language Setting] window.

Remarks

- A project script is used for clearing superimpose windows. Moreover, a screen script is used for displaying superimpose windows. For more details about scripts, please refer to "5.7 Script List".
- 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 Flag Monitor (B-30006)



Outline

This screen displays the flag status of the robot controller.

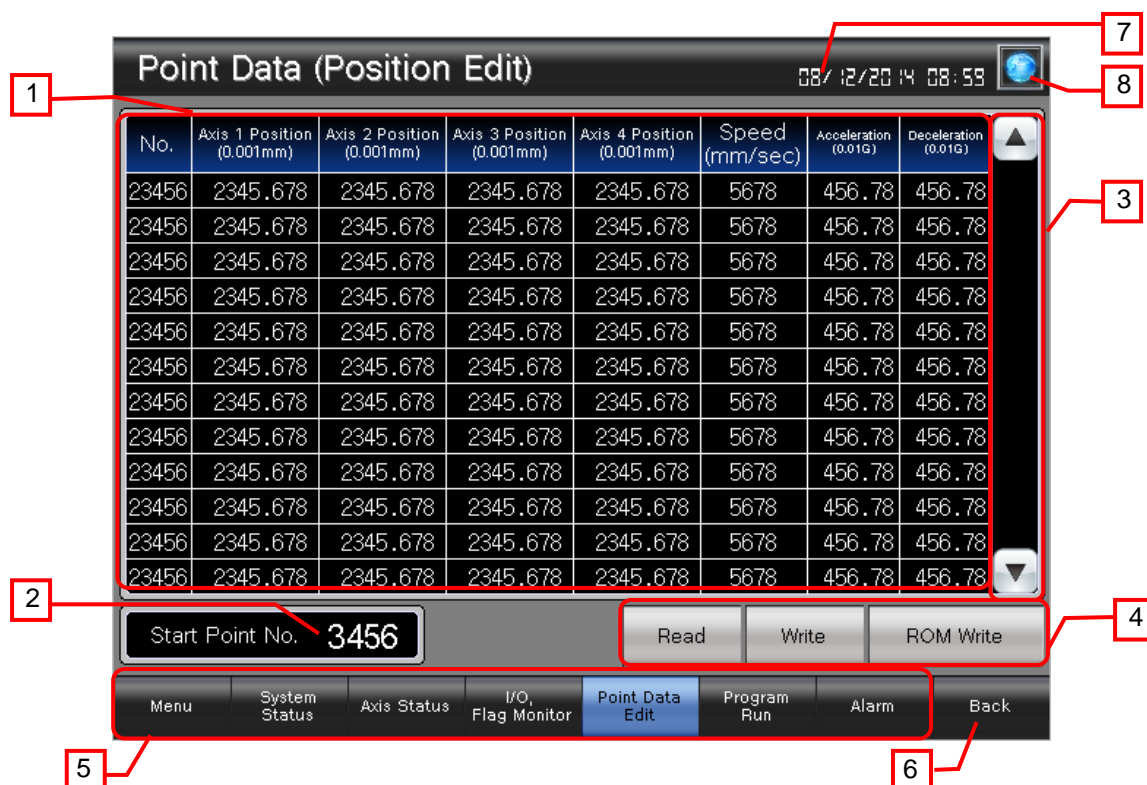
Description

1. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
2. Displays the flag status.
3. Switches the flag No. to be monitored.
4. Switches to the previously opened screen.
5. Displays the current date and time. Touch the area to open the [Clock Setting] window.
6. Opens the [Language Setting] window.

Remarks

- A project script is used for clearing superimpose windows. Moreover, a screen script is used for displaying superimpose windows. For more details about scripts, please refer to "5.7 Script List".
- 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 Point Data Edit (B-30007)



Outline

This screen displays and edits the point data of the robot controller.

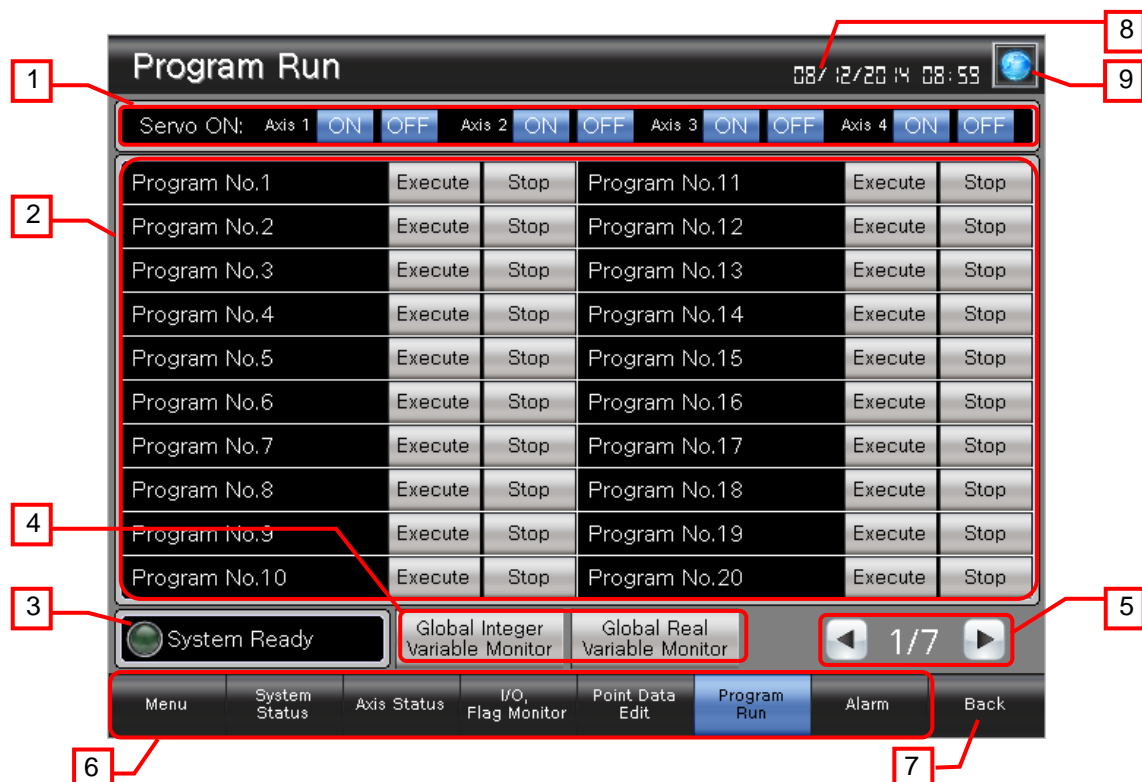
Description

1. Edits the point data. If there is no point data and the value is grayout, it cannot be edited.
2. Sets the read starting point No. for the point data.
3. Switches the point data by 12 points.
4. Operates the point data.
 - Read : Reads the data for 12 points from the value set on the starting point No.
 - Write : Writes the point data to the memory data of X-SEL.
Confirmation dialog is displayed when executing.
 - ROM Write : Writes the memory data to the flash ROM of X-SEL.
Confirmation dialog is displayed when executing.
5. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
6. Switches to the previously opened screen.
7. Displays the current date and time. Touch the button to open the [Clock Setting] window.
8. Opens the [Language Setting] window.

Remarks

- The maximum range which can be read is 3000 points, however, the range which can be set for starting point No. is from No.1 to No.2989.
- When a point data is edited and then switched the data or screen without writing, the edited value is not retained because the point data is read again.
- When GOT is started, the starting point is set to No. "1" with the project script. A screen script is used for reading the point data and setting the axis pattern. For more details about scripts, please refer to "5.7 Script List".
- 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.

5.3.8 Program Run (B-30008)



Outline

This screen displays operating the program of the robot controller.

Description

1. Displays the servo ON/OFF status of each axis. The servo ON/OFF status can also be switched.
2. Operates the program. For more details, please refer to "5.3.21 Program Run1 to Program Run7".
3. Displays the system ready status.
4. Switches to each screen.
5. These switches operate the displayed Program Run screen page.

1/7

 : Displays the page number of the displayed Program Run screen.
 Touch the value to change the page number.

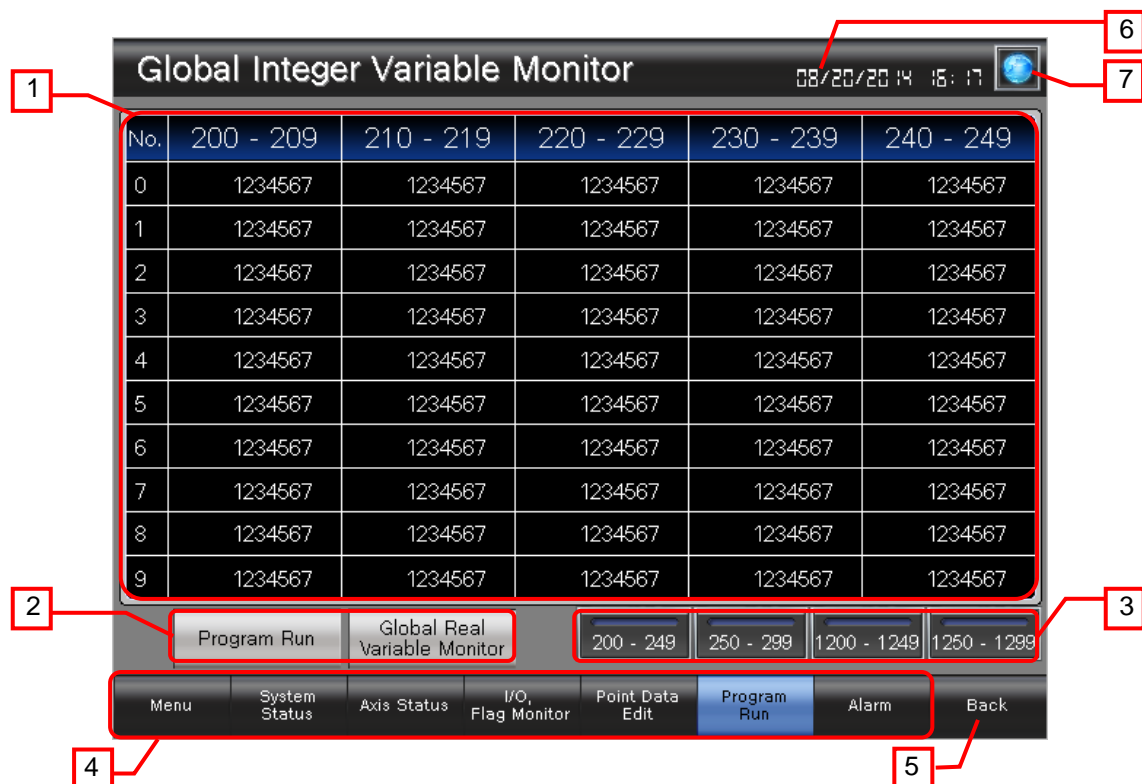
◀ ▶

 : Switches the displayed Program Run screen.
6. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
7. Switches to the previously opened screen.
8. Displays the current date and time. Touch the button to open the [Clock Setting] window.
9. Opens the [Language Setting] window.

Remarks

- A project script is used for clearing superimpose windows. Moreover, a screen script is used for displaying superimpose windows. For more details about scripts, please refer to "5.7 Script List".
- 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.

5.3.9 Global Integer Variable Monitor (B-30009)



Outline

This screen displays and edits the global integer variable of the robot controller.

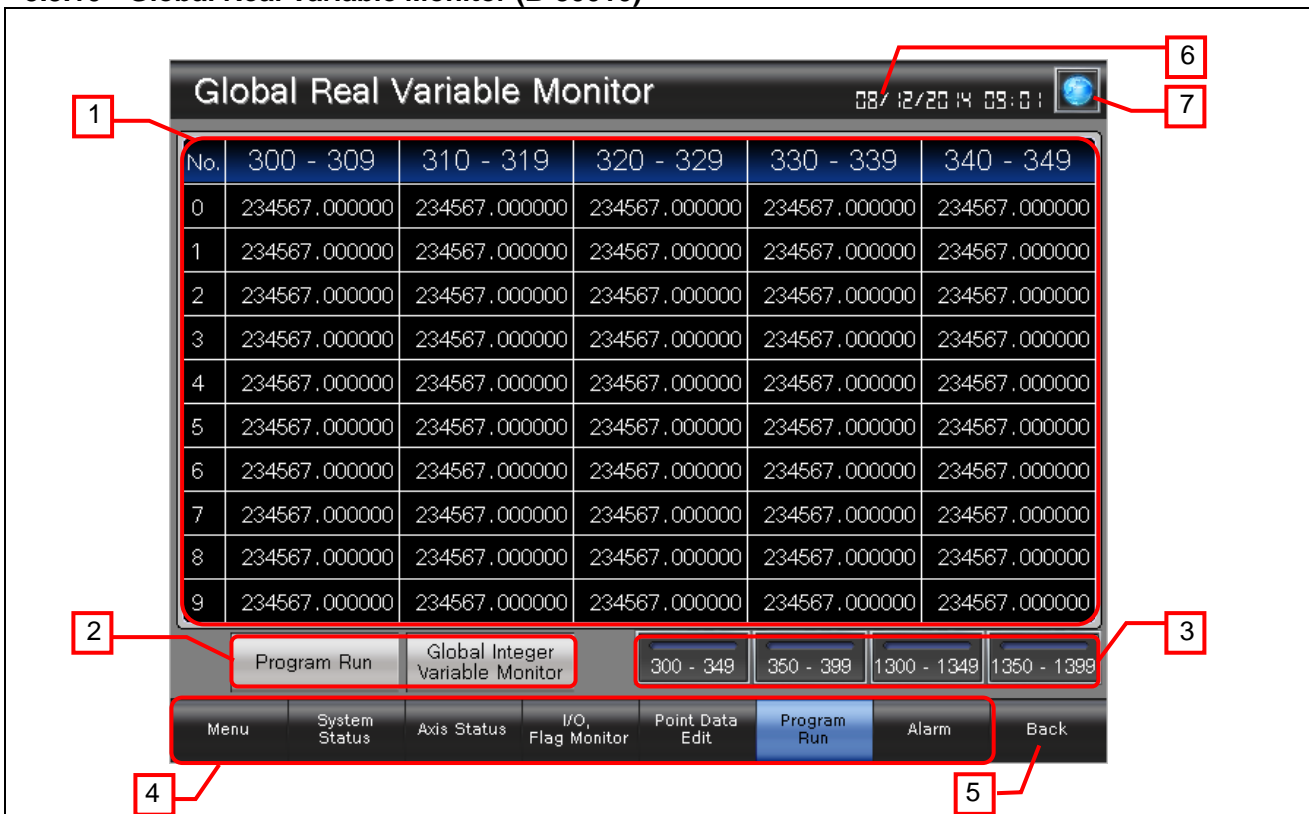
Description

1. Displays the global integer variable. Touch the value to change the value.
2. Switches to each screen.
3. Switches the range of the global integer variable to be monitored.
4. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
5. Switches to the previously opened screen.
6. Displays the current date and time. Touch the button 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 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.

5.3.10 Global Real Variable Monitor (B-30010)



Outline

This screen displays and edits the global real variable of the robot controller.

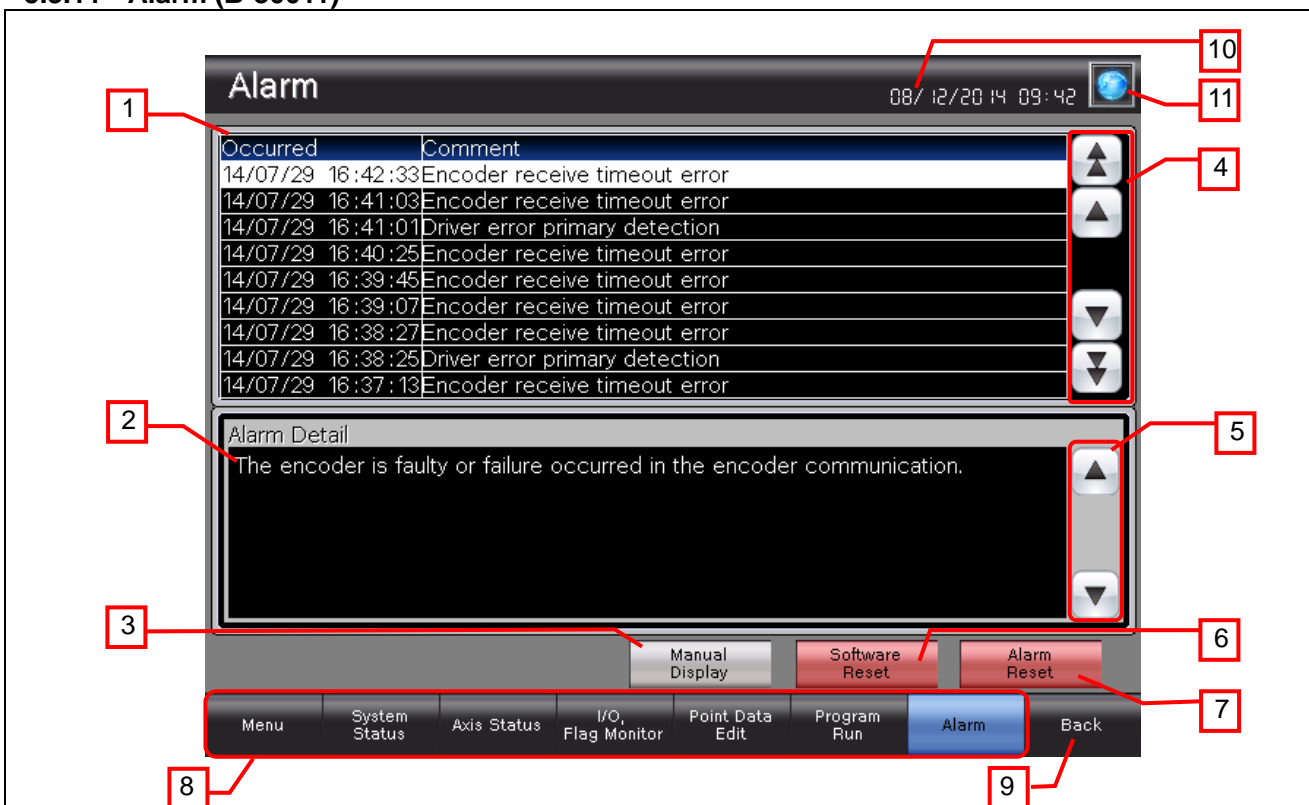
Description

1. Displays the global real variable. Touch the value to change the value.
2. Switches to each screen.
3. Switches the range of the global real variable to be monitored.
4. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
5. Switches to the previously opened screen.
6. Displays the current date and time. Touch the button 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 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.

5.3.11 Alarm (B-30011)



Outline

This screen displays the latest system error of the robot controller.

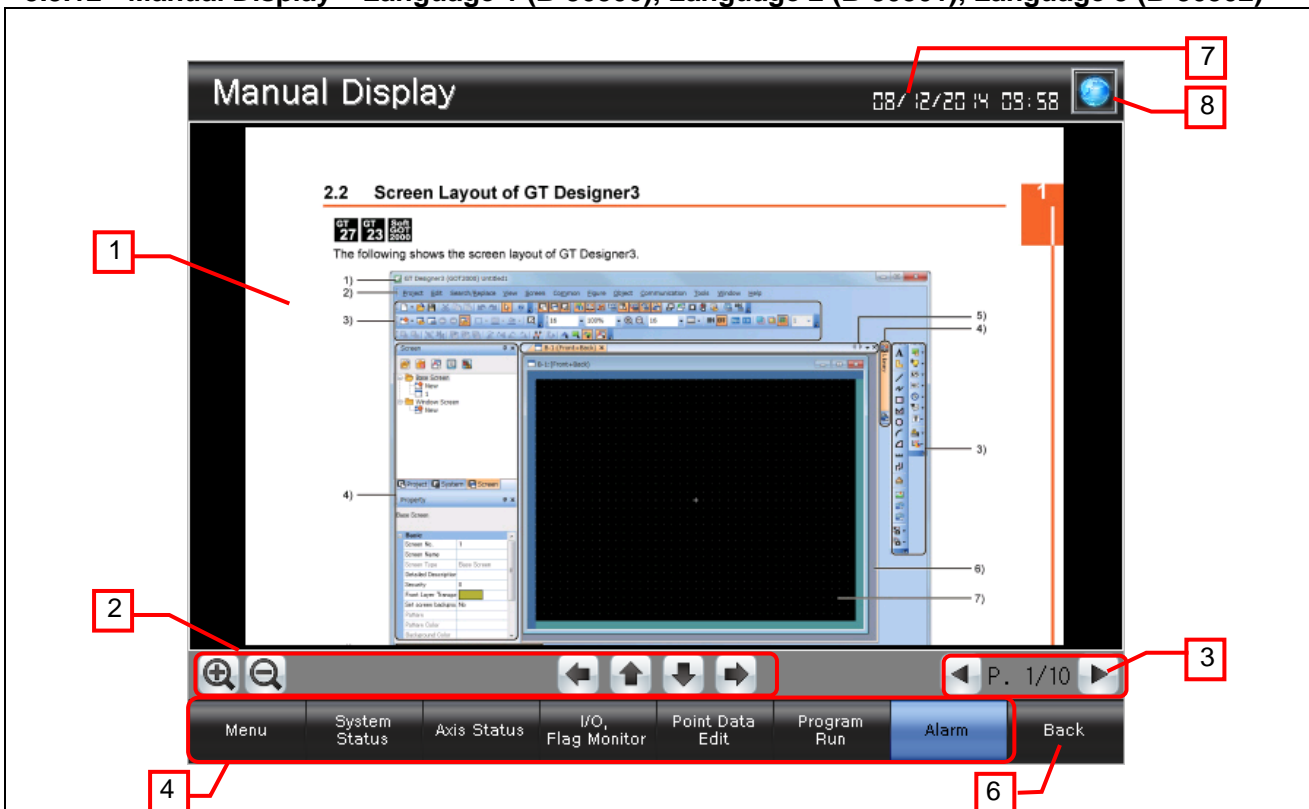
Description

- Displays alarms. Touch an alarm to display/hide the cursor. While touching the alarm display area, flicking the area will scroll the alarms up and down.
- Displays details of the alarm.
- Switches to the [Manual Display] screen.
- Operates the alarms.
 - : Scrolls the page up and down.
 - : Scrolls alarms up and down line by line.
- Operates details of the alarm.
 - : Scrolls alarms up and down line by line.
- Resets the software. Hold down the switch for three seconds.
- Resets the alarm. Hold down the switch for three seconds.
- Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
- Switches to the previously opened screen.
- Displays the current date and time. Touch the button to open the [Clock Setting] window.
- Opens the [Language Setting] window.

Remarks

- The [Manual Display] switch allows switching to the [Manual Display] screen of the currently displayed language.
- 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.






5.3.12 Manual Display – Language 1 (B-30500), Language 2 (B-30501), Language 3 (B-30502)



Outline

This screen displays the manual of the currently displayed language.

Description

1. The documents with Document IDs 201 to 203 are displayed in the [Manual Display - Language 1 (B-30500) to Language 3 (B-30502)] screens. The page 1 is displayed when the screen is displayed initially. While touching the document, flicking to 8 directions will scroll the document to 8 directions. While displaying the edge of the document, flicking the document will switch pages. Pinching out and in will zoom in and out the document in 3 steps (large, middle, and small).
2. These switches operate the displayed document.
 : Enlarges or reduces the displayed document.
 : Scrolls the displayed document to the left or right.
 : Scrolls the displayed document up or down.
3. These switches operate the displayed document page.
 : Displays the page number of the displayed document. Touch the value to change the page number.
 : Switches to the previous or next page of the displayed document.
4. Switches to each screen. The blue switch indicates the currently displayed screen, thus selecting this switch will not switch the screen.
5. Switches to the previously opened screen.
6. Displays the current date and time. Touch the button to open the [Clock Setting] window.
7. Opens the [Language Setting] window.

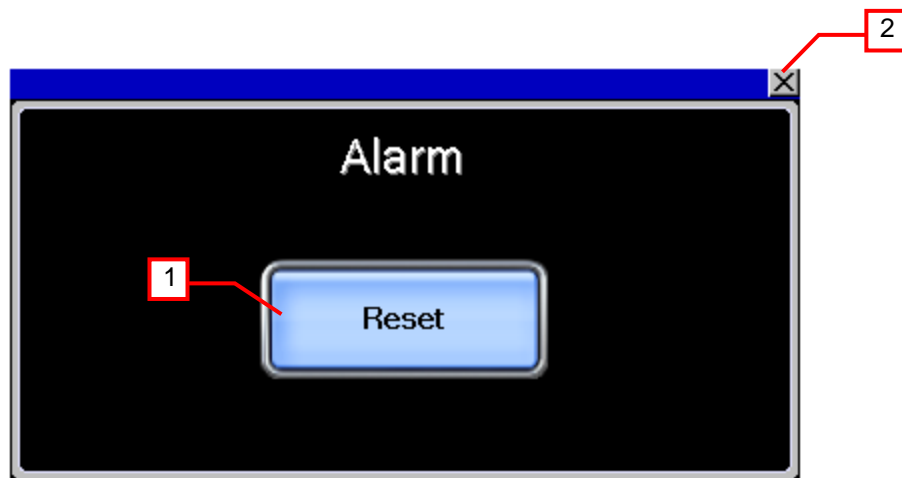
Remarks

- The language of the manual should be the same as the language of the document that will be prepared for the manual. The language of the title and the text on touch switches (other than the manual display area) is the same as the language of comments specified in the columns No. 1 to No. 3 in the comment group No. 498 to 500. The relation of the document (Document ID) and the column No. in the comment group No. 498 to 500 is shown below.

Base screen	Document ID	Column No.
Manual Display - Language 1 (B-30500)	201	1
Manual Display - Language 2 (B-30501)	202	2
Manual Display - Language 3 (B-30502)	203	3

- When GOT is started, the document page is set to No. "1" with the project script. For more details about scripts, please refer to "5.7 Script List".
- The document data for the manual display should be prepared by the customers. For more details, please refer to "6. 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.

5.3.13 Alarm Reset (W-30001)



Outline

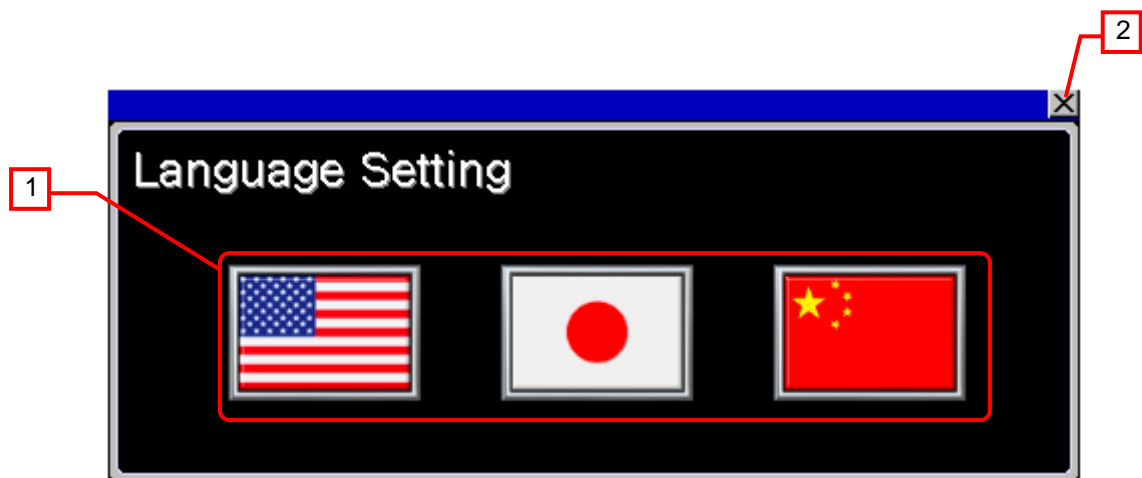
This window screen allows resetting the system alarm.

Description

1. Resets the system alarm, and closes the window screen after 1 second.
2. Closes the window screen.

Remarks

5.3.14 Language Setting (W-30002)



Outline

This window screen allows selecting the GOT language.

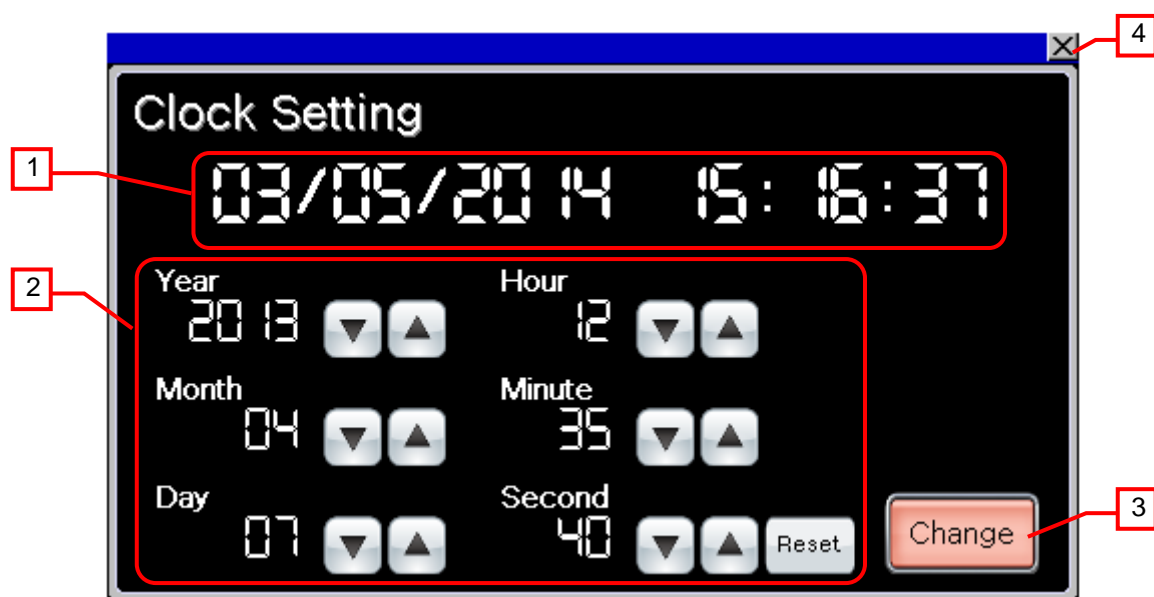
Description

1. Switches the language and closes the window screen.
2. Closes the window screen.

Remarks

- The system language is also switched corresponding to the display language.
- While the base screen is one of the screens [Manual Display - Language 1 to Language 3], if the language is switched with the [Language Setting] window the screen script will change the manual display screen according to the language selected in this screen. For more details about scripts, please refer to "5.7 Script List".



5.3.15 Clock Setting (W-30003)



Outline

This window screen allows changing the GOT clock data.

Description

1. Displays the current date and time.
2. Use   switches to change the date and time. Hold down the switches to increment or decrement the value continuously. The [Reset] switch resets the seconds.
3. Applies the set date and time to the GOT clock data, and closes the window screen after 1 second.
4. Closes the window screen.

Remarks

- The 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 "5.7 Script List".

5.3.16 Input Port1 to Input Port7 (W-30010 to W-30016)

1

No.	Item	No.	Item	No.	Item
0	Program Start	15	General-purpose Input	30	General-purpose Input
1	General-purpose Input	16	General-purpose Input	31	General-purpose Input
2	General-purpose Input	17	General-purpose Input	32	General-purpose Input
3	General-purpose Input	18	General-purpose Input	33	General-purpose Input
4	General-purpose Input	19	General-purpose Input	34	General-purpose Input
5	General-purpose Input	20	General-purpose Input	35	General-purpose Input
6	General-purpose Input	21	General-purpose Input	36	General-purpose Input
7	Program Specification (PRG No.1)	22	General-purpose Input	37	General-purpose Input
8	Program Specification (PRG No.2)	23	General-purpose Input	38	General-purpose Input
9	Program Specification (PRG No.4)	24	General-purpose Input	39	General-purpose Input
10	Program Specification (PRG No.8)	25	General-purpose Input	40	General-purpose Input
11	Program Specification (PRG No.10)	26	General-purpose Input	41	General-purpose Input
12	Program Specification (PRG No.20)	27	General-purpose Input	42	General-purpose Input
13	Program Specification (PRG No.40)	28	General-purpose Input	43	General-purpose Input
14	General-purpose Input	29	General-purpose Input	44	General-purpose Input

Outline

This window screen displays the input port statuses of the robot controller.

Description

1. Displays the input port statuses.

Remarks

- This screen is used for Input Port Monitor (B-30004).

5.3.17 Output Port1 to Output Port7 (W-30018 to W-30024)

1

No.	Item	No.	Item	No.	Item
300	Alarm Output	315	General-purpose Output	330	General-purpose Output
301	Ready Output	316	General-purpose Output	331	General-purpose Output
302	Emergency-stop Output	317	General-purpose Output	332	General-purpose Output
303	General-purpose Output	318	General-purpose Output	333	General-purpose Output
304	General-purpose Output	319	General-purpose Output	334	General-purpose Output
305	General-purpose Output	320	General-purpose Output	335	General-purpose Output
306	General-purpose Output	321	General-purpose Output	336	General-purpose Output
307	General-purpose Output	322	General-purpose Output	337	General-purpose Output
308	General-purpose Output	323	General-purpose Output	338	General-purpose Output
309	General-purpose Output	324	General-purpose Output	339	General-purpose Output
310	General-purpose Output	325	General-purpose Output	340	General-purpose Output
311	General-purpose Output	326	General-purpose Output	341	General-purpose Output
312	General-purpose Output	327	General-purpose Output	342	General-purpose Output
313	General-purpose Output	328	General-purpose Output	343	General-purpose Output
314	General-purpose Output	329	General-purpose Output	344	General-purpose Output

Outline

This window screen displays the output port statuses of the robot controller.

Description

1. Displays the output port statuses.

Remarks

- This screen is used for Output Port Monitor (B-30005).

5.3.18 Flag1 to Flag3 (W-30025 to W-30027)

1

Status	Item	Status	Item	Status	Item	Status	Item	Status	Item	Status	Item	Status	Item
OFF	600	OFF	615	OFF	630	OFF	645	OFF	660	OFF	675	OFF	690
OFF	601	OFF	616	OFF	631	OFF	646	OFF	661	OFF	676	OFF	691
OFF	602	OFF	617	OFF	632	OFF	647	OFF	662	OFF	677	OFF	692
OFF	603	OFF	618	OFF	633	OFF	648	OFF	663	OFF	678	OFF	693
OFF	604	OFF	619	OFF	634	OFF	649	OFF	664	OFF	679	OFF	694
OFF	605	OFF	620	OFF	635	OFF	650	OFF	665	OFF	680	OFF	695
OFF	606	OFF	621	OFF	636	OFF	651	OFF	666	OFF	681	OFF	696
OFF	607	OFF	622	OFF	637	OFF	652	OFF	667	OFF	682	OFF	697
OFF	608	OFF	623	OFF	638	OFF	653	OFF	668	OFF	683	OFF	698
OFF	609	OFF	624	OFF	639	OFF	654	OFF	669	OFF	684	OFF	699
OFF	610	OFF	625	OFF	640	OFF	655	OFF	670	OFF	685	OFF	700
OFF	611	OFF	626	OFF	641	OFF	656	OFF	671	OFF	686	OFF	701
OFF	612	OFF	627	OFF	642	OFF	657	OFF	672	OFF	687	OFF	702
OFF	613	OFF	628	OFF	643	OFF	658	OFF	673	OFF	688	OFF	703
OFF	614	OFF	629	OFF	644	OFF	659	OFF	674	OFF	689	OFF	704

Outline

This window screen displays the flag statuses of the robot controller.

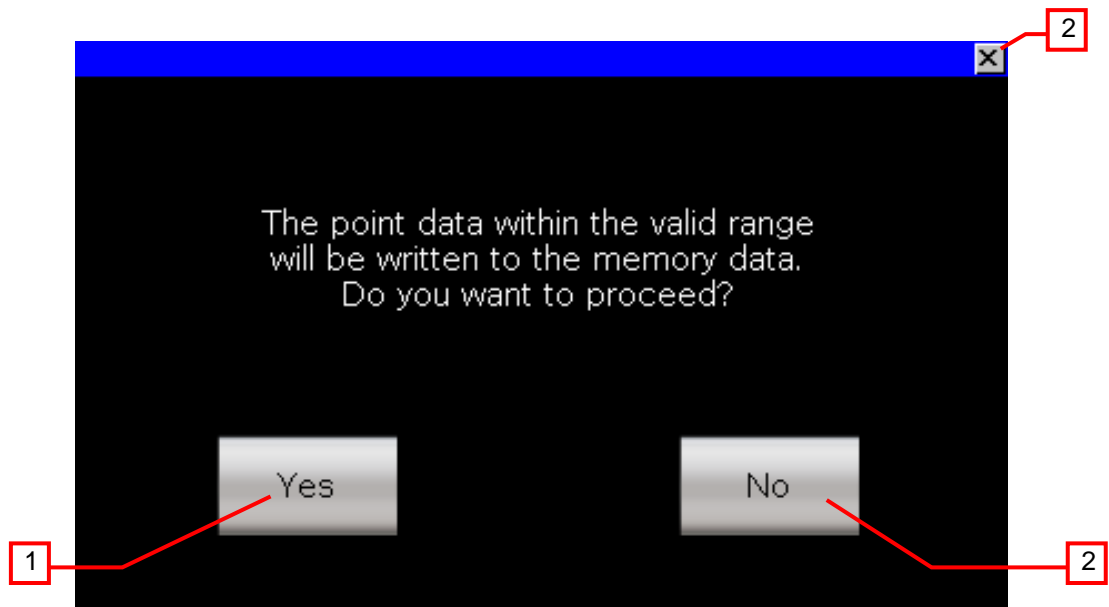
Description

- 1. Displays the flag statuses.

Remarks

- This screen is used for Flag Monitor (B-30006).

5.3.19 Write Confirmation Window (W-30028)



Outline

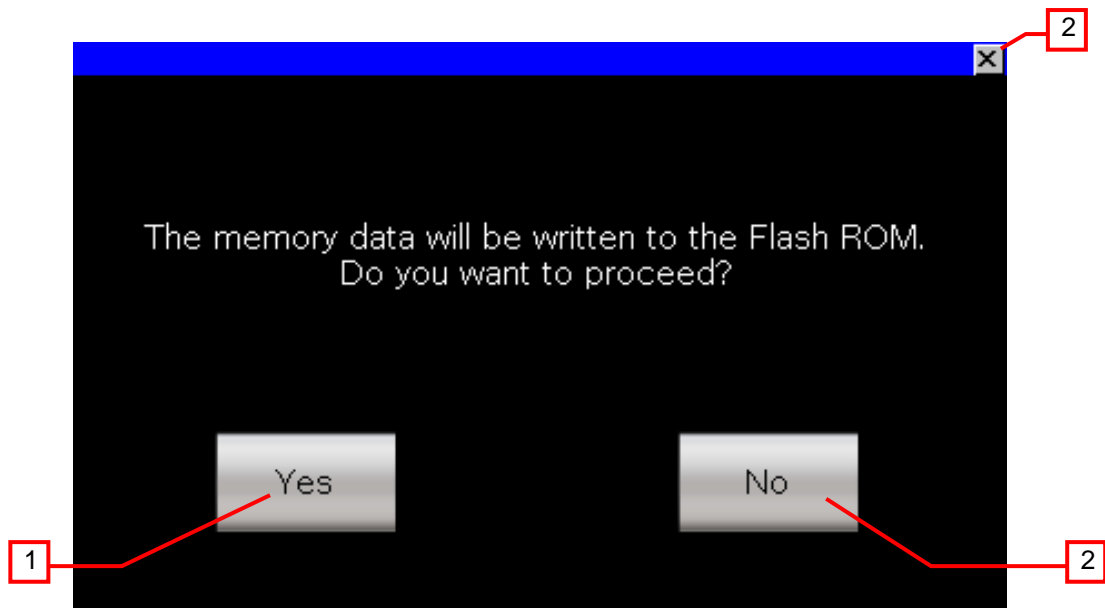
This window screen displays for confirmation when the point data is written to the memory data.

Description

1. Writes the value set for the point data to the memory data.
2. Closes the window screen.

Remarks

5.3.20 ROM Write Confirmation Window (W-30029)



Outline

This window screen displays for confirmation when the memory data is written to the flash ROM.

Description

1. Writes the value of memory data to the flash ROM.
2. Closes the window screen.

Remarks

5.3.21 Program Run1 to Program Run7 (W-30030 to W-30036)

1

Program No.1	Execute	Stop	Program No.11	Execute	Stop
Program No.2	Execute	Stop	Program No.12	Execute	Stop
Program No.3	Execute	Stop	Program No.13	Execute	Stop
Program No.4	Execute	Stop	Program No.14	Execute	Stop
Program No.5	Execute	Stop	Program No.15	Execute	Stop
Program No.6	Execute	Stop	Program No.16	Execute	Stop
Program No.7	Execute	Stop	Program No.17	Execute	Stop
Program No.8	Execute	Stop	Program No.18	Execute	Stop
Program No.9	Execute	Stop	Program No.19	Execute	Stop
Program No.10	Execute	Stop	Program No.20	Execute	Stop

Outline

This window screen operates the program of the robot controller.

Description

- 1. Execute/Stop the program.

Remarks

- This screen is used for Program Run (B-30008).

5.4 Device List

Some of the devices specified to the on-screen switches and lamps, etc., 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 the "GT Designer3 (GOT2000) Help".

5.4.1 Devices of the controller

Type	Device No.	Application
Bit	IP000 to IP299	Input port
	OP300 to OP599	Output port
	FG000:600 to FG000:899	Flag
Word	AXST0+6n (n=0 to 3)	Axis status (axis 1 to axis 4)
	AXST1+6n (n=0 to 3)	Axis sensor input status (axis 1 to axis 4)
	AXST3+6n (n=0 to 3)	Encoder status (axis 1 to axis 4)
	AXST4+6n (n=0 to 3)	Current position (L) (axis 1 to axis 4)
	AXST5+6n (n=0 to 3)	Current position (H) (axis 1 to axis 4)
	PGST0+4n (n=0 to 127)	Program status
	PGST1+4n (n=0 to 127)	Execution program step number
	PGST2+4n (n=0 to 127)	Program-dependent error code
	PGST3+4n (n=0 to 127)	Error occurrence step number
	SYST0	System mode
	SYST1	Critical level system error number
	SYST2	Latest system error number
	SYST3	System status byte 1
	SYST4	System status byte 2
	SYST5	System status byte 3
	PRG001 to PRG128	Program control
	AR0	Alarm reset
	SR0	Software reset
	FRW0	Write to flash ROM
	SV0	Servo device command trigger
	SV1	Servo device axis pattern
	SV2	Servo ON/OFF control
	INT000:200 to INT000:299, INT000:1200 to INT000:1299	Global integer variable
	RL000:300 to RL000:399, RL000:1300 to RL000:1399	Global real variable
	ER001:000:00	Latest error: System error number
	ER101:000:00	Axis error number (axis 1)
	ER102:000:00	Axis error number (axis 2)
	ER103:000:00	Axis error number (axis 3)
	ER104:000:00	Axis error number (axis 4)
	ER101:000:0A	Message (axis 1)
	ER102:000:0A	Message (axis 2)
	ER103:000:0A	Message (axis 3)
	ER104:000:0A	Message (axis 4)
	PD00	Point data total count device command trigger
	PD01	Starting point number
	PD02	Number of point data
	PD03+13n (n=0 to 11)	Point number (Point data 1 to 12)
	PD04+13n (n=0 to 11)	Axis pattern (Point data 1 to 12)
	PD05+13n (n=0 to 11)	Acceleration (Point data 1 to 12)

Type	Device No.	Application
Word	PD06+13n (n=0 to 11)	Deceleration (Point data 1 to 12)
	PD07+13n (n=0 to 11)	Speed (Point data 1 to 12)
	PD08+13n (n=0 to 11)	1st axis position data (Point data 1 to 12)
	PD09+13n (n=0 to 11)	2nd axis position data (Point data 1 to 12)
	PD0A+13n (n=0 to 11)	3rd axis position data (Point data 1 to 12)
	PD0B+13n (n=0 to 11)	4th axis position data (Point data 1 to 12)

5.4.2 GOT internal devices

Type	Device No.	Application
Bit	GB40	Script trigger
	GB41	Device data transfer reset
	GB61150	Script No.30104 startup trigger
	GB61153	Script No.30107 startup trigger
	GB61250	Write completion device
	GD60031.b13	GOT Error Reset Signal
	GD61015+2n.b0 (n=0 to 3)	Device data transfer trigger (axis 1 to axis 4)
	GD61016+2n.b0 (n=0 to 3)	Device data transfer external notification device (axis 1 to axis 4)
	GD61205+2n.b0 (n=0 to 3)	Servo ON/OFF status storage device (axis 1 to axis 4)
	GS512.b0	Time change signal
Word	GD60000	Base screen switching
	GD60001	Overlap window 1 screen switching
	GD60004	Overlap window 2 screen switching
	GD60016	Superimpose window 1 screen switching
	GD60021	Language switching
	GD60022	System language switching
	GD60031, GD60041	System information
	GD60080 to GD60082	Document display, page No., previous page switch, next page switch
	GD61000	Program No. specification device
	GD61001	Program No. offset device
	GD61010	Monitor axis specification device
	GD61011	Monitor axis offset device
	GD61012	Axis error offset device
	GD61015 to GD61022	Device data transfer trigger for axis error
	GD61040	Latest system error No. storage device
	GD61045	Current position (L) storage device
	GD61046	Current position (H) storage device
	GD61050 to GD61089	Latest system error message storage device
	GD61100	PD area clearing device
	GD61200	Program operation monitor switching device
	GD61205 to GD61208	Servo ON/OFF status storage device
	GD61250	Offset device for integer device
	GD61300	Offset device for real device
	GD61350	Alarm detail display device
	GD61355	Display row specification device
	GD63990 to GD63995	Clock digiswitch
	GS513 to GS516	Changed time
	GS650 to GS652	Present time
	TMP0950 to TMP0996	For script operation

5.5 Comment List

Comment group No.	Comment No.	Where comments are used
498	No.519 to 4095	B-30011
499	No.519 to 4095	B-30011
500	No.1	B-30001 to 30502
	No.2 to 7	B-30001
	No.8 to 14	B-30002 to 30502
	No.51 to 113	B-30002
	No.151 to 188	B-30003
	No.201 to 203	B-30004
	No.251 to 261	W-30010 to 30016
	No.301 to 303	B-30005
	No.351 to 356	W-30018 to 30024
	No.401 to 403	B-30006
	No.451 to 452	W-30025 to 3000.27
	No.501 to 515	B-30007
	No.551 to 559	B-30008
	No.601 to 730	W-30030 to 30036
	No.751 to 774	B-30009
	No.801 to 824	B-30010
	No.851 to 857	B-30010
	No.901	B-30500 to 30502
	No.951 to 953	W-30028
	No.1001 to 1003	W-30029
	No.1051 to 1052	W-30001
	No.1101	W-30002
	No.1151 to 1159	W-30003

5.6 Device Data Transfer List

ID: 201 Data Transfer 1

Item		Settings
Device Data Transfer Trigger	Trigger Type	Rise
	External Control Device	GD61015
	Trigger Device	GD61015.b0
	Transfer Inverting Flag Device	GD61015.b1
External Information Notification	<input checked="" type="checkbox"/> External Notification Device	GD61016
	Device Data Transfer Notification Signal	GD61016.b0
	BCD Conversion Error Notification Signal	GD61016.b14
	Device Data Transfer Error Notification Signal	GD61016.b15
Device	Block Number	3
Block	Device Type	Unsigned BIN32
	Points	20
	Source Device	ER101:000:0A
	Destination Device	GD61050
	Offset	None
Block 2	Device Type	Unsigned BIN32
	Points	1
	Source Device	ER101:000:00
	Destination Device	GD61040
	Offset	None
Block 3	Device Type	Bit
	Points	1
	Source Device	GB41
	Destination Device	GD61015.b0
	Offset	None

ID: 202 Data Transfer 2

Item		Settings
Device Data Transfer Trigger	Trigger Type	Rise
	External Control Device	GD61017
	Trigger Device	GD61017.b0
	Transfer Inverting Flag Device	GD61017.b1

Item		Settings
External Information	Notification	<input checked="" type="checkbox"/> External Notification Device
	Device Data Transfer Notification Signal	GD61018
	BCD Conversion Error Notification Signal	GD61018.b0
	Device Data Transfer Error Notification Signal	GD61018.b14
Device	Block Number	GD61018.b15
Block 1	Device Type	3
	Points	Unsigned BIN32
	Source Device	20
	Destination Device	ER102:000:0A
	Offset	GD61050
Block 2	Device Type	None
	Points	Unsigned BIN32
	Source Device	1
	Destination Device	ER102:000:00
	Offset	GD61040
Block 3	Device Type	None
	Points	Bit
	Source Device	1
	Destination Device	GB41
	Offset	GD61017.b0

ID: 203 Data Transfer 3

Item		Settings
Device Data Transfer Trigger	Trigger Type	Rise
	External Control Device	GD61019
	Trigger Device	GD61019.b0
	Transfer Inverting Flag Device	GD61019.b1
External Information	Notification	<input checked="" type="checkbox"/> External Notification Device
	Device Data Transfer Notification Signal	GD61020
	BCD Conversion Error Notification Signal	GD61020.b0
	Device Data Transfer Error Notification Signal	GD61020.b14
Device	Block Number	GD61020.b15
Block 1	Device Type	3

Item		Settings
Block 1	Points	20
	Source Device	ER103:000:0A
	Destination Device	GD61050
	Offset	None
Block 2	Device Type	Unsigned BIN32
	Points	1
	Source Device	ER103:000:00
	Destination Device	GD61040
	Offset	None
Block 3	Device Type	Bit
	Points	1
	Source Device	GB41
	Destination Device	GD61019.b0
	Offset	None

ID: 204 Data Transfer 4

Item		Settings
Device Data Transfer Trigger	Trigger Type	Rise
	External Control Device	GD61021
	Trigger Device	GD61021.b0
	Transfer Inverting Flag Device	GD61021.b1
External Information Notification	<input checked="" type="checkbox"/> External Notification Device	GD61022
	Device Data Transfer Notification Signal	GD61022.b0
	BCD Conversion Error Notification Signal	GD61022.b14
	Device Data Transfer Error Notification Signal	GD61022.b15
Device	Block Number	3
Block 1	Device Type	Unsigned BIN32
	Points	20
	Source Device	ER104:000:0A
	Destination Device	GD61050
	Offset	None
Block 2	Device Type	Unsigned BIN32
	Points	1

Item		Settings
Block 2	Source Device	ER104:000:00
	Destination Device	GD61040
	Offset	None
Block 3	Device Type	Bit
	Points	1
	Source Device	GB41
	Destination Device	GD61021.b0
	Offset	None

5.7 Script List

Item	Settings
Project script	Specified
Screen script	B-30002, B-30003, B-30004, B-30005, B-30006, B-30007, B-30008, W-30002
Object script	B-30008, W-30003

5.7.1 Project script

Script No.	30000	Script name	Script30000
Comment	Initial Setting		
Data type	Signed BIN16	Trigger type	Rise, GB40
[w:GD61000] = 1; //Program No. [w:GD61010] = 1; //Monitor Axis for Axis status [w:GD61355] = 1; //Alarm detail row [u32:PD1] = 1; //Starting point No. [w:GD60080] = 1; //Set 1 to Document Page No. of Base Screen 30500 [w:GD60081] = 1; //Set 1 to Document Page No. of Base Screen 30501 [w:GD60082] = 1; //Set 1 to Document Page No. of Base Screen 30502			
Script No.	30103	Script name	Script30103
Comment	Erase Superimpose window		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Erase Superimpose window except the specific window switch([w:GD60000]){ case 30004: break; case 30005: break; case 30006: break; case 30008: break; default: [w:GD60016] = 0; break; }			

5.7.2 Screen script

Base screen 30002

Script No.	30100	Script name	Script30100
Comment	Offset calculation		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Offset calculation [w:GD61001] = ([w:GD61000] - 1) * 4; //Calculate the Offset value based on program No.			

Base screen 30003

Script No.	30101	Script name	Script30101
Comment	Monitor Control		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Set status offset device for the target monitor axis [w:GD61011] = ([w:GD61010] - 1) * 6; //Control the axis error [w:GD61012] = ([w:GD61010] - 1) * 2; if([b:GD61016.b0[w:GD61012]] == OFF){ //When the Device Data Transfer is not in process [b:GD61015.b0[w:GD61012]] = ON; //Activate the Device Data Transfer trigger for target monitor axis } //Control the current position [w:GD61045] = [w:AXST04[w:GD61011]]; [w:GD61046] = [w:AXST05[w:GD61011]];			

Base screen 30004, 30005, 30006, 30008

Script No.	30102	Script name	Script30102
Comment	Read Superimpose window		
Data type	Signed BIN16	Trigger type	Rise, GB40
//Display Superimpose window when the specific Superimpose window is displayed. switch([w:GD60000]){ case 30004: [w:GD60016] = 30010; break; case 30005: [w:GD60016] = 30018; break; case 30006: [w:GD60016] = 30025; break; case 30008: [w:GD60016] = 30030; [w:GD61200] = 1; break; default: [w:GD60016] = 0; break; }			

Base screen 30007

Script No.	30104	Script name	Script30104
Comment	Read PD		
Data type	Unsigned BIN16	Trigger type	Rise, GB61150
[u32:GD61100] = 0; //Clear and set internal devices to 0. fmov([u32:GD61100],[u32:PD03],156); //Clear PD area [u32:PD02] = 12; //Set the number of point data			

[u32:PD00] = 2; //Execute command trigger for read			
[b:GB61153] = ON;			
[b:GB61150] = OFF;			
Script No.	30105	Script name	Script30105
Comment	PD Reread when screen is changed		
Data type	Unsigned BIN16	Trigger type	Rise, GB40
[u32:GD61100] = 0; //Clear and set internal devices to 0.			
fmov([u32:GD61100],[u32:PD03],156); //Clear PD area			
[u32:PD02] = 12; //Set the number of point data			
[u32:PD00] = 2; //Execute command trigger for read			
[b:GB61153] = ON;			
Script No.	30107	Script name	Script30107
Comment	Set the axis pattern		
Data type	Unsigned BIN16	Trigger type	ON, GB61153
//Control the axis pattern			
[u32:PD04] = 0x000F;			
[u32:PD11] = 0x000F;			
[u32:PD1E] = 0x000F;			
[u32:PD2B] = 0x000F;			
[u32:PD38] = 0x000F;			
[u32:PD45] = 0x000F;			
[u32:PD52] = 0x000F;			
[u32:PD5F] = 0x000F;			
[u32:PD6C] = 0x000F;			
[u32:PD79] = 0x000F;			
[u32:PD86] = 0x000F;			
[u32:PD93] = 0x000F;			
[b:GB61153] = OFF;			

Base screen 30008

Script No.	30109	Script name	Script30109
Comment	ON/OFF status of servo		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Monitor ON/OFF status of servo from the axis status			
[w:GD61205] = [w:AXST00];			
[w:GD61206] = [w:AXST06];			
[w:GD61207] = [w:AXST0C];			
[w:GD61208] = [w:AXST12];			

Window screen 30002

Script No.	30002	Script name	Script30002
Comment	Lang. Switching for Man. Display		
Data type	Signed BIN16	Trigger type	When closing a screen
if(([w:GD60000] >= 30500) && ([w:GD60000] <=30502)){ //Base Screen Switching Device 30500 to 30502			
if([w:GD60021] == 1){ //In Case of Language 1			
[w:GD60000] = 30500; //Manual Display - Move to Language 1 Screen			
}			
if([w:GD60021] == 2){ //In Case of Language 2			
[w:GD60000] = 30501; //Manual Display - Move to Language 2 Screen			
}			
if([w:GD60021] == 3){ //In Case of Language 3			
[w:GD60000] = 30502; //Manual Display - Move to Language 3 Screen			
}			
}			

5.7.3 Object script

Base screen 30008

Object (Name)	Numerical input		
Script user ID	1		
Data type	Unsigned BIN16	Trigger type	Rise, GB61250
//Screen Switching [w:GD60016] = 30030 + ([w:GD61200] - 1); [b:GB61250] = OFF;			

Window screen 30003

Object (Name)	Numerical display (Change_Year)		
Script user ID	1		
Data type	Unsigned BIN16	Trigger type	Rise, GB40
//Obtain Today's Year & Month from Clock Data [w:TMP950] = [w:GS650] & 0xF000; //Obtain Tenths Digit of "Last 2-Digits of Year" from Clock Data for Setting [w:TMP960] = [w:TMP950] >> 12; //Decimal Alignment [w:TMP968] = [w:TMP960] * 10; //BCD->BIN [w:TMP951] = [w:GS650] & 0x0F00; //Obtain Ones Digit of "Last 2-Digits of Year" from Clock Data for Setting [w:TMP961] = [w:TMP951] >> 8; //BCD->BIN [w:TMP973] = 2000 + [w:TMP968] + [w:TMP961]; //Set Year to TMP973 as BIN [w:GD63990] = [w:TMP973]; //Set Year [w:TMP952] = [w:GS650] & 0x00F0; //Obtain Tenths Digit of Month from Clock Data for Setting [w:TMP962] = [w:TMP952] >> 4; //Decimal Alignment [w:TMP969] = [w:TMP962] * 10; //BCD->BIN [w:TMP953] = [w:GS650] & 0x000F; //Obtain Ones Digit of Month from Clock Data for Setting [w:TMP974] = [w:TMP969] + [w:TMP953]; //Set Month to TMP974 as BIN [w:GD63991] = [w:TMP974]; //Set Month [w:TMP954] = [w:GS651] & 0xF000; //Obtain Tenths Digit of "Last 2-Digits of Day" from Clock Data for Setting [w:TMP963] = [w:TMP954] >> 12; //Decimal Alignment [w:TMP970] = [w:TMP963] * 10; //BCD->BIN [w:TMP955] = [w:GS651] & 0x0F00; //Obtain Ones Digit of "Last 2-Digits of Day" from Clock Data for Setting [w:TMP964] = [w:TMP955] >> 8; //BCD->BIN [w:TMP975] = [w:TMP970] + [w:TMP964]; //Set Day to TMP975 as BIN [w:GD63992] = [w:TMP975]; //Set Day [w:TMP956] = [w:GS651] & 0x00F0; //Obtain Tenths Digit of Hour from Clock Data for Setting [w:TMP965] = [w:TMP956] >> 4; //Decimal Alignment [w:TMP971] = [w:TMP965] * 10; //BCD->BIN [w:TMP957] = [w:GS651] & 0x000F; //Obtain Ones Digit of Hour from Clock Data for Setting [w:TMP976] = [w:TMP971] + [w:TMP957]; //Set Hour to TMP976 as BIN [w:GD63993] = [w:TMP976]; //Set Hour [w:TMP958] = [w:GS652] & 0xF000; //Obtain Tenths Digit of "Last 2-Digits of Minute" from Clock Data for Setting [w:TMP966] = [w:TMP958] >> 12; //Decimal Alignment [w:TMP972] = [w:TMP966] * 10; //BCD->BIN [w:TMP959] = [w:GS652] & 0x0F00; //Obtain Ones Digit of "Last 2-Digits of Minute" from Clock Data for Setting [w:TMP967] = [w:TMP959] >> 8; //BCD->BIN [w:TMP977] = [w:TMP972] + [w:TMP967]; //Set Minute to TMP977 as BIN [w:GD63994] = [w:TMP977]; //Set Minute [w:TMP993] = [w:GS652] & 0x00F0; //Obtain Tenths Digit of Second from Clock Data for Setting [w:TMP995] = [w:TMP993] >> 4; //Decimal Alignment [w:TMP996] = [w:TMP995] * 10; //BCD->BIN [w:TMP994] = [w:GS652] & 0x000F; //Obtain Ones Digit of Second from Clock Data for Setting [w:TMP978] = [w:TMP996] + [w:TMP994]; //Set Second to TMP978 as BIN [w:GD63995] = [w:TMP978]; //Set Second			

Object (Name)	Numerical display (Change_Month)		
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] / 10) << 4) + ([w:TMP979] % 10); //Year BIN -> BCD			
[w:TMP981] = (([w:GD63991] / 10) << 4) + ([w:GD63991] % 10); //Month BIN -> BCD			
[w:TMP982] = (([w:GD63992] / 10) << 4) + ([w:GD63992] % 10); //Day BIN -> BCD			
[w:TMP983] = (([w:GD63993] / 10) << 4) + ([w:GD63993] % 10); //Hour BIN -> BCD			
[w:TMP984] = (([w:GD63994] / 10) << 4) + ([w:GD63994] % 10); //Minute BIN -> BCD			
[w:TMP985] = (([w:GD63995] / 10) << 4) + ([w:GD63995] % 10); //Second BIN -> BCD			
Object (Name)	Numerical display (Change_Day)		
Script user ID	3		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Year & Month Setting			
[w:GS513] = ([w:TMP980] << 8) + [w:TMP981]; //Set Year & Month to Change Time Device			
Object (Name)	Numerical display (Change_Hour)		
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 Change Time Device			
Object (Name)	Numerical display (Change_Minute)		
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 (Name)	Numerical display (Change_Second)		
Script user ID	6		
Data type	Unsigned BIN16	Trigger type	Ordinary
//Day of Week Setting			
[w:TMP986] = [w:GD63990]; //Year (BIN)			
[w:TMP987] = [w:GD63991]; //Month (BIN)			
[w:TMP988] = [w:GD63992]; //Day (BIN)			
if(([w:TMP987] == 1) ([w:TMP987] == 2)){ //Correction Processing to Calculate January and February as 13th/14th Month			
[w:TMP986] = [w:TMP986] - 1; //Subtract 1 from Year			
[w:TMP987] = [w:TMP987] + 12; //Add 12 to Month			
}			
[w:TMP989] = [w:TMP986]/4; //Create Items Required for Zeller's Congruence			
[w:TMP990] = [w:TMP986]/100; //Create Items Required for Zeller's Congruence			
[w:TMP991] = [w:TMP986]/400; //Create Items Required for Zeller's Congruence			
[w:TMP992] = (13*[w:TMP987]+8)/5; //Create Items Required for Zeller's Congruence			
//Calculate Day of Week Using Zeller's Congruence and Set the Day to Change Time Device			
[w:GS516] = ([w:TMP986]+[w:TMP989]-[w:TMP990]+[w:TMP991]+[w:TMP992]+[w:TMP988])%7;			

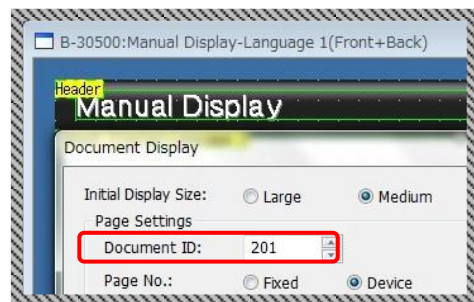
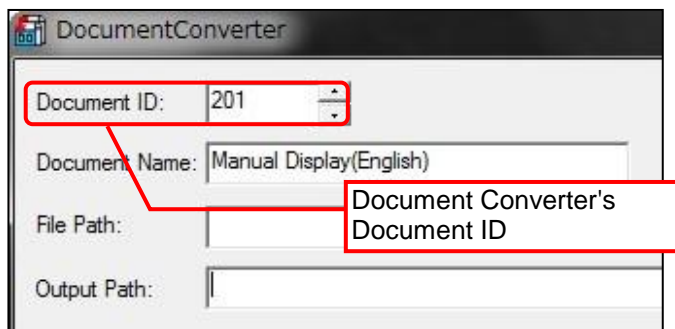
6. MANUAL DISPLAY

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 languages of the manual are switched by switching to the base screen to which the document (Document ID) of the selected language is specified.

6.1 Preparing Document Data for Manual Display

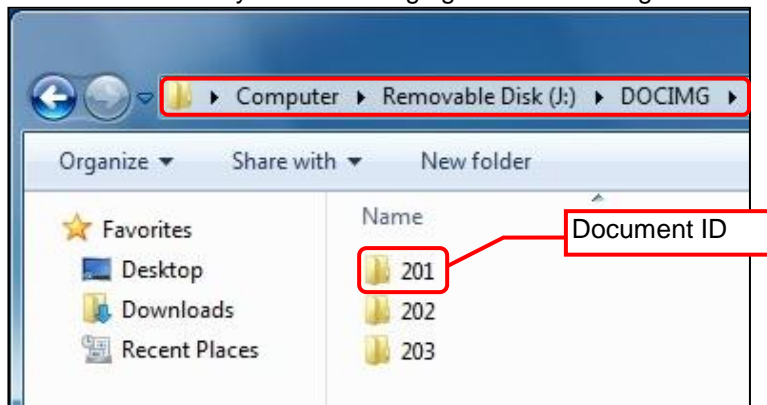
Example: Displaying a manual (document) on the base screen B-30500: Manual Display - Language 1

- (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 the same value as the base screen B-30500 document display [Document ID].



Example: Document ID of the document display in the base screen B-30500: Manual Display - Language 1

- (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.

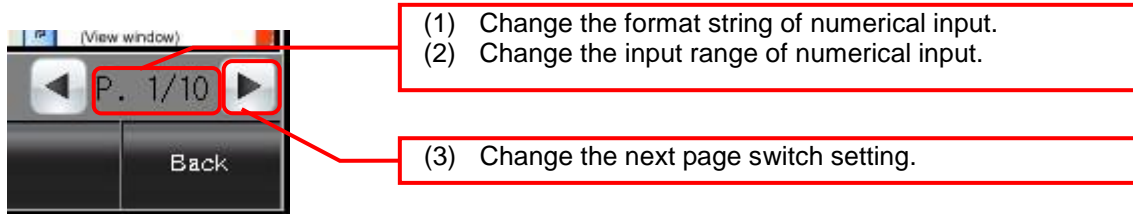


SD card folder configuration

6.2 Changing the Total Number of Document Pages

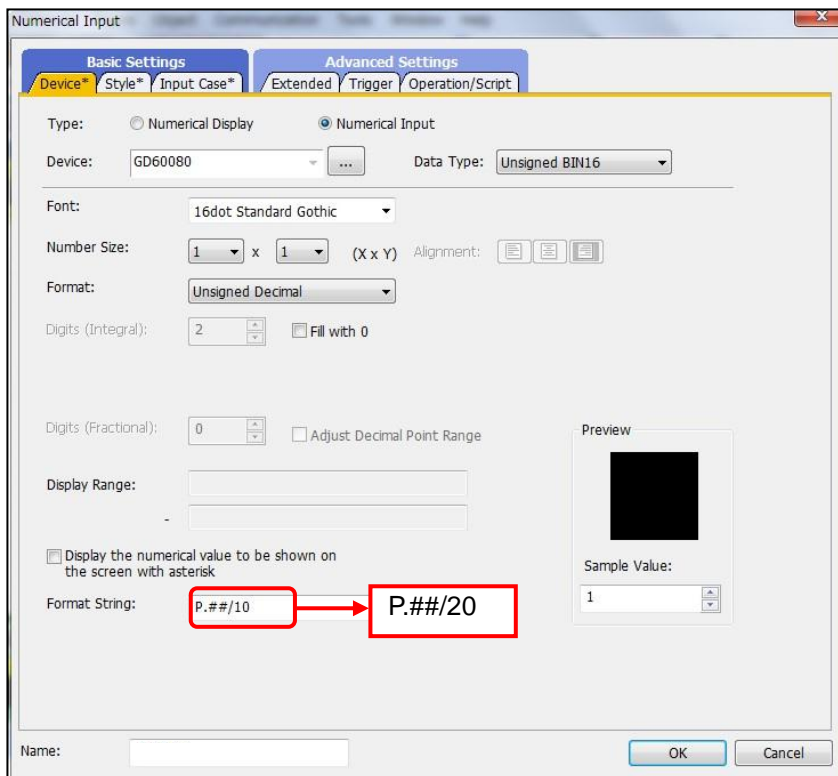
Change the total number of pages at the lower right of the screen according to the total page number of the document to be displayed.

Example: To change the total number of the document from 10 pages to 20 pages.

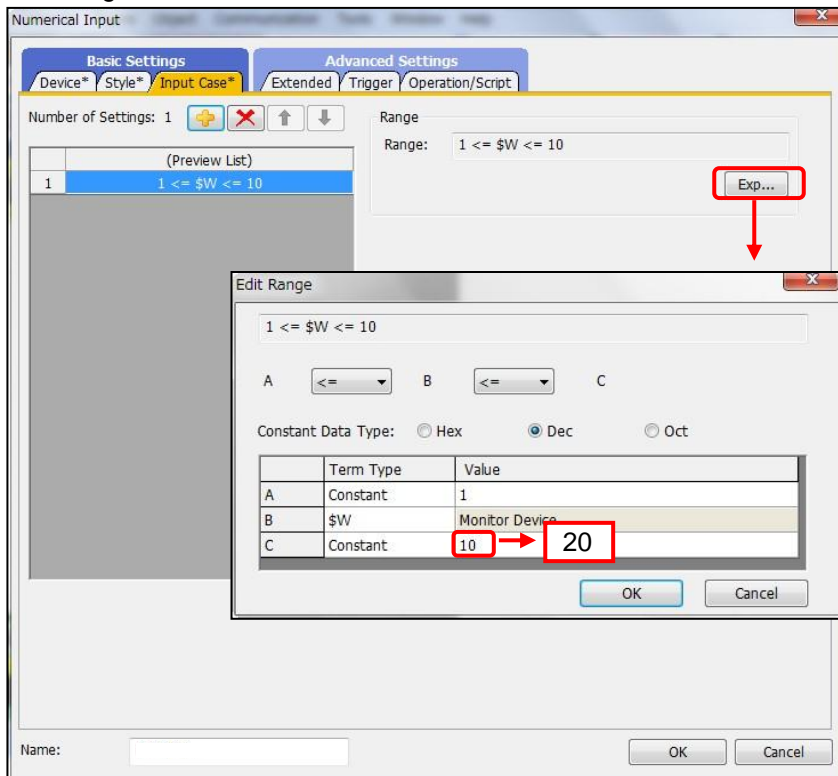


(1) Change the format string of numerical input.

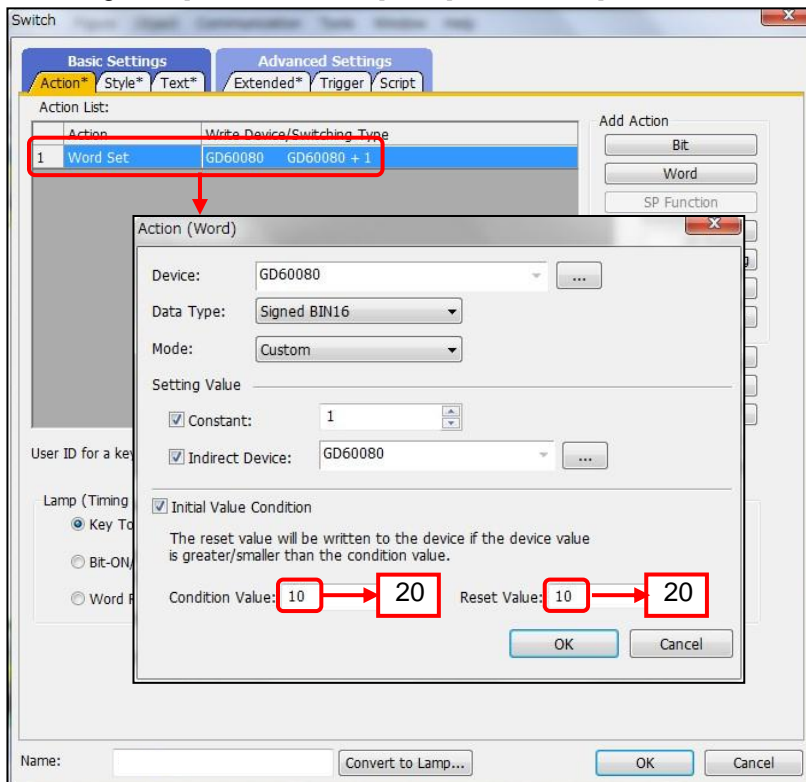
1. Double-click the numerical input, and open the [Device] tab on the dialog box.
2. Change the [Format String] from "P.##/10" to "P.##/20".



- (2) Change the input range of numerical input.
 1. Open the [Input Range] tab on the dialog box.
 2. Click on [Exp...], and open the [Edit Range] dialog box.
 3. Change the constant from 10 to 20.

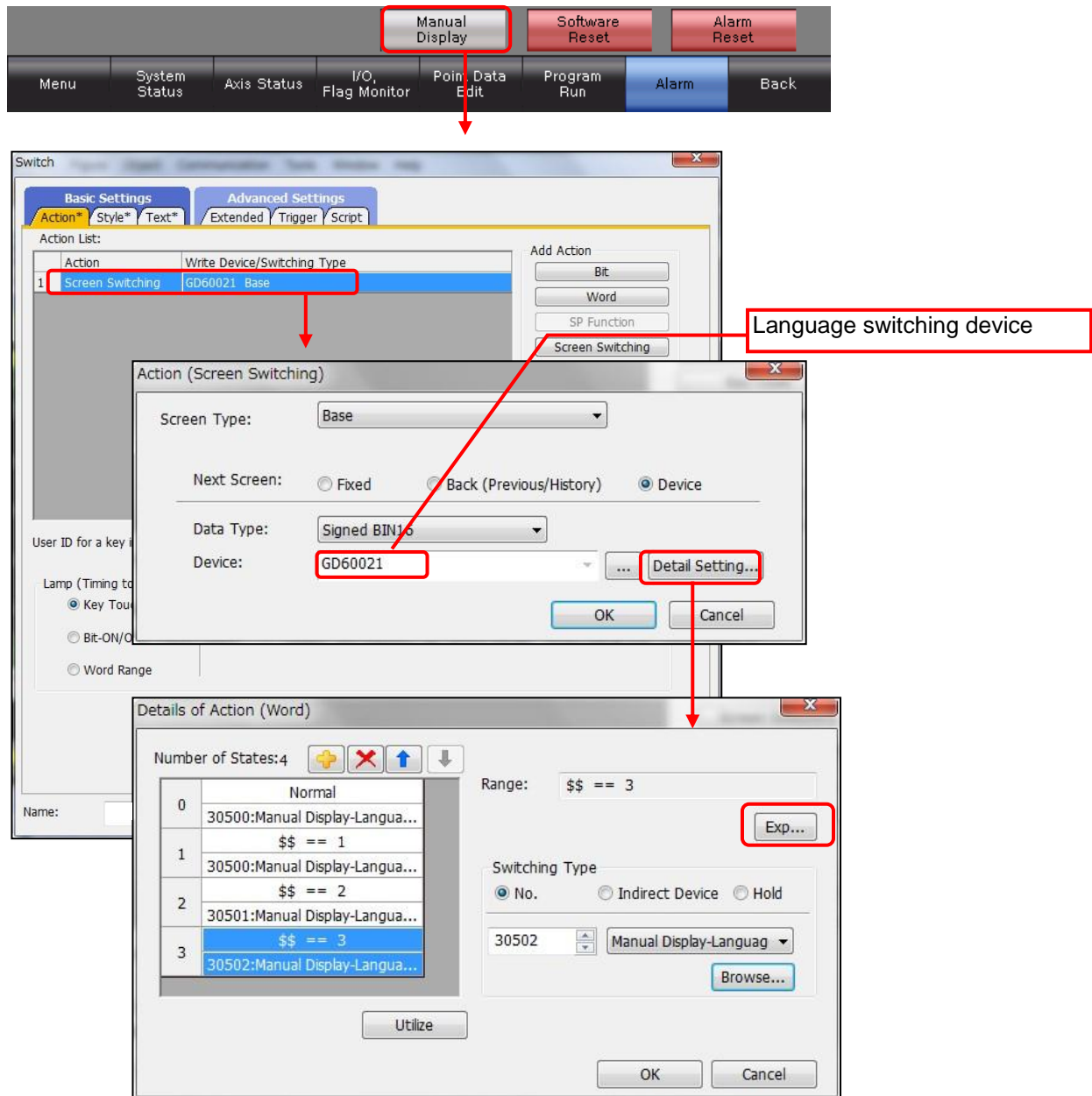


- (3) Change the next page switch setting.
 1. Open the [Action] tab on the dialog box.
 2. Double-click on [Action 1], and open the [Action (Word)] dialog box.
 3. Change the [Condition Value] and [Reset Value] from 10 to 20.



6.3 Setting the [Manual Display] Switch

The [Manual Display] switch specifies the manual screen to be displayed according to the Column No. stored in the language switching device. For more details about Column No., please refer to "5.1 Display Language".



7. TEMPLATES

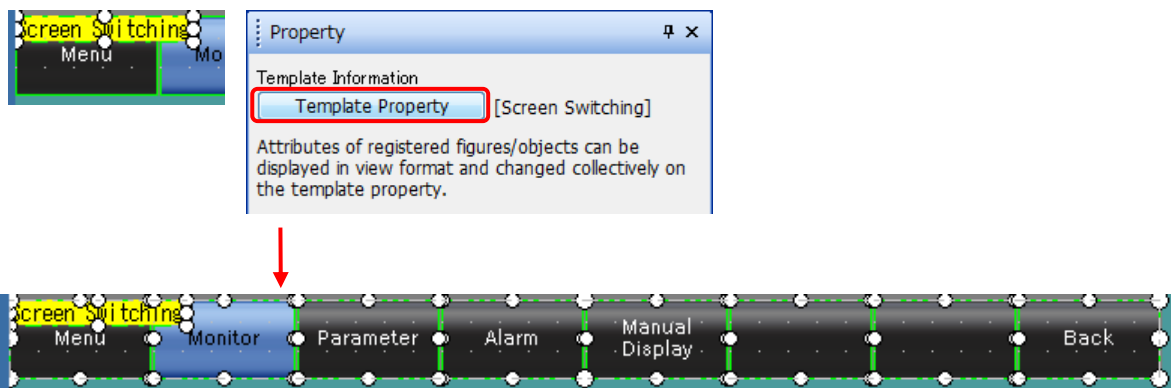
Templates are a group of figures and objects. Related settings are grouped into template attributes and registered, so the devices and colors, etc. can be easily changed in a batch. For more details about changing the attribute settings, please refer to the "GT Designer3 (GOT2000) Help".



The template information is only displayed on the screen design software's editing screen. It is not displayed on the GOT display screen.

Example: Changing shape color of a switch (each screen)

(1) Select [Template Information], and click on [Template Property] (or double-click [Template Information]).



The figures and objects that are registered in the template are changed to the selected state.

(2) Double-click on [Set Value] in [Switch(Each Screen)_Shape Color], and select the new color.

