MITSUBISHI ELECTRIC

GT Works3 Add-on License for GOT2000 Enhanced Drive Control (Servo) Project Data Manual (Screen Details)

-SW1DND-GTSV-MZ

Safety Precautions

Always read the precautions before using this product.

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

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

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

⚠ **WARNING**	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
⚠ **CAUTION**	Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

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

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

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

[Test Operation Precautions]

⚠ WARNING

- Before testing the operation of a user-created screen (such as turning on or off a bit device, changing the current value of a word device, changing the set value or current value of a timer or counter, and changing the current value of a buffer memory), thoroughly read the manual to fully understand the operating procedure.
  During the test operation, never change the data of the devices which are used to perform significant operation for the system.
  Doing so may cause an accident due to a false output or malfunction.

[Precautions for Using a Data Storage]

⚠ WARNING

- Do not remove the SD card from drive A while the SD card is being accessed by the GOT, or the GOT may stop processing for about 20 seconds.
  During this stop, you cannot operate the GOT, and the functions running in the background, including the screen refresh, alarm, logging, and script, also stop.
  This stop affects the system operation, causing an accident.
  Before removing the SD card, check that the SD card access LED is off.
- Do not remove the data storage from the file server (drive N) that is being accessed by the GOT, or the system operation may be affected.
  Before removing the data storage, check the relevant system signal to make sure that the data storage is not being accessed.

[Precautions for Using a Data Storage]

⚠CAUTION

- Do not remove the data storage from the GOT while the data storage is being accessed by the GOT, or the data storage and files may be damaged.
  Before removing the data storage, check the SD card access LED, relevant system signal, or others to make sure that the data storage is not being accessed.

[Precautions for Remote Control]

⚠WARNING

- Remote control is available through a network by using GOT functions, including the SoftGOT-GOT link function, the remote personal computer operation function, the VNC server function, and the GOT Mobile function.
  If you remotely operate control equipment using such functions, the field operator may not notice the remote operation, leading to an accident.
  In addition, a communication delay or interruption may occur depending on the network environment, and remote control of control equipment cannot be performed normally in some cases.
  Before using the above functions to perform remote control, fully grasp the circumstances of the field site and ensure safety.
- When operating the server (GOT) of the GOT Mobile function to disconnect a client, notify the operator of the client about the disconnection beforehand.
  Not doing so may cause an accident.

[Design Precautions]

⚠WARNING

- To maintain the security (confidentiality, integrity, and availability) of the GOT and the system against unauthorized access, DoS[*1] attacks, computer viruses, and other cyberattacks from unreliable networks and devices via network, take appropriate measures such as firewalls, virtual private networks (VPNs), and antivirus solutions.
  Mitsubishi Electric shall have no responsibility or liability for any problems involving GOT trouble and system trouble by unauthorized access, DoS attacks, computer viruses, and other cyberattacks.
  *1 DoS: A denial-of-service (DoS) attack disrupts services by overloading systems or exploiting vulnerabilities, resulting in a denial-of-service (DoS) state.

[Precautions for Exclusive Authorization Control]

⚠WARNING

- Before using the GOT network interaction function to prevent simultaneous operations from multiple pieces of equipment, make sure you understand the function.
  You can enable or disable the exclusive authorization control of the GOT network interaction function for each screen. (For all screens, the exclusive authorization control is disabled by default.)
  Properly determine the screens for which the exclusive authorization control is required, and set the control by screen.
  A screen for which the exclusive authorization control is disabled is operable simultaneously from multiple pieces of equipment. Make sure to determine the operation period for each operator, fully grasp the circumstances of the field site, and ensure safety to perform operations.

Considerations for using GT Designer3

Memory capacity and hard disk space of your personal computer

For the required memory capacity and hard disk space, refer to the following.

📖GT Designer3 (GOT2000) Screen Design Manual

Error massage displayed at GT Designer3 startup or during data editing in GT Designer3

[Operation will be terminated because of insufficient memory. Would you like to stop?] If the above message appears, exit some running applications or restart Windows to free up memory.

Changing device types

If a word device and any bit of the device are specified, changing the device type from the bit data type to a word data type may display [??] as the device.

In such a case, specify the device again.

Example) D0.b0 → D0, D0.b5 → ??

Windows settings

If you change the Windows font size from the default, the panes and other items in GT Designer3 will appear improperly. Use GT Designer3 with the default Windows font size.

CONTENTS

Introduction

This manual describes the screen specifications and how to use servo amplifier add-on projects.

For the installation and operating procedure for the servo amplifier add-on projects, refer to the following.

GT Works3 Add-on License for GOT2000 Enhanced Drive Control (Servo) Project Data Manual (Fundamentals)

Manuals for GT Works3

The electronic manuals related to this product are installed together with the screen design software.
If you need the printed manuals, consult your local sales office.

Manuals for GT Designer3 (GOT2000)

Point

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

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

■Screen design software-related manuals

Manual name	Manual number (Model code)	Format
GT Works3 Installation Instructions	-	PDF
GT Designer3 (GOT2000) Screen Design Manual	SH-081220ENG (1D7ML9)	PDF e-Manual
GT Converter2 Version3 Operating Manual for GT Works3	SH-080862ENG	PDF e-Manual
GOT2000 Series MES Interface Function Manual for GT Works3 Version1	SH-081228ENG	PDF e-Manual

■Connection manuals

Manual name	Manual number (Model code)	Format
GOT2000 Series Connection Manual (Mitsubishi Electric Products) For GT Works3 Version1	SH-081197ENG (1D7MJ8)	PDF e-Manual
GOT2000 Series Connection Manual (Non-Mitsubishi Electric Products 1) For GT Works3 Version1	SH-081198ENG	PDF e-Manual
GOT2000 Series Connection Manual (Non-Mitsubishi Electric Products 2) For GT Works3 Version1	SH-081199ENG	PDF e-Manual
GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1	SH-081200ENG	PDF e-Manual
GOT2000 Series Handy GOT Connection Manual For GT Works3 Version1	SH-081867ENG (1D7MS9)	PDF e-Manual
GOT2000 Series Connection Manual (α2 Connection) for GT Works3 Version1	JY997D52301	PDF e-Manual

■GT SoftGOT2000 manuals

Manual name	Manual number (Model code)	Format
GT SoftGOT2000 Version1 Operating Manual	SH-081201ENG	PDF e-Manual
MELSOFT GT OPC UA Client Operating Manual	SH-082174ENG	PDF

■GOT2000 series user's manuals

Manual name	Manual number (Model code)	Format
GOT2000 Series User's Manual (Hardware)	SH-081194ENG (1D7MJ5)	PDF e-Manual
GOT2000 Series User's Manual (Utility)	SH-081195ENG (1D7MJ6)	PDF e-Manual
GOT2000 Series User's Manual (Monitor)	SH-081196ENG (1D7MJ7)	PDF e-Manual

■GOT SIMPLE series user's manuals

Manual name	Manual number	Format
GOT SIMPLE Series User's Manual	JY997D52901	PDF e-Manual

■Manuals related to GT Works3 add-on projects

Manual name	Manual number (Model code)	Format
GT Works3 Add-on License for GOT2000 Enhanced Drive Control (Servo) Project Data Manual (Fundamentals)	SH-082072ENG (1D7MV1)	PDF e-Manual
GT Works3 Add-on License for GOT2000 Enhanced Drive Control (Servo) Project Data Manual (Screen Details)	SH-082074ENG (1D7MV3)	PDF e-Manual

Manuals for GT Designer3 (GOT1000)

Refer to the Help and manuals for GT Designer3 (GOT1000).

Abbreviations, Generic Terms, and Model Icons

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

GOT

■GOT2000 series

Abbreviations and generic terms			Description	Meaning of icon	
				Available	Unavailable
GT27	GT27-X	GT2715-X	GT2715-XTBA GT2715-XTBD	GT 27	GT 27
	GT27-S	GT2712-S	GT2712-STBA GT2712-STWA GT2712-STBD GT2712-STWD		
		GT2710-S	GT2710-STBA GT2710-STBD		
		GT2708-S	GT2708-STBA GT2708-STBD		
	GT27-V	GT2710-V	GT2710-VTBA GT2710-VTWA GT2710-VTBD GT2710-VTWD		
		GT2708-V	GT2708-VTBA GT2708-VTBD		
		GT2705-V	GT2705-VTBD		
GT25			All GT25 models	GT 25	GT 25
	GT25-W	GT2512-WX	GT2512-WXTBD GT2512-WXTSD	GT 25	GT 25
		GT2510-WX	GT2510-WXTBD GT2510-WXTSD		
		GT2507-W	GT2507-WTBD GT2507-WTSD		
		GT2507T-W	GT2507T-WTSD		
	GT25-S	GT2512-S	GT2512-STBA GT2512-STBD		
		GT2512F-S	GT2512F-STNA GT2512F-STND		
	GT25-V	GT2510-V	GT2510-VTBA GT2510-VTWA GT2510-VTBD GT2510-VTWD		
		GT2510F-V	GT2510F-VTNA GT2510F-VTND		
		GT2508-V	GT2508-VTBA GT2508-VTWA GT2508-VTBD GT2508-VTWD		
		GT2508F-V	GT2508F-VTNA GT2508F-VTND		
		GT2505-V	GT2505-VTBD		
	GT25HS-V Handy GOT	GT2506HS-V	GT2506HS-VTBD	GT 2506 HS	GT 2506 HS
		GT2505HS-V	GT2505HS-VTBD	GT 2505 HS	GT 2505 HS
GT23	GT23-V	GT2310-V	GT2310-VTBA GT2310-VTBD	GT 23	GT 23
		GT2308-V	GT2308-VTBA GT2308-VTBD		

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

■GOT SIMPLE series

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

■GOT1000 series, GOT900 series, and GOT800 series

Abbreviations and generic terms	Description	Meaning of icon	
		Available	Unavailable
GOT1000 series	GOT1000 series	-	
GOT900 series	GOT-A900 series GOT-F900 series	-	
GOT800 series	GOT-800 series	-	

Communication unit

Abbreviations and generic terms	Description
Bus connection unit	GT15-QBUS GT15-QBUS2 GT15-ABUS GT15-ABUS2 GT15-75QBUSL GT15-75QBUS2L GT15-75ABUSL GT15-75ABUS2L
Serial communication unit	GT15-RS2-9P GT15-RS4-9S GT15-RS4-TE
MELSECNET/H communication unit	GT15-J71LP23-25 GT15-J71BR13
CC-Link IE TSN communication unit	GT25-J71GN13-T2
CC-Link IE Controller Network communication unit	GT15-J71GP23-SX
CC-Link IE Field Network communication unit	GT15-J71GF13-T2
CC-Link communication unit	GT15-J61BT13
Wireless LAN communication unit	GT25-WLAN
Serial multi-drop connection unit	GT01-RS4-M
Connection conversion adapter	GT10-9PT5S
Field network adapter unit	GT25-FNADP
Ethernet communication unit	GT25-J71E71-100
RS-232/485 signal conversion adapter	GT14-RS2T4-9P

Option unit

Abbreviations and generic terms	Description
Printer unit	GT15-PRN
Video input unit	GT27-V4-Z (A set of GT16M-V4-Z and GT27-IF1000)
RGB input unit	GT27-R2 GT27-R2-Z (A set of GT16M-R2-Z and GT27-IF1000)
Video/RGB input unit	GT27-V4R1-Z (A set of GT16M-V4R1-Z and GT27-IF1000)
RGB output unit	GT27-ROUT GT27-ROUT-Z (A set of GT16M-ROUT-Z and GT27-IF1000)
Digital video output unit	GT27-VHOUT
Multimedia unit	GT27-MMR-Z (A set of GT16M-MMR-Z and GT27-IF1000)
Video signal conversion unit	GT27-IF1000
External I/O unit	GT15-DIO GT15-DIOR
Sound output unit	GT15-SOUT
SD card unit	GT21-03SDCD

Option

Abbreviations and generic terms	Description
SD card	NZ1MEM-2GBSD NZ1MEM-4GBSD NZ1MEM-8GBSD NZ1MEM-16GBSD L1MEM-2GBSD L1MEM-4GBSD
Battery	GT11-50BAT GT15-BAT
Protective sheet	GT27-15PSGC GT25-12WPSGC GT25-12PSGC GT25-10WPSGC GT25-10PSGC GT25-08PSGC GT21-07WPSGC GT25T-07WPSVC GT25-05PSGC GT25-05PSGC-2 GT21-05PSGC GT21-04RPSGC-UC GT21-03PSGC-UC GT21-04PSGC-UC GT27-15PSCC GT25-12WPSCC GT25-12PSCC GT25-10WPSCC GT25-10PSCC GT25-08PSCC GT25-05PSCC GT25-05PSCC-2 GT25-12PSCC-UC GT25-10PSCC-UC GT25-08PSCC-UC GT21-07WPSCC GT21-05PSCC GT21-04RPSCC-UC GT21-04PSCC-UC GT21-03PSCC-UC GT16H-60PSC GT14H-50PSC
Antibacterial/antiviral protective sheet	GT25-12PSAC GT25-10PSAC GT25-08PSAC
Environmental protection sheet	GT25F-12ESGS GT25F-10ESGS GT25F-08ESGS
Protective cover for oil	GT20-15PCO GT20-12PCO GT20-10PCO GT20-08PCO GT21-12WPCO GT21-10WPCO GT21-07WPCO GT25T-07WPCO GT25-05PCO GT25-05PCO-2 GT05-50PCO GT21-04RPCO GT10-30PCO GT10-20PCO
USB environmental protection cover	GT25-UCOV GT25-05UCOV GT21-WUCOV

Abbreviations and generic terms	Description
Stand	GT15-90STAND GT15-80STAND GT15-70STAND GT05-50STAND GT25-10WSTAND GT21-07WSTAND GT25T-07WSTAND
Attachment	GT15-70ATT-98 GT15-70ATT-87 GT15-60ATT-97 GT15-60ATT-96 GT15-60ATT-87 GT15-60ATT-77 GT21-04RATT-40
Panel-mounted USB port extension	GT14-C10EXUSB-4S GT10-C10EXUSB-5S
Connector conversion box	GT16H-CNB-42S GT16H-CNB-37S GT11H-CNB-37S
Emergency stop switch guard cover	GT16H-60ESCOV GT14H-50ESCOV
Wall-mounting attachment	GT14H-50ATT

Software

■Software related to GOT

Abbreviations and generic terms	Description
GT Works3	SW1DND-GTWK3-J, SW1DND-GTWK3-E, SW1DND-GTWK3-C
GT Designer3 Version1	Screen design software GT Designer3 for GOT2000 and GOT1000 series
GT Designer3	Screen design software for GOT2000 series included in GT Works3
GT Designer3 (GOT2000)	
GT Designer3 (GOT1000)	Screen design software for GOT1000 series included in GT Works3
Speech synthesis license	GT Works Text to Speech License (SW1DND-GTVO-M)
Add-on license	GT Works3 add-on license for GOT2000 enhanced drive control (servo) project data (SW1DND-GTSV-MZ)
GENESIS64 Advanced	GENESIS64 server application (GEN64-APP)
GENESIS64 Basic SCADA	GENESIS64 server application (GEN64-BASIC)
GENESIS64	Generic term of GENESIS64 Advanced and GENESIS64 Basic SCADA
GOT Mobile function license for GT SoftGOT2000	License required to use the GOT Mobile function with GT SoftGOT2000 (SGT2K-WEBSKEY-□)
GT Simulator3	Screen simulator GT Simulator3 for GOT2000, GOT1000, and GOT900 series
GT SoftGOT2000	GOT2000 compatible HMI software GT SoftGOT2000
GT OPC UA Client	MELSOFT GT OPC UA Client (SW1DNN-GTOUC-MD)
GT Converter2	Data conversion software GT Converter2 for GOT1000 and GOT900 series
GT Designer2 Classic	Screen design software GT Designer2 Classic for GOT900 series
GT Designer2	Screen design software GT Designer2 for GOT1000 and GOT900 series
DU/WIN	Screen design software FX-PCS-DU/WIN for GOT-F900 series

■Software related to iQ Works

Abbreviations and generic terms	Description
iQ Works	iQ Platform compatible engineering environment MELSOFT iQ Works
MELSOFT Navigator	Integrated development environment software included in SW□DND-IQWK (iQ Platform compatible engineering environment MELSOFT iQ Works) (□ represents a version.)
MELSOFT iQ AppPortal	SW□DND-IQAPL-M type integrated application management software (□ represents a version.)

■Other software

Abbreviations and generic terms		Description
GX Works3		SW□DND-GXW3-E (-EA, -EAZ) type programmable controller engineering software (□ represents a version.)
GX Works2		SW□DNC-GXW2-E (-EA, -EAZ) type programmable controller engineering software (□ represents a version.)
Controller simulator	GX Simulator3	Simulation function of GX Works3
	GX Simulator2	Simulation function of GX Works2
	GX Simulator	SW□D5C-LLT-E (-EV) type ladder logic test tool function software package (SW5D5C-LLT (-V) or later versions) (□ represents a version.)
GX Developer		SW□D5C-GPPW-E (-EV)/SW□D5F-GPPW (-V) type software package (□ represents a version.)
GX LogViewer		SW□DNN-VIEWER-E type software package (□ represents a version.)
MI Configurator		Configuration and monitor tool for Mitsubishi Electric industrial computers (SW□DNNMICONF-M) (□ represents a version.)
PX Developer		SW□D5C-FBDQ-E type FBD software package for process control (□ represents a version.)
MT Works2		Motion controller engineering environment MELSOFT MT Works2 (SW□DND-MTW2-E) (□ represents a version.)
MT Developer		SW□RNC-GSV type integrated start-up support software for motion controller Q series (□ represents a version.)
CW Configurator		Setting/monitoring tools for the C Controller module and MELSECWinCPU(SW□DND-RCCPU-E) (□ represents a version.)
MR Configurator2		SW□DNC-MRC2-E type servo configuration software (□ represents a version.)
MR Configurator		MRZJW□-SETUP type servo configuration software (□ represents a version.)
FR Configurator2		Inverter setup software (SW□DND-FRC2-E) (□ represents a version.)
FR Configurator		Inverter setup software (FR-SW□-SETUP-WE) (□ represents a version.)
NC Configurator2		CNC parameter setting support tool (FCSB1221)
NC Configurator		CNC parameter setting support tool
FX Configurator-FP		Parameter setting, monitoring, and testing software package for FX3U-20SSC-H (SW□D5CFXSSCE) (□ represents a version.)
FX3U-ENET-L Configuration tool		FX3U-ENET-L type Ethernet module setting software (SW1D5-FXENETL-E)
RT ToolBox2		Robot program creation software (3D-11C-WINE)
RT ToolBox3		Robot program creation software (3F-14C-WINE)
MX Component		MX Component Version□ (SW□D5C-ACT-E, SW□D5C-ACT-EA) (□ represents a version.)
MX Sheet		MX Sheet Version□ (SW□D5C-SHEET-E, SW□D5C-SHEET-EA) (□ represents a version.)
CPU Module Logging Configuration Tool		CPU module logging configuration tool (SW1DNN-LLUTL-E)

■License key (for GT SoftGOT2000)

Abbreviations and generic terms	Description
License key	GT27-SGTKEY-U

■Others

Abbreviations and generic terms	Description
IAI	IAI Corporation
AZBIL	Azbil Corporation
OMRON	OMRON Corporation
KEYENCE	KEYENCE CORPORATION
JTEKT ELECTRONICS (formerly KOYO EI)	JTEKT ELECTRONICS CORPORATION (formerly KOYO ELECTRONICS INDUSTRIES CO., LTD.)
JTEKT	JTEKT Corporation
SHARP	Sharp Corporation
SHINKO	Shinko Technos Co., Ltd.
CHINO	CHINO CORPORATION
TOSHIBA	TOSHIBA CORPORATION
SHIBAURA MACHINE	SHIBAURA MACHINE CO., LTD.
PANASONIC	Panasonic Corporation
PANASONIC IDS	Panasonic Industrial Devices SUNX Co., Ltd.
HITACHI IES	Hitachi Industrial Equipment Systems Co., Ltd.
HITACHI	Hitachi, Ltd.
HIRATA	Hirata Corporation
FUJI	FUJI ELECTRIC CO., LTD.
MURATEC	Muratec products manufactured by Murata Machinery, Ltd.
YASKAWA	YASKAWA Electric Corporation
YOKOGAWA	Yokogawa Electric Corporation
RKC	RKC INSTRUMENT INC.
ALLEN-BRADLEY	Allen-Bradley products manufactured by Rockwell Automation, Inc.
CLPA	CC-Link Partner Association
GE	GE Intelligent Platforms, Inc.
HMS	HMS Industrial Networks
LS ELECTRIC (formerly LS IS)	LS ELECTRIC Co., Ltd (formerly LS Industrial Systems Co., Ltd.)
MITSUBISHI INDIA	Mitsubishi Electric India Pvt. Ltd.
ODVA	Open DeviceNet Vendor Association, Inc.
SCHNEIDER	Schneider Electric SA
SICK	SICK AG
SIEMENS	Siemens AG
SCHNEIDER EJH	Schneider Electric Japan Holdings Ltd.
PLC	Programmable controller manufactured by its respective company
Control equipment	Control equipment manufactured by its respective company
Temperature controller	Temperature controller manufactured by its respective company
Indicating controller	Indicating controller manufactured by its respective company
Controller	Controller manufactured by its respective company
Industrial switch (for CC-Link IE TSN Class B)	CC-Link IE TSN Class B (Synchronized Realtime Communication) hub certified by CC-Link Partner Association
Industrial switch (for CC-Link IE TSN Class A)	CC-Link IE TSN Class A (Realtime Communication) hub certified by CC-Link Partner Association

Terminology

The following shows the terms used in this manual.

Term	Description
Object	Function that operates on the screen according to the value of the specified device
Input object	Touch switch object, numerical input object, text input object, or alarm display object
Attribute	Setting item of a figure or object Example) Monitor device, font, and text color
Label	System label, global label, or label (GT Designer3)
Window	Modeless window, which permits user operations on the other windows while it is open. Example) [Environmental Setting] window
Dialog	Modal window, which does not permit user operations on the other windows while it is open. Example) [Type Setting] dialog
Data storage	SD card, USB memory, CF card in a card reader, or other storage media
Ethernet interface	GOT interface for Ethernet communication: • Ethernet standard port • Ethernet standard port 1 • Ethernet standard port 2 • Ethernet extended port
GT SoftGOT2000 (Single channel)	GT SoftGOT2000 capable of monitoring channel No. 1 only
GT SoftGOT2000 (Multiple channels)	GT SoftGOT2000 capable of monitoring channels No. 1 to No. 4
GT Works3 add-on license	License (product ID) required to use the servo amplifier add-on projects.
Servo amplifier add-on project	Project data for interacting with servo amplifiers. Usable by activating the GT Works3 add-on license (by entering the product ID number indicated in the License Certificate).

1 SYSTEM CONFIGURATION

1.1 List of the Supported Models

The following table lists the GOTs, connection paths, and destination servo amplifiers that support the add-on project for a servo amplifier.

For the connection between the GOT and the PLC, refer to the following.

☞ Page 22 System Configuration Diagram

GOT *1	PLC CPU	Connection path			Destination servo amplifier
		Controller to be routed or connection type		Network to be routed	
GT27 GT25 GS25*2	RnCPU	Simple motion module	RD77MS	SSCNETIII/H	MR-J4-B(-RJ) MR-J4W2-B MR-J4W3-B
	QnCPU		QD77MS		
	LnCPU		LD77MS		
	FX5CPU		FX5-40SSC-S FX5-80SSC-S		
	RnCPU	Motion controller CPU	R64MTCPU R32MTCPU R16MTCPU	SSCNETIII/H	MR-J4-B(-RJ) MR-J4W2-B MR-J4W3-B
	QnCPU		Q17nDSCPU Q170MSCPU(-S1)		

*1 GT23, GT21, GS21, and GT SoftGOT2000 do not support the add-on project for a servo amplifier.

*2 For GS25, use the screen for GT25**-WX by changing the GOT type.

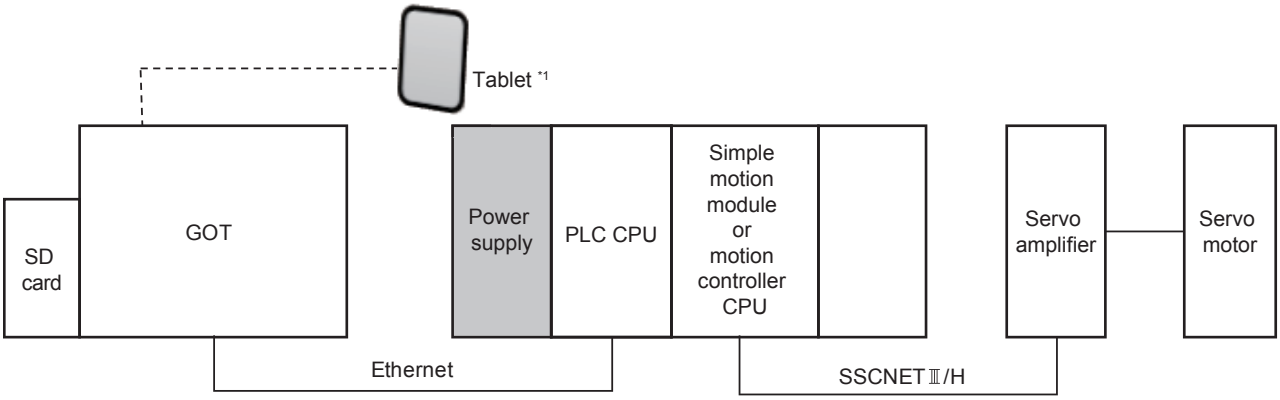
1.2 System Configuration Diagram

The add-on project for a servo amplifier is created with the configuration where the servo amplifier on SSCNET III/H is monitored through a PLC CPU and simple motion module or motion controller CPU.
Change the connection method between the GOT and the PLC CPU to be routed as necessary.

When connecting the GOT and a PLC CPU by Ethernet

■When connecting through a PLC with built-in Ethernet port

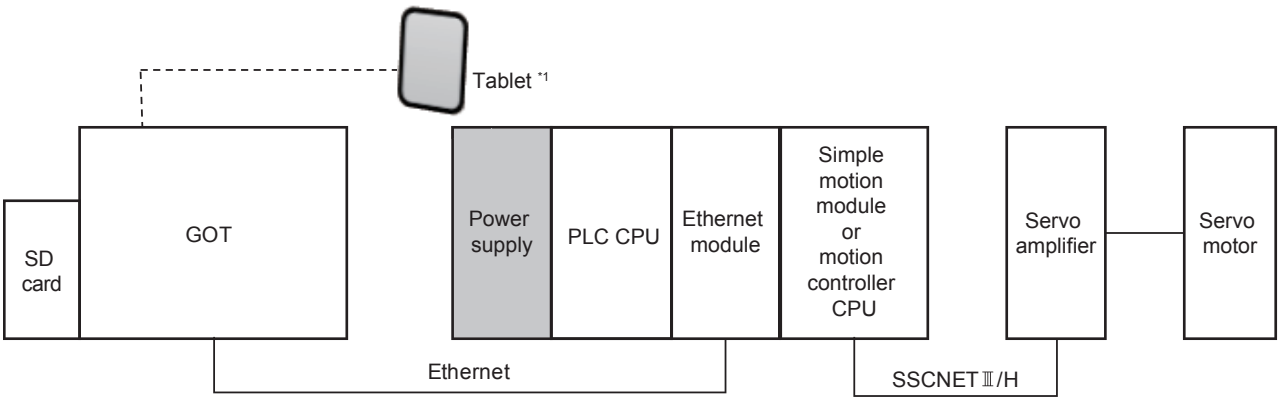
Connect the GOT and a PLC with built-in Ethernet port, and monitor the servo amplifier through the simple motion module or motion controller CPU.



*1 Required when the GOT Mobile function is used.

■When connecting through an Ethernet module

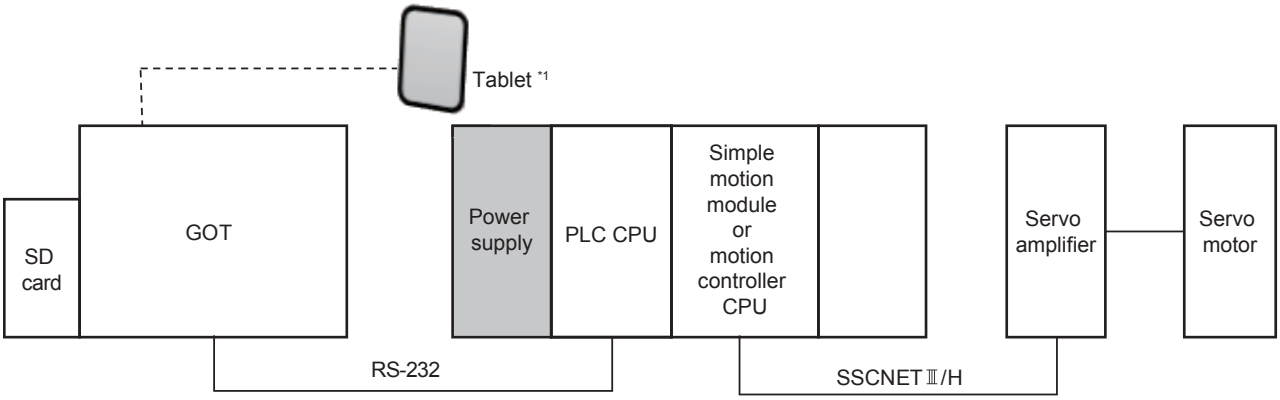
Connect the GOT and an Ethernet module, and monitor the servo amplifier through the simple motion module or motion controller CPU.



*1 Required when the GOT Mobile function is used.

When connecting the GOT to a PLC CPU by direct CPU connection (serial)

Connect the GOT and a PLC CPU directly, and monitor the servo amplifier through the simple motion module or motion controller CPU.



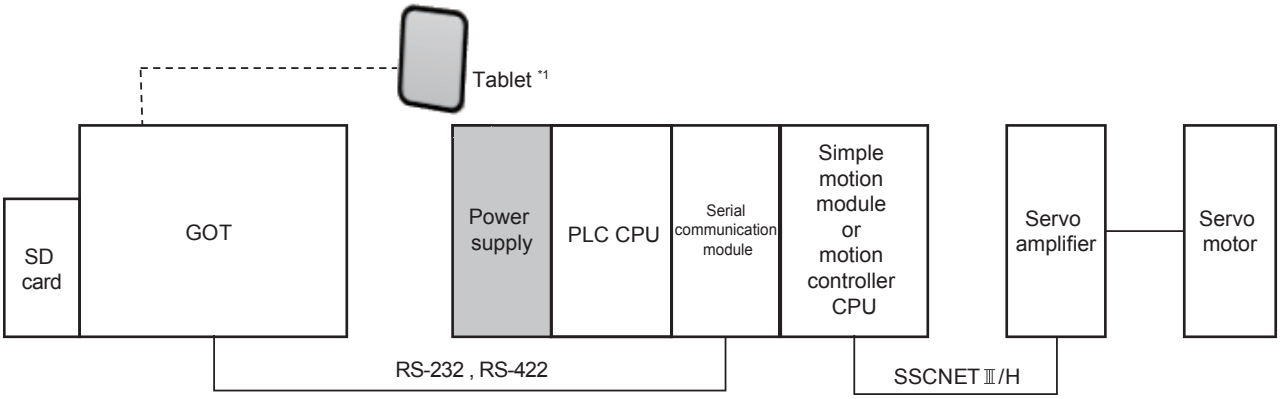
*1 Required when the GOT Mobile function is used.

If the PLC devices and servo amplifier devices are monitored with the same communication channel, the monitoring speed is decreased.

To avoid the monitoring performance degradation, increase the connection paths between the GOT and PLC CPU, and monitor the PLC devices and servo amplifier devices with different channels.

When connecting the GOT to a PLC CPU by serial communication connection

Connect the GOT and a PLC CPU by serial communication connection, and monitor the servo amplifier through the simple motion module or motion controller CPU.



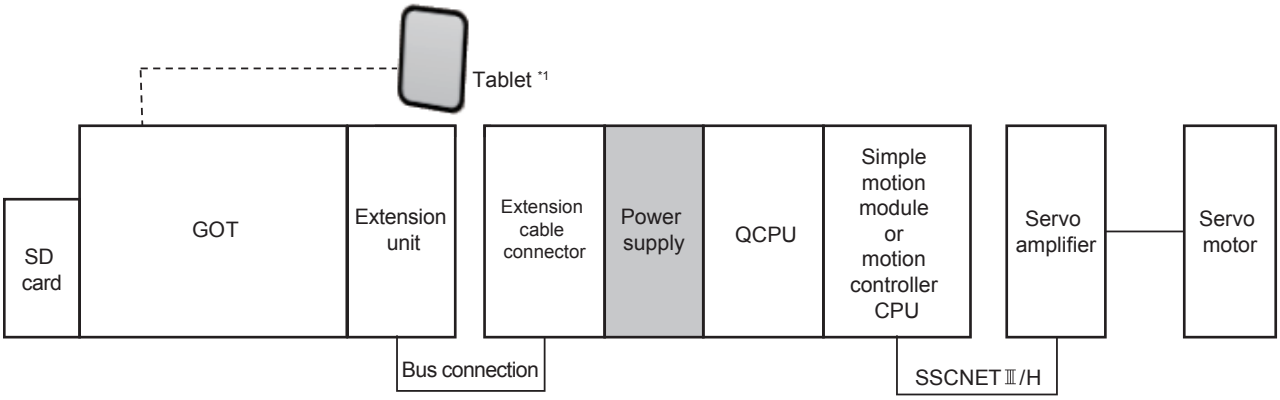
*1 Required when the GOT Mobile function is used.

If the PLC devices and servo amplifier devices are monitored with the same communication channel, the monitoring speed is decreased.

To avoid the monitoring performance degradation, increase the connection paths between the GOT and serial communication module, and monitor the PLC devices and servo amplifier devices with different channels.

When connecting the GOT to a PLC CPU by bus connection

Connect the GOT and a PLC CPU by bus connection, and monitor the servo amplifier through the simple motion module or motion controller CPU.



*1 Required when the GOT Mobile function is used.

If the PLC devices and servo amplifier devices are monitored with the same communication channel, the monitoring speed is decreased.

To avoid the monitoring performance degradation, increase the connection paths between the GOT and QCPU, and monitor the PLC devices and servo amplifier devices with different channels.

1.3 Supported GOTs

The GOTs that support the add-on project for a servo amplifier are shown below.

- GT27
- GT25
- GS25[*1]

This project is for the horizontally-oriented GOT.

The add-project for a servo amplifier is provided for each resolution.

For the details, refer to the following.

☞ Page 155 Resolution of add-on project for a servo amplifier

*1 For GS25, use the screen for GT25**-WX by changing the GOT type.

MEMO

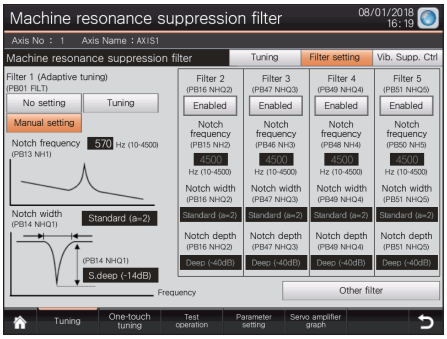
2 FUNCTIONS OF EACH SCREEN

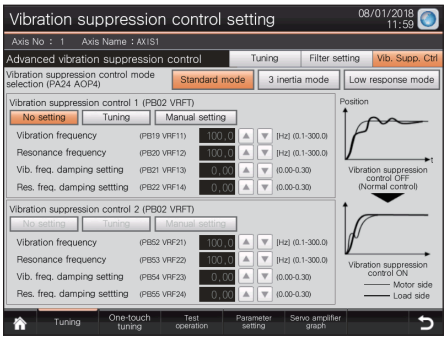
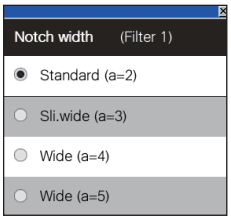
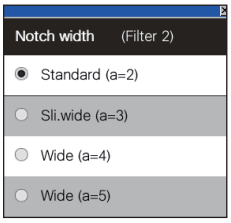
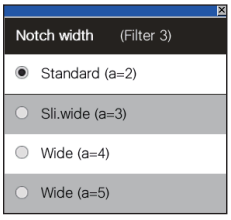
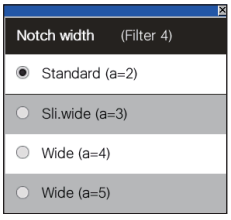
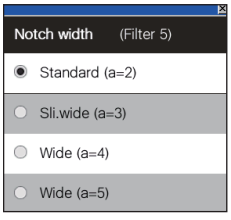
2.1 Function

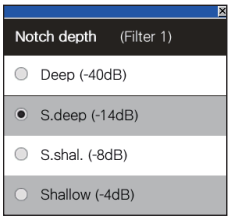
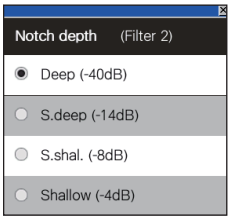
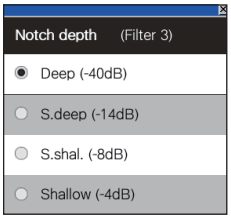
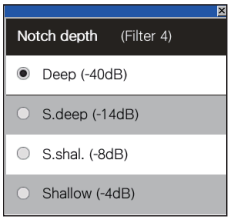
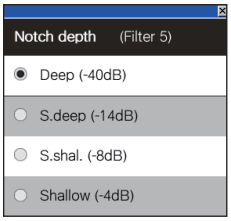
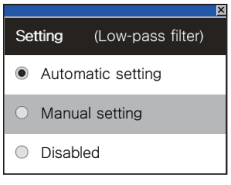
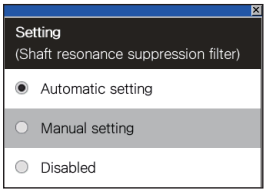
This section explains the functions that are supported by the add-on project for a servo amplifier.
In this chapter, the screen of project data for GT27-S is used as an example.
For the project data other than GT27-S, the appearance of the screen and the screen number may differ.

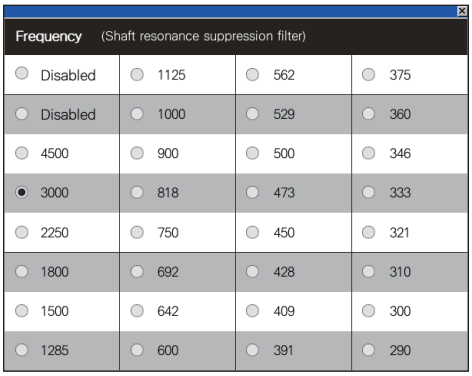
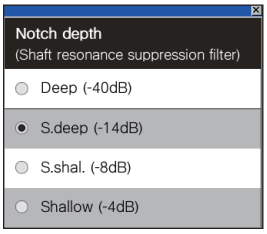
Tuning

This function adjusts the gain parameter, and automatically sets the appropriate gain according to the purpose.
By using the filter function and vibration suppression control setting, an advanced adjustment can be performed.

Screen name (screen No.)	Reference
Tuning (B-30100) 	☞ Page 67 Tuning (B-30100)
Machine Resonance Supp. Filter (B-30110) 	☞ Page 69 Machine Resonance Supp. Filter (B-30110)
Other filter (B-30111) 	☞ Page 70 Other filter (B-30111)

Screen name (screen No.)	Reference
Vibration Suppression Control (B-30130) 	☞ Page 72 Vibration Suppression Control (B-30130)
Resonance.Supp.Fltr1 Notch Width (W-30110) 	☞ Page 113 Resonance.Supp.Fltr1 Notch Width (W-30110)
Resonance.Supp.Fltr2 Notch Width (W-30111) 	☞ Page 113 Resonance.Supp.Fltr2 Notch Width (W-30111)
Resonance.Supp.Fltr3 Notch Width (W-30112) 	☞ Page 114 Resonance.Supp.Fltr3 Notch Width (W-30112)
Resonance.Supp.Fltr4 Notch Width (W-30113) 	☞ Page 114 Resonance.Supp.Fltr4 Notch Width (W-30113)
Resonance.Supp.Fltr5 Notch Width (W-30114) 	☞ Page 115 Resonance.Supp.Fltr5 Notch Width (W-30114)

Screen name (screen No.)	Reference
Resonance.Supp.Fltr1 Notch Depth (W-30115) 	☞ Page 115 Resonance.Supp.Fltr1 Notch Depth (W-30115)
Resonance.Supp.Fltr2 Notch Depth (W-30116) 	☞ Page 116 Resonance.Supp.Fltr2 Notch Depth (W-30116)
Resonance.Supp.Fltr3 Notch Depth (W-30117) 	☞ Page 116 Resonance.Supp.Fltr3 Notch Depth (W-30117)
Resonance.Supp.Fltr4 Notch Depth (W-30118) 	☞ Page 117 Resonance.Supp.Fltr4 Notch Depth (W-30118)
Resonance.Supp.Fltr5 Notch Depth (W-30119) 	☞ Page 117 Resonance.Supp.Fltr5 Notch Depth (W-30119)
Low-pass Filter Settings (W-30120) 	☞ Page 118 Low-pass Filter Settings (W-30120)
Shaft Res.Supp.Filter Settings (W-30121) 	☞ Page 118 Shaft Res.Supp.Filter Settings (W-30121)

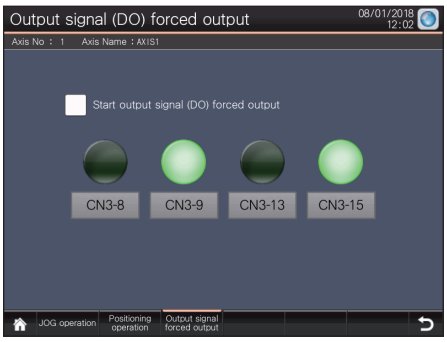
Screen name (screen No.)	Reference
Shaft Res.Supp.Filter Frequency (W-30122) 	☞ Page 119 Shaft Res.Supp.Filter Frequency (W-30122)
Shaft Res.Supp.Filter Notch Depth (W-30123) 	☞ Page 119 Shaft Res.Supp.Filter Notch Depth (W-30123)

Test operation

The test operation can be performed before the actual operation without the command from the controller.

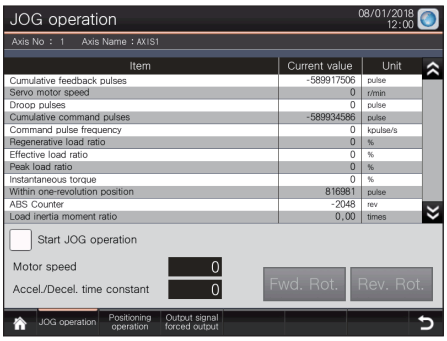
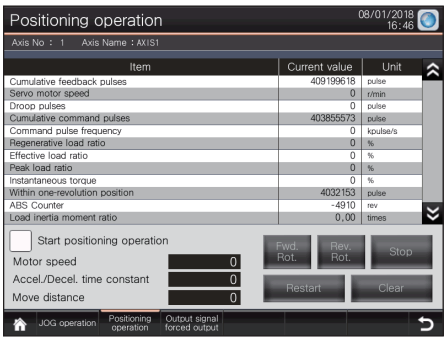
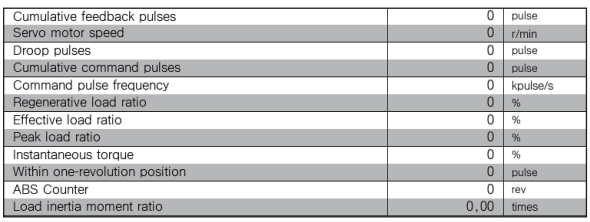
Forced ON/OFF of the output signal

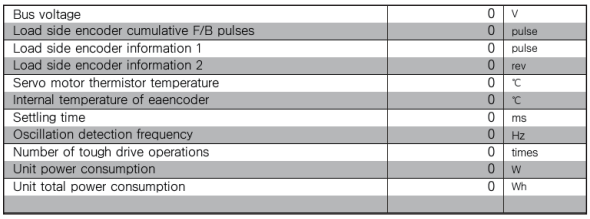
By forcibly turning on and off the output signal of the servo amplifier, the wiring of output signal can be checked.

Screen name (screen No.)	Reference
Output Signal(DO) Forced Output (B-30330) 	☞ Page 78 Output Signal(DO) Forced Output (B-30330)

Operation check of the servo motor

The test operation (JOG operation, positioning operation) can be performed without the command from the controller.

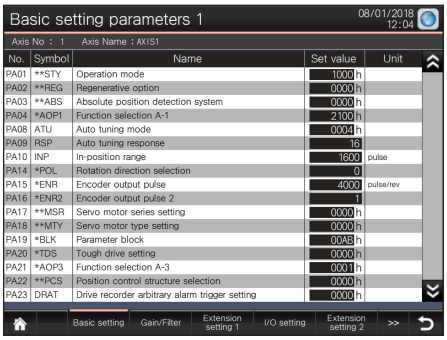
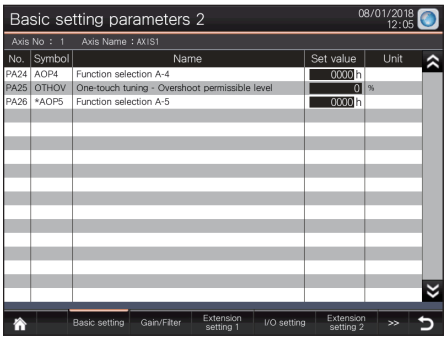
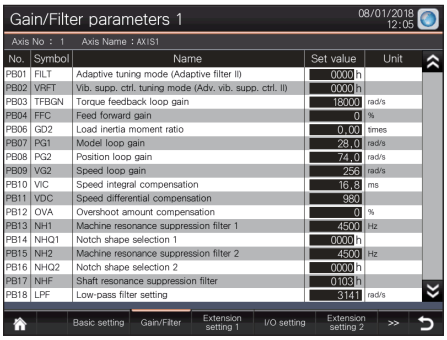
Screen name (screen No.)	Reference
JOG Operation (B-30310) 	☞ Page 75 JOG Operation (B-30310)
Positioning Operation (B-30320) 	☞ Page 76 Positioning Operation (B-30320)
Test Operation Status 1 (W-30300) 	☞ Page 121 Test Operation Status 1 (W-30300)

Screen name (screen No.)	Reference
Test Operation Status 2 (W-30301) 	☞ Page 121 Test Operation Status 2 (W-30301)

Bus voltage	0	V
Load side encoder cumulative F/B pulses	0	pulse
Load side encoder information 1	0	pulse
Load side encoder information 2	0	rev
Servo motor thermistor temperature	0	℃
Internal temperature of eaencoder	0	℃
Settling time	0	ms
Oscillation detection frequency	0	Hz
Number of tough drive operations	0	times
Unit power consumption	0	W
Unit total power consumption	0	Wh

Parameter settings

The parameter settings of the servo amplifier can be changed.

Screen name (screen No.)	Reference
Basic Settings Parameters1 (B-30410) 	☞ Page 80 Basic Settings Parameters1 (B-30410)
Basic Settings Parameters2 (B-30411) 	☞ Page 81 Basic Settings Parameters2 (B-30411)
Gain/Filter Parameters1 (B-30420) 	☞ Page 82 Gain/Filter Parameters1 (B-30420)

Basic setting parameters 1 — 08/01/2018 12:04

Axis No : 1 Axis Name : AXIS1

No.	Symbol	Name	Set value	Unit
PA01	**STY	Operation mode	1000 h	
PA02	**REG	Regenerative option	0000 h	
PA03	**ABS	Absolute position detection system	0000 h	
PA04	*AOP1	Function selection A-1	2100 h	
PA08	ATU	Auto tuning mode	0004 h	
PA09	RSP	Auto tuning response	16	
PA10	INP	In-position range	1600	pulse
PA14	*POL	Rotation direction selection	0	
PA15	*ENR	Encoder output pulse	4000	pulse/rev
PA16	*ENR2	Encoder output pulse 2	1	
PA17	**MSR	Servo motor series setting	0000 h	
PA18	**MTY	Servo motor type setting	0000 h	
PA19	*BLK	Parameter block	00AB h	
PA20	*TDS	Tough drive setting	0000 h	
PA21	*AOP3	Function selection A-3	0001 h	
PA22	**PCS	Position control structure selection	0000 h	
PA23	DRAT	Drive recorder arbitrary alarm trigger setting	0000 h	

Basic setting | Gain/Filter | Extension setting 1 | I/O setting | Extension setting 2 | >>

Basic setting parameters 2 — 08/01/2018 12:05

Axis No : 1 Axis Name : AXIS1

No.	Symbol	Name	Set value	Unit
PA24	AOP4	Function selection A-4	0000 h	
PA25	OTHOV	One-touch tuning - Overshoot permissible level	0	%
PA26	*AOP5	Function selection A-5	0000 h	

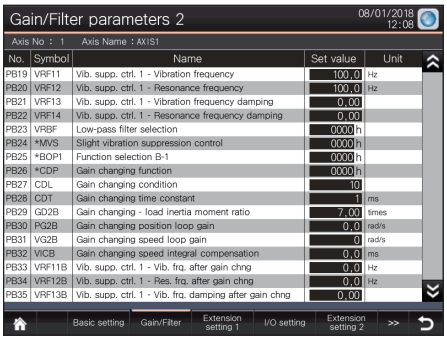
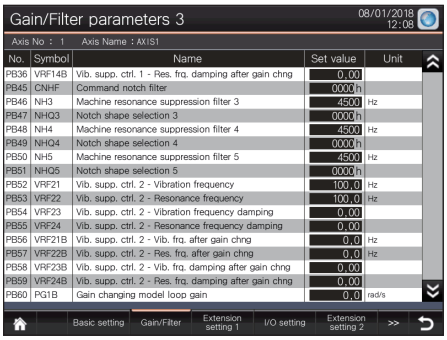
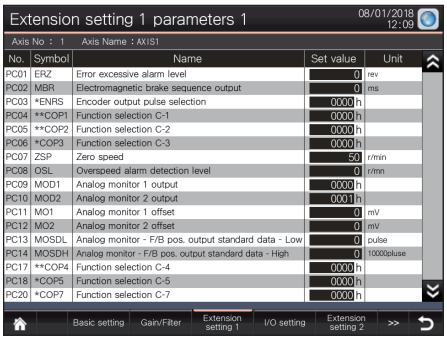
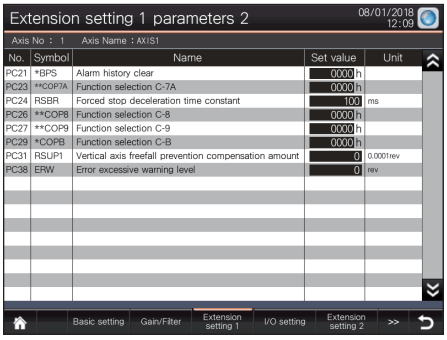
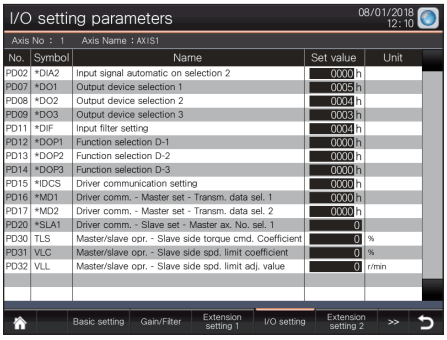
Basic setting | Gain/Filter | Extension setting 1 | I/O setting | Extension setting 2 | >>

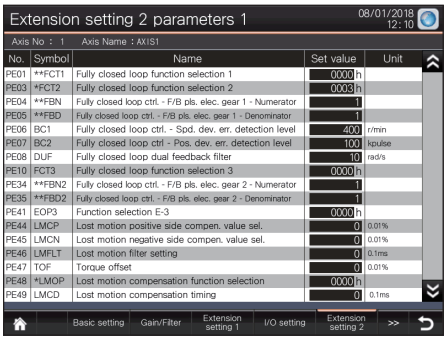
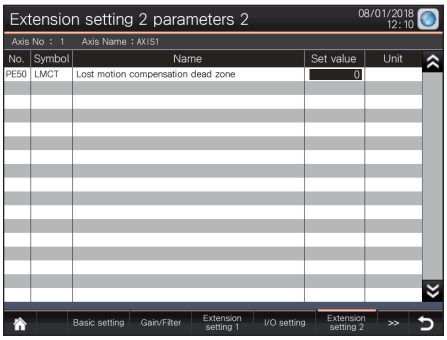
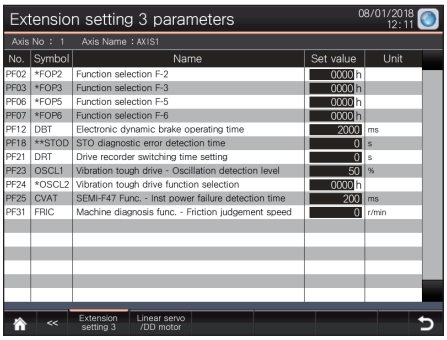
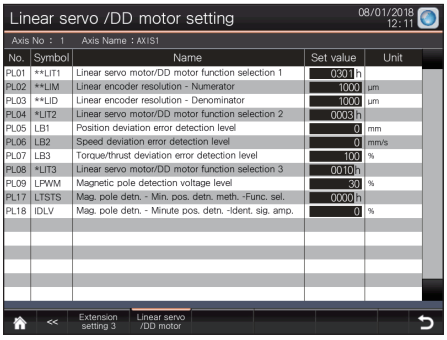
Gain/Filter parameters 1 — 08/01/2018 12:05

Axis No : 1 Axis Name : AXIS1

No.	Symbol	Name	Set value	Unit
PB01	FILT	Adaptive tuning mode (Adaptive filter II)	0000 h	
PB02	VRFT	Vib. supp. ctrl. tuning mode (Adv. vib. supp. ctrl. II)	0000 h	
PB03	TFBGN	Torque feedback loop gain	18000	rad/s
PB04	FFC	Feed forward gain	0	%
PB06	GD2	Load inertia moment ratio	0.00	times
PB07	PG1	Model loop gain	28.0	rad/s
PB08	PG2	Position loop gain	74.0	rad/s
PB09	VG2	Speed loop gain	256	rad/s
PB10	VIC	Speed integral compensation	16.8	ms
PB11	VDC	Speed differential compensation	980	
PB12	OVA	Overshoot amount compensation	0	%
PB13	NH1	Machine resonance suppression filter 1	4500	Hz
PB14	NHQ1	Notch shape selection 1	0000 h	
PB15	NH2	Machine resonance suppression filter 2	4500	Hz
PB16	NHQ2	Notch shape selection 2	0000 h	
PB17	NHF	Shaft resonance suppression filter	0103 h	
PB18	LPF	Low-pass filter setting	3141	rad/s

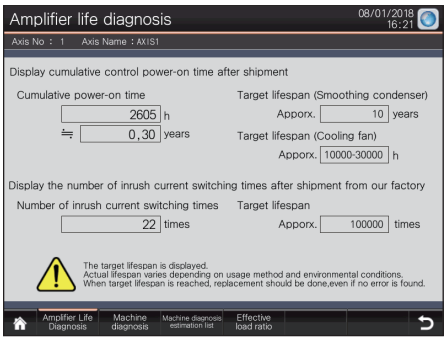
Basic setting | Gain/Filter | Extension setting 1 | I/O setting | Extension setting 2 | >>

Screen name (screen No.)	Reference
Gain/Filter Parameters2 (B-30421) 	☞ Page 83 Gain/Filter Parameters2 (B-30421)
Gain/Filter Parameters3 (B-30422) 	☞ Page 84 Gain/Filter Parameters3 (B-30422)
Ext.Settings1 Parameters1 (B-30430) 	☞ Page 85 Ext.Settings1 Parameters1 (B-30430)
Ext.Settings1 Parameters2 (B-30431) 	☞ Page 86 Ext.Settings1 Parameters2 (B-30431)
I/O Settings Parameters (B-30440) 	☞ Page 87 I/O Settings Parameters (B-30440)

Screen name (screen No.)	Reference
Ext.Settings2 Parameters1 (B-30450) 	☞ Page 88 Ext.Settings2 Parameters1 (B-30450)
Ext.Settings2 Parameters2 (B-30451) 	☞ Page 89 Ext.Settings2 Parameters2 (B-30451)
Ext.Settings3 Parameters (B-30460) 	☞ Page 90 Ext.Settings3 Parameters (B-30460)
Linear/DD Motor Parameters (B-30470) 	☞ Page 91 Linear/DD Motor Parameters (B-30470)

Amplifier life diagnosis

The cumulative power-on time and the number of on and off of the rush relay can be checked.
The replacement time of the servo amplifier parts with life (such as the condenser and relay) can be checked.

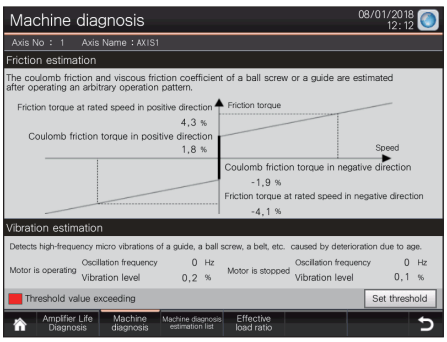
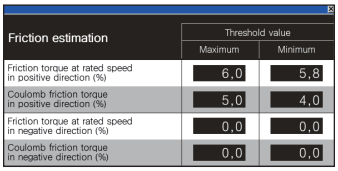
Screen name (screen No.)	Reference
Amplifier Life Diagnosis (B-30500) 	☞ Page 92 Amplifier Life Diagnosis (B-30500)

Machine diagnosis

The information on friction and vibration of the machine is displayed on the GOT for grasping the aged deterioration and for preventing system stoppage due to failure.
The abnormalities in the machine parts such as the ball screws and bearings can be detected by estimating the friction and vibrating components of the device driving part from the internal data of the servo amplifier.

Displaying the estimated value

Displays the friction estimation and vibration estimation.
By setting the threshold value for the estimation, the machine status can be grasped.
When the estimation exceeds the threshold value, the background of the screen changes.
In this way, the error can be detected early.

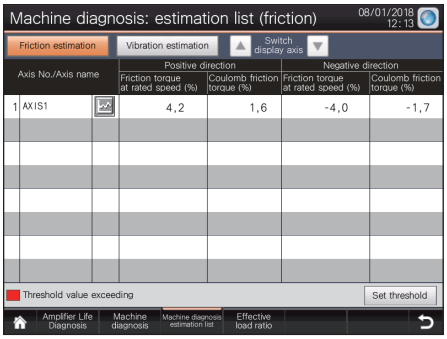
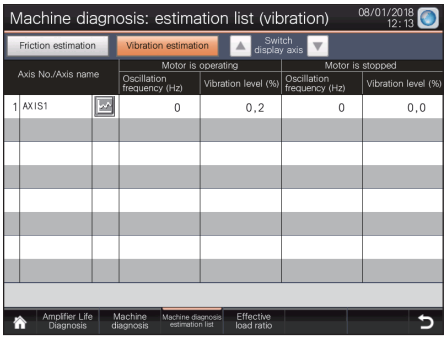
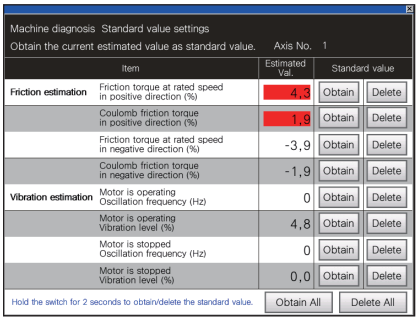
Screen name (screen No.)	Reference
Machine Diagnosis (B-30600) 	☞ Page 93 Machine Diagnosis (B-30600)
Machine Diag. Threshold Setting (W-30600) 	☞ Page 123 Machine Diag. Threshold Setting (W-30600)

Friction estimation	Threshold value	
	Maximum	Minimum
Friction torque at rated speed in positive direction (%)	6,0	5,8
Coulomb friction torque in positive direction (%)	5,0	4,0
Friction torque at rated speed in negative direction (%)	0,0	0,0
Coulomb friction torque in negative direction (%)	0,0	0,0

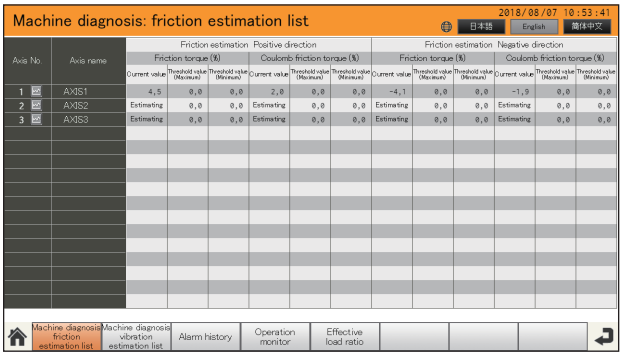
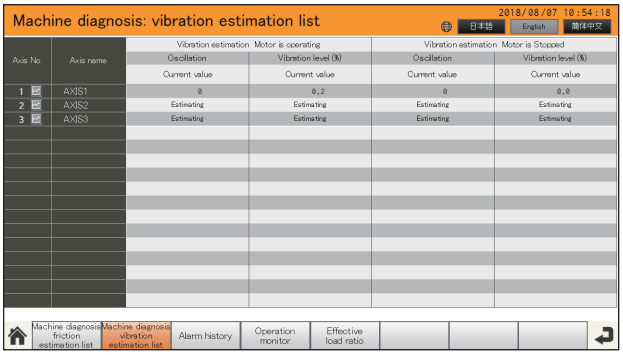
List display of the estimated value and threshold value

The estimated value and threshold value of the multiple axes are displayed in a list.

By displaying multiple axes information in one screen, the information of the whole device can be monitored and compared.

Screen name (screen No.)	Reference
Machine Diag .Estimation (Fric) (B-30700) 	☞ Page 95 Machine Diag .Estimation (Fric) (B-30700)
Machine Diag. Estimation (Vib) (B-30710) 	☞ Page 96 Machine Diag. Estimation (Vib) (B-30710)
Machine Diag.Standard Val.Set (W-30706) 	☞ Page 131 Machine Diag.Standard Val.Set (W-30706)

The following screens are used in the GOT Mobile function.

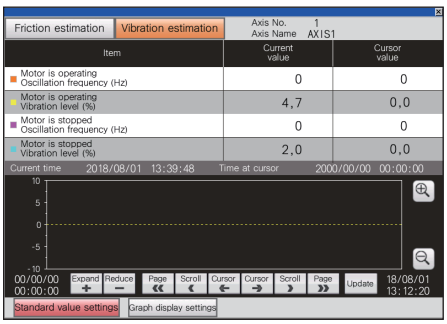
Screen name (screen No.)	Reference
Mobile_Machine Diag. Fric Est. (M-30000) 	☞ Page 141 Mobile_Machine Diag. Fric Est. (M-30000)
Mobile_Machine Diag. Vib Est. (M-30010) 	☞ Page 144 Mobile_Machine Diag. Vib Est. (M-30010)

Collecting and displaying the estimated value in graph

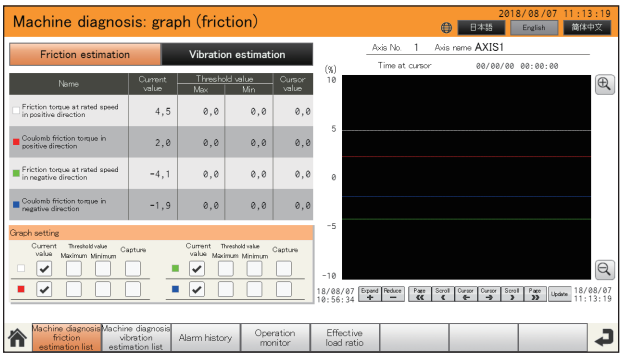
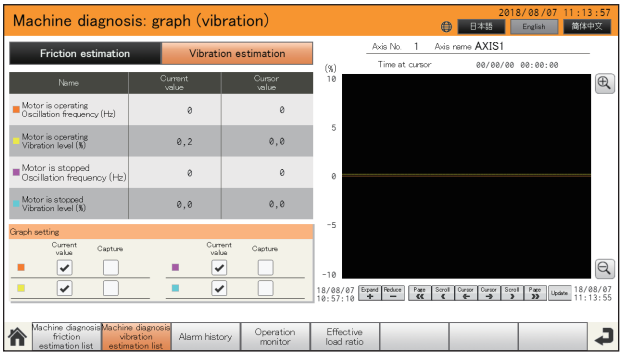
Collect the estimated value by logging and display the collected data in a graph.

The status change due to aged deterioration can be grasped easily by displaying the estimated value in a graph.

The error and aged deterioration can be detected by displaying the threshold value and normal value at initial operation in the same graph.

Screen name (screen No.)	Reference
Machine Diag. Graph (Friction) (W-30704) 	☞ Page 128 Machine Diag. Graph (Friction) (W-30704)
Machine Diag. Graph (Vibration) (W-30714) 	☞ Page 134 Machine Diag. Graph (Vibration) (W-30714)

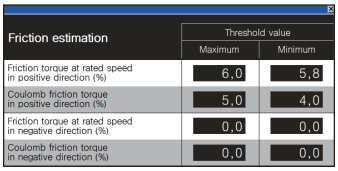
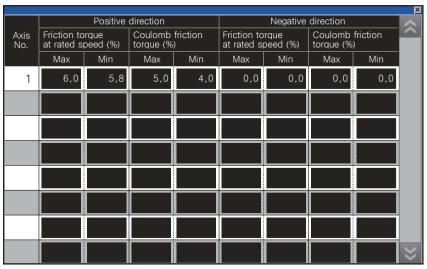
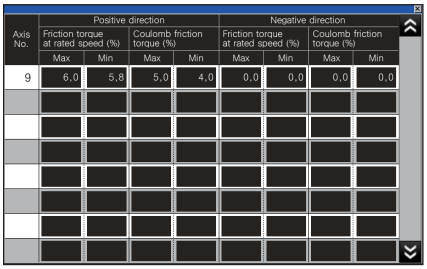
The following screen is used in the GOT Mobile function.

Screen name (screen No.)	Reference
Mobile_Machine Diag.Graph (Fric) (M-30001) 	☞ Page 142 Mobile_Machine Diag.Graph (Fric) (M-30001)
Mobile_Machine Diag.Graph (Vib) (M-30011) 	☞ Page 145 Mobile_Machine Diag.Graph (Vib) (M-30011)

Threshold value setting

Set the threshold value for the estimated value.

A message requesting to inspect and replace the device can be displayed by generating an alarm when the estimated value exceeds the threshold value due to aged deterioration.

Screen name (screen No.)	Reference
Machine Diag. Threshold Setting (W-30600) 	☞ Page 123 Machine Diag. Threshold Setting (W-30600)
Machine Diag. Threshold (Fric)1 (W-30702) 	☞ Page 126 Machine Diag. Threshold (Fric)1 (W-30702)
Machine Diag. Threshold (Fric)2 (W-30703) 	☞ Page 127 Machine Diag. Threshold (Fric)2 (W-30703)

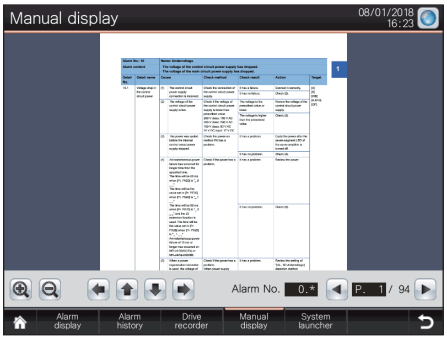
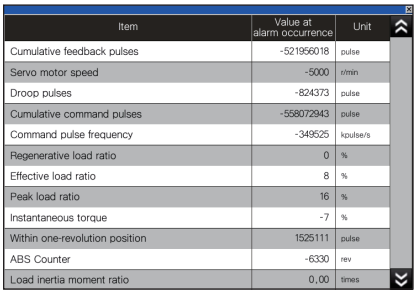
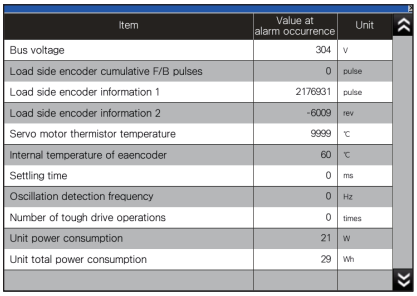
Alarm display

The alarm and warning information generated in the servo amplifier are displayed.

Displaying the alarm information

The alarm information of the servo amplifier is displayed.

The troubleshooting manual corresponding to the data of the currently occurring alarm at occurrence and alarm can be displayed.

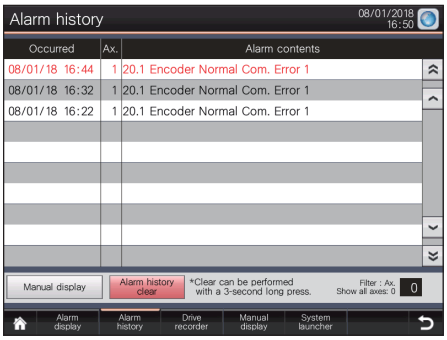
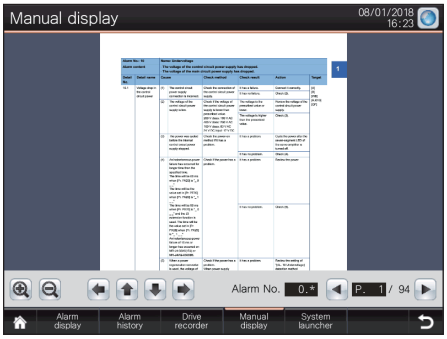
Screen name (screen No.)	Reference
Alarm Display (B-31000) 	☞ Page 98 Alarm Display (B-31000)
Manual Display (B-31200) 	☞ Page 100 Manual Display (B-31200)
Status at alarm occurrence 1 (W-30900) 	☞ Page 137 Status at Alarm Occurrence 1 (W-30900)
Status at alarm occurrence 2 (W-30901) 	☞ Page 138 Status at Alarm Occurrence 2 (W-30901)

Observing and collecting the alarm information

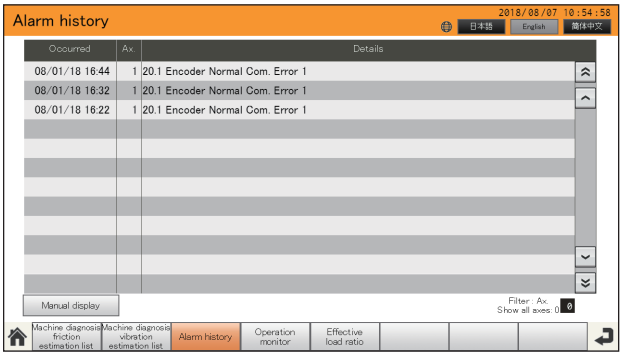
Observe and collect the alarm information of the servo amplifier for multiple axes with the user alarm observation function of the GOT.

The collected data can be displayed in a list, and the axis can be filtered from multiple axes and displayed.

The troubleshooting manual can be displayed for the selected alarm.

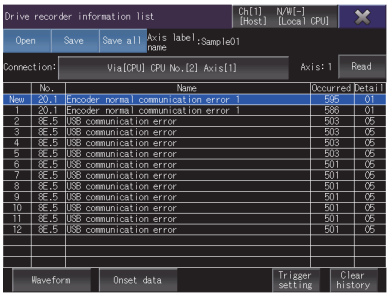
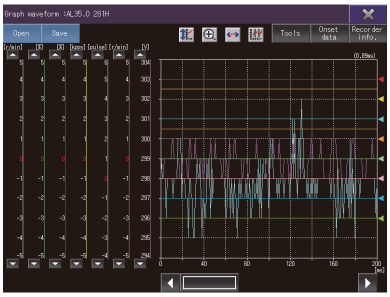
Screen name (screen No.)	Reference
Alarm History (B-31100) 	☞ Page 99 Alarm History (B-31100)
Manual Display (B-31200) 	☞ Page 100 Manual Display (B-31200)

The following screen is used in the GOT Mobile function.

Screen name (screen No.)	Reference
Mobile_Alarm History (M-30030) 	☞ Page 147 Mobile_Alarm History (M-30030)

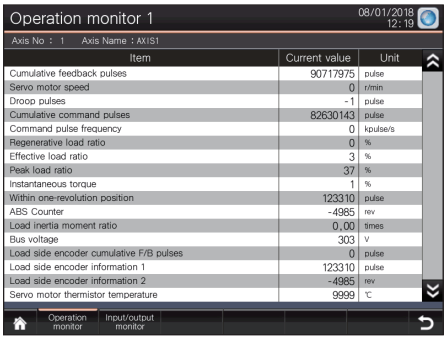
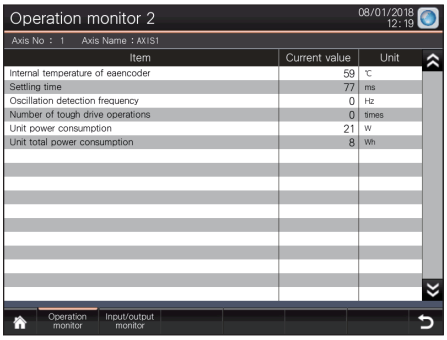
Drive recorder (extended function screen)

The data prior to and subsequent to an alarm is read from a connected servo amplifier, and the data (including motor current values and position commands) is displayed in a waveform or list form on the GOT.

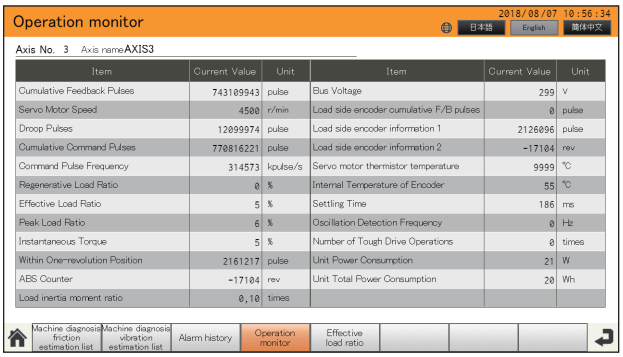
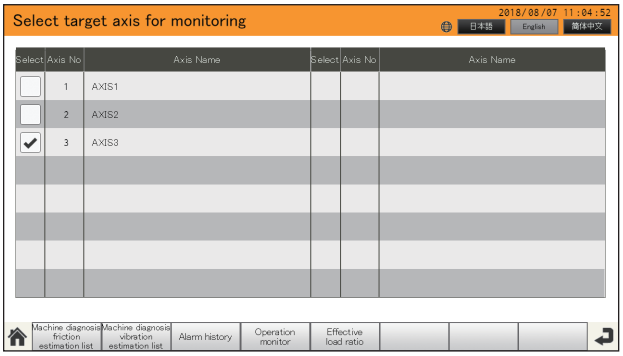
Extended function name	Function overview
Drive recorder (extended function screen) • [Drive recorder information list] screen  • [Graph waveform] screen 	The extended function of the GOT is used for the drive recorder. The alarm read from the servo amplifier to the GOT is displayed on the [Drive recorder information list] screen in a list. Each servo data item before and after the alarm can be displayed in a waveform on the [Graph waveform] screen and the error cause can be analyzed. For the details of the drive recorder (extended function), refer to the following. GOT2000 Series User's Manual (Monitor)

Operation monitor

The status of the operating servo amplifier is displayed.

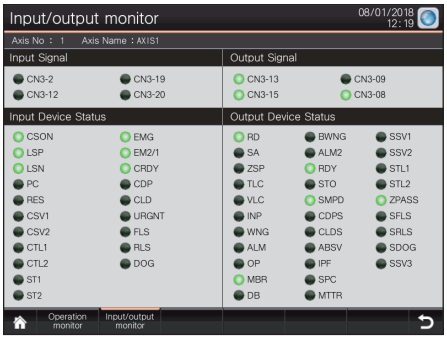
Screen name (screen No.)	Reference
Operation Monitor 1 (B-31300) 	☞ Page 102 Operation Monitor 1 (B-31300)
Operation Monitor 2 (B-31301) 	☞ Page 103 Operation Monitor 2 (B-31301)

The following screens are used in the GOT Mobile function.

Screen name (screen No.)	Reference
Mobile_Operation Monitor (M-30040) 	☞ Page 148 Mobile_Operation Monitor (M-30040)
Mobile_Monitor Axis Select (M-30210) 	☞ Page 153 Mobile_Monitor Axis Select (M-30210)

I/O monitor

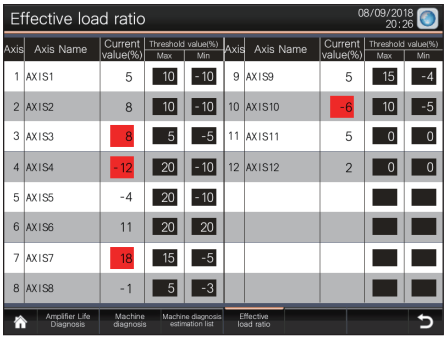
The I/O signal of the servo amplifier and the status of the I/O device are displayed.

Screen name (screen No.)	Reference
I/O Monitor (B-31400) 	☞ Page 104 I/O Monitor (B-31400)

Effective load ratio

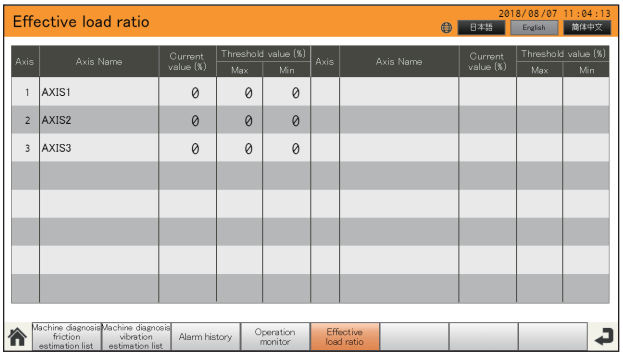
The effective load ratio of the servo amplifier is displayed in a list.
By displaying the monitor data of multiple axes in one screen, the information of the whole device can be monitored and compared.
Thus, the device status can be grasped easily.
A threshold value can be set for the monitor data.
When the current value exceeds the threshold value, the background color of the screen changes.
In this way, the error can be detected early.

Screen name (screen No.)	Reference
Effective Load Ratio (B-30900)	☞ Page 97 Effective Load Ratio (B-30900)



The following screen is used in the GOT Mobile function.

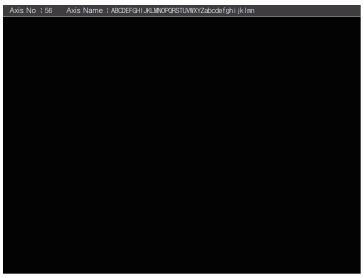
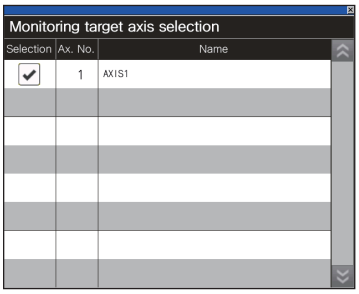
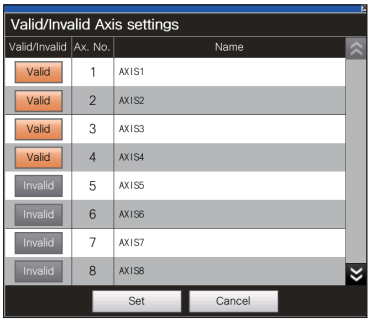
Screen name (screen No.)	Reference
Mobile_Effective Load Ratio (M-30050)	☞ Page 149 Mobile_Effective Load Ratio (M-30050)



Axis switching

By switching valid and invalid for the axis, the axis to be used can be selected.

The monitoring target axis can be switched on the screen.

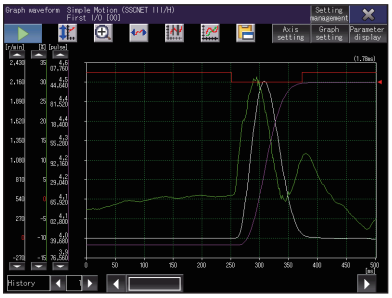
Screen name (screen No.)	Reference
Axis No./Axis Name (B-32500) 	☞ Page 105 Axis No./Axis Name (B-32500)
Monitoring Target Axis Selection (W-32500) 	☞ Page 139 Monitoring Target Axis Selection (W-32500)
Valid/Invalid Axis Settings (W-32501) 	☞ Page 140 Valid/Invalid Axis Settings (W-32501)

Servo amplifier graph (extended function screen)

Read the waveform data measured by a servo amplifier to the GOT and display the data in graph form.

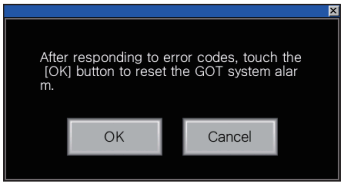
The waveform data and parameter information of the servo amplifier can be checked.

The measured data can be output to a file.

Extended function name	Function overview
Servo amplifier graph (extended function screen) 	The extended function of the GOT is used for the servo amplifier graph. Reads the waveform data measured by a servo amplifier to the GOT and displays the data to graph. You can compare a normal waveform with an abnormal one by superimposing multiple waveforms, and the deterioration of the device can be known. For the details of the servo amplifier graph (extended function), refer to the following. 📖GOT2000 Series User's Manual (Monitor)

GOT system alarm reset

When the GOT system alarm reset occurs, reset the system alarm of the GOT.

Screen name (screen No.)	Reference
GOT System Alarm Reset (W-30000) 	☞ Page 106 GOT System Alarm Reset (W-30000)

Language settings

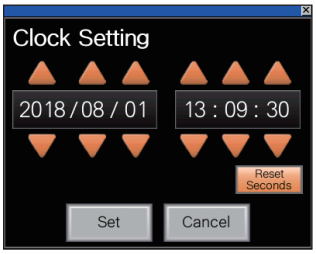
Set the language displayed on the GOT.

Select the language from Japanese, English, and Chinese (simplified).

Screen name (screen No.)	Reference
Language Settings (W-30001) 	☞ Page 106 Language Settings (W-30001)

Clock setting

Set the date and time of the GOT.

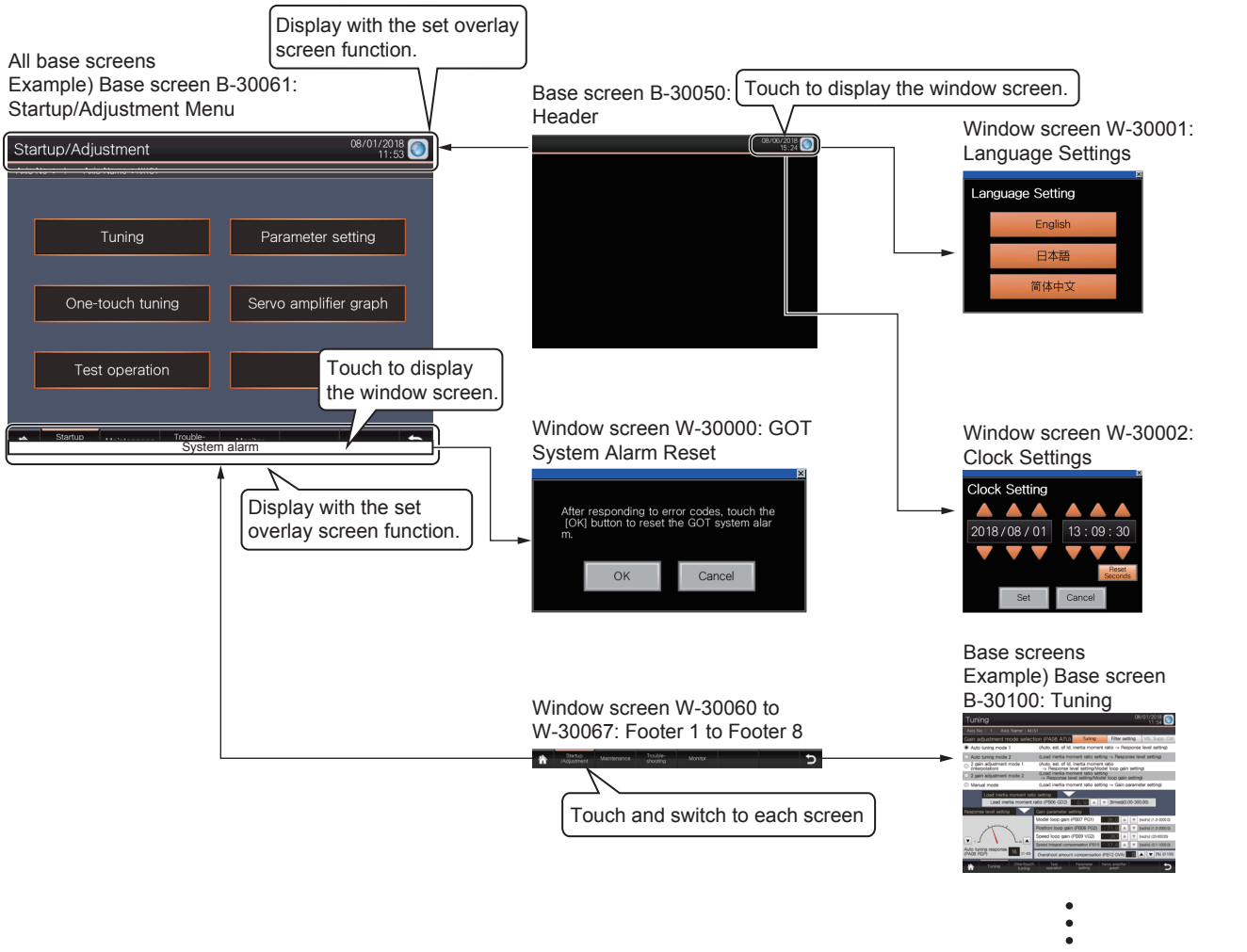
Screen name (screen No.)	Reference
Clock Settings (W-30002) 	☞ Page 107 Clock Settings (W-30002)

2.2 Screen Configuration

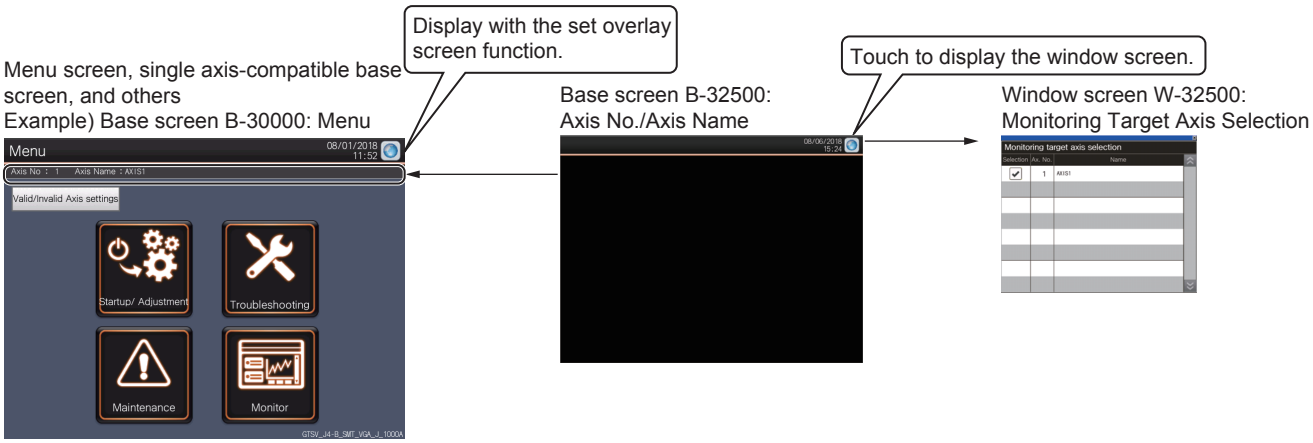
Common screen

The common screen is displayed for using the header and footer in each base screen with the set overlay function.
These screens are not displayed independently.
The following shows the configuration of the common screen.

Header (B-30050), Footer1 (W-30060) to Footer8 (W-30067)



Axis No./Axis Name (B-32500)



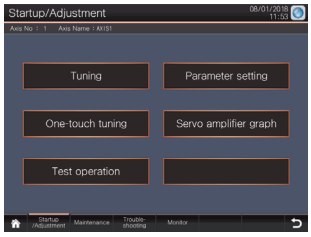
Base screen

The following shows the screen configuration of the base screen.

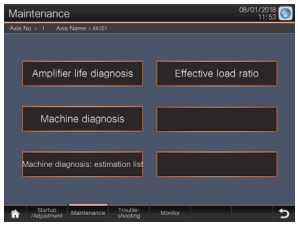
Menu (B-30000)

Base screen B-30000: Menu

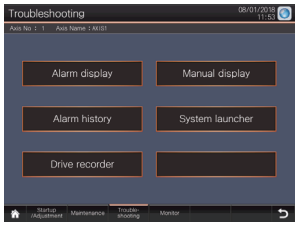
Base screen B-30061:
Startup/Adjustment Menu



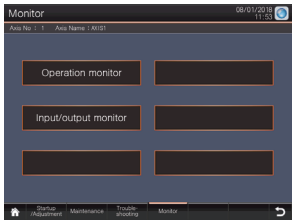
Base screen B-30062:
Maintenance Menu



Base screen B-30063:
Troubleshooting Menu

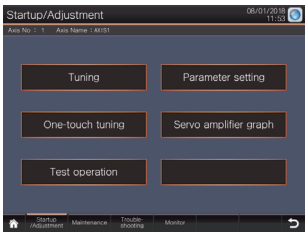


Base screen B-30064:
Monitor Menu



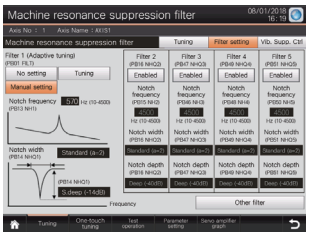
Startup/Adjustment Menu (B-30061)

Base screen B-30061:
Startup/Adjustment Menu

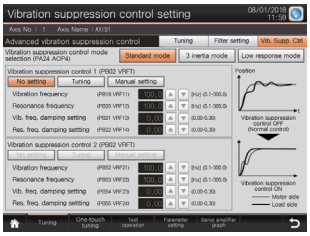


Base screen B-30100:
Tuning

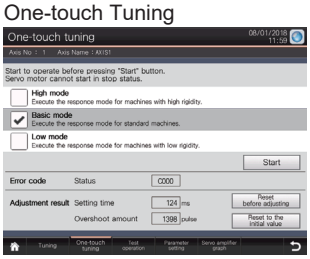
Base screen
B-30110 to B-30111:
Machine Resonance Supp. Filter,
Other filter



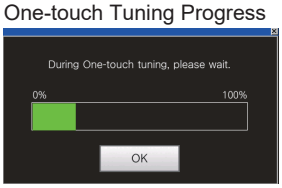
Base screen B-30130:
Vibration Suppression Control



Base screen B-30200:
One-touch Tuning

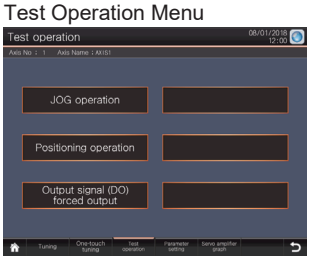


Window screen W-30200:
One-touch Tuning Progress

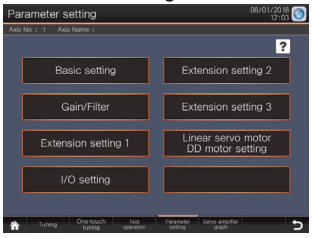


Window screen W-30201:
Setting Change Confirmation

Base screen B-30300:
Test Operation Menu

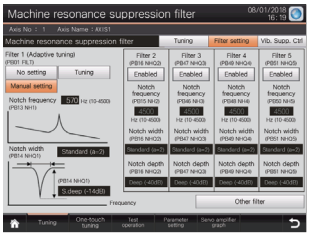


Base screen B-30400:
Parameter Setting Menu

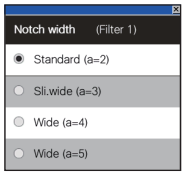


■Machine Resonance Supp. Filter (B-30110)

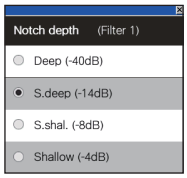
Base screen B-30110:
Machine Resonance Supp. Filter



Window screen W-30110 to W-30114:
Resonance.Supp.Fltr1 to 5 Notch Width

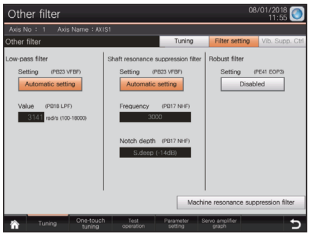


Window screen W-30115 to W-30119:
Resonance.Supp.Fltr1 to 5 Notch Depth

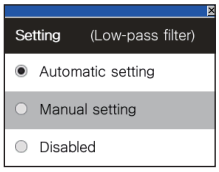


■Other filter (B-30111)

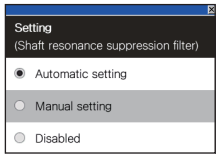
Base screen B-30111:
Other filter



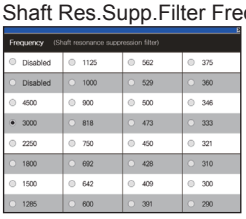
Window screen W-30120:
Low-pass Filter Settings



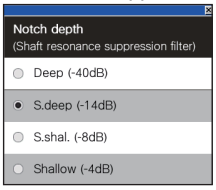
Window screen W-30121:
Shaft Res.Supp.Filter Settings



Window screen W-30122:
Shaft Res.Supp.Filter Frequency

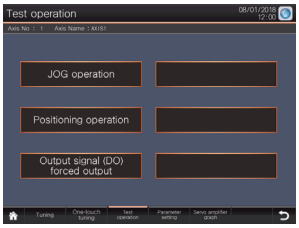


Window screen W-30123:
Shaft Res.Supp.Filter Notch Depth

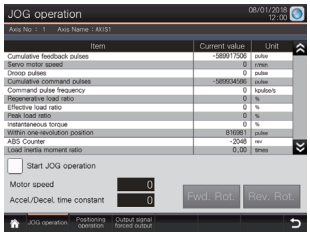


Test Operation Menu (B-30300)

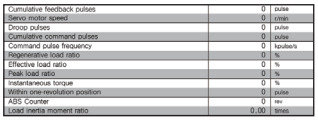
Base screen B-30300:
Test Operation Menu



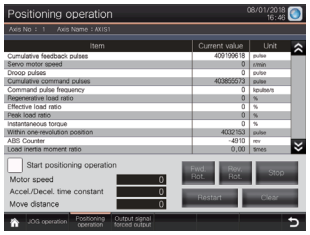
Base screen B-30310:
JOG Operation



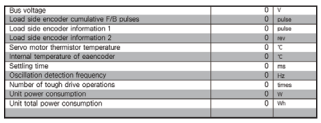
Window screen W-30300 to W-30301:
Test Operation Status



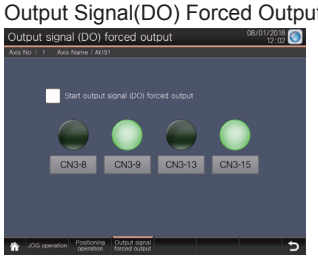
Base screen B-30320:
Positioning Operation



Window screen W-30300 to W-30301:
Test Operation Status

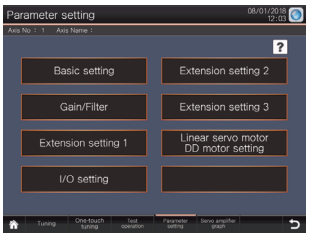


Base screen B-30330:
Output Signal(DO) Forced Output

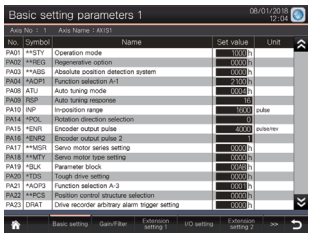


Parameter Setting Menu (B-30400)

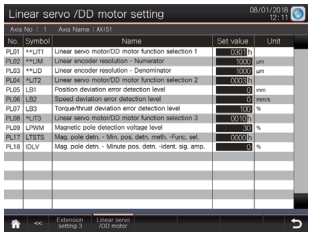
Base screen B-30400:
Parameter Setting Menu



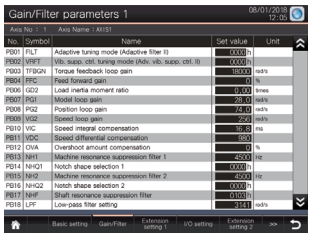
Base screen B-30410 to B-30411:
Basic Settings Parameters



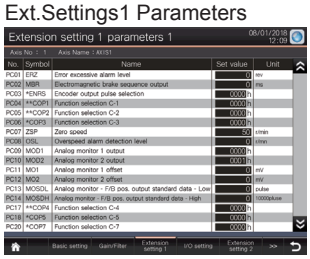
Base screen B-30470:
Linear/DD Motor Parameters



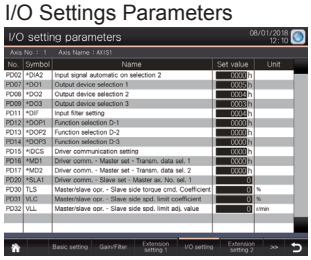
Base screen B-30420 to B-30422:
Gain/Filter Parameters



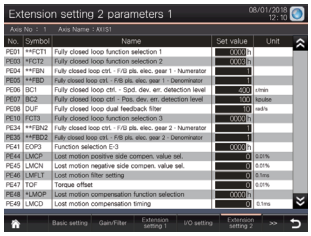
Base screen B-30430 to B-30431:
Ext.Settings1 Parameters



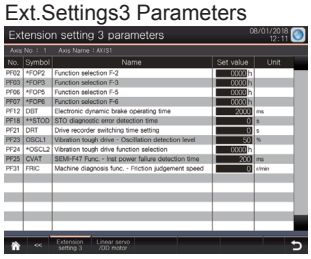
Base screen B-30440:
I/O Settings Parameters



Base screen B-30450 to B-30451:
Ext.Settings2 Parameters

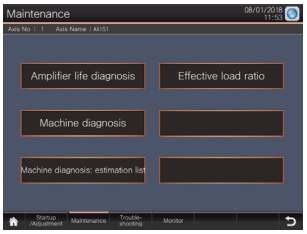


Base screen B-30460:
Ext.Settings3 Parameters

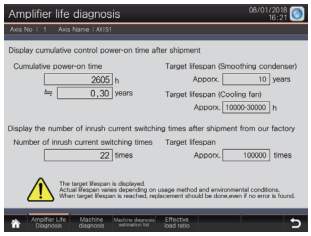


Maintenance Menu (B-30062)

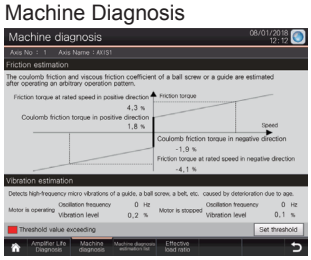
Base screen B-30062:
Maintenance Menu



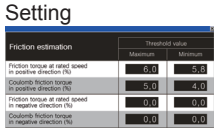
Base screen B-30500:
Amplifier Life Diagnosis



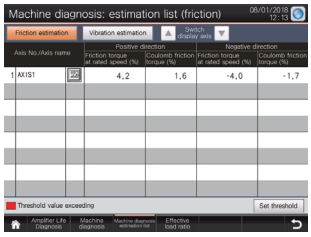
Base screen B-30600:
Machine Diagnosis



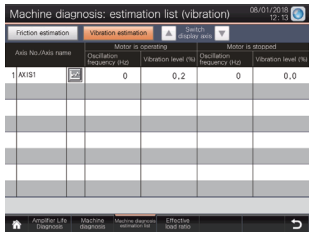
Window screen W-30600:
Machine Diag. Threshold Setting



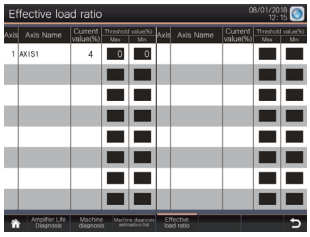
Base screen B-30700:
Machine Diag .Estimation (Fric)



Base screen B-30710:
Machine Diag. Estimation (Vib)

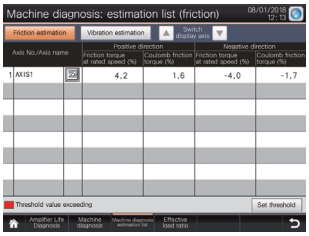


Base screen B-30900:
Effective Load Ratio

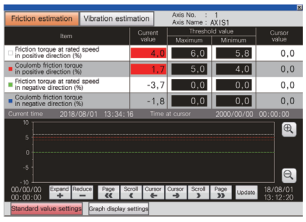


Machine Diag .Estimation (Fric) (B-30700)

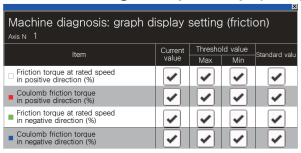
Base screen B-30700:
Machine Diag .Estimation (Fric)



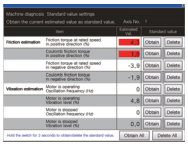
Window screen W-30704:
Machine Diag. Graph (Friction)



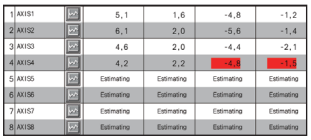
Window screen W-30705:
Machine Diag. Graph Disp (Fric)



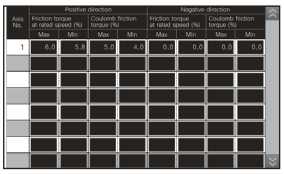
Window screen W-30706:
Machine Diag.Standard Val.Set



Window screen W-30700 to W-30701:
Machine Diag. Friction Est.

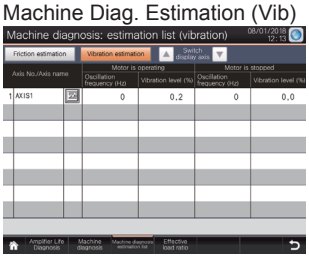


Window screen W-30702 to W-30703:
Machine Diag. Threshold (Fric)

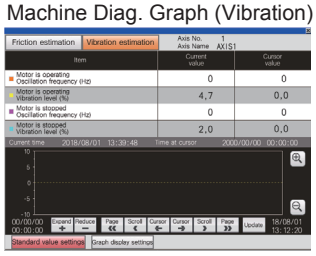


Machine Diag. Estimation (Vib) (B-30710)

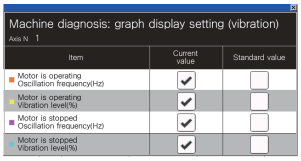
Base screen B-30710:
Machine Diag. Estimation (Vib)



Window screen W-30714:
Machine Diag. Graph (Vibration)

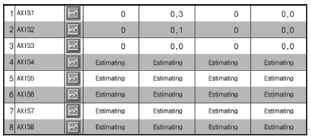


Window screen W-30715:
Machine Diag. Graph Disp (Vib)



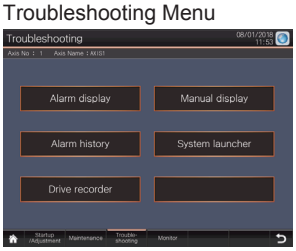
Window screen W-30706:
Machine Diag.Standard Val.Set

Window screen W-30710 to W-30711:
Machine Diag. Vibration Est.

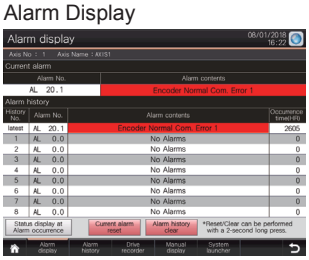


Troubleshooting Menu (B-30063)

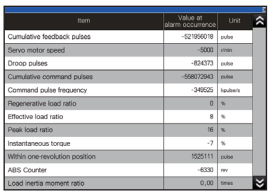
Base screen B-30063:
Troubleshooting Menu



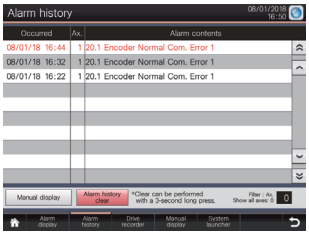
Base screen B-31000:
Alarm Display



Window screen
W-30900 to W-30901:
Status at Alarm Occurrence

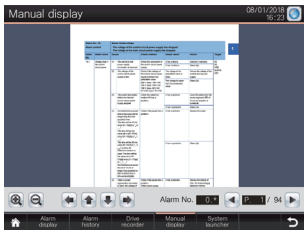


Base screen B-31100:
Alarm History



Extended function:
Drive recorder

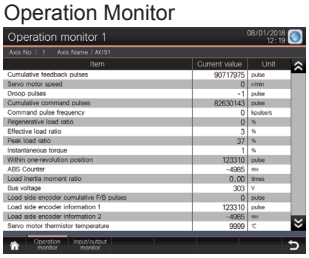
Base screen B-31200:
Manual Display



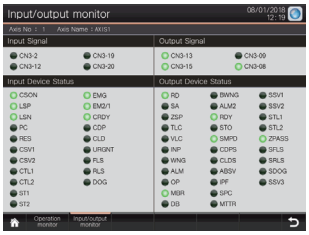
Monitor Menu (B-30064)

Base screen B-30064:
Monitor Menu

Base screen B-31300 to B-31301:
Operation Monitor



Base screen B-31400: I/O Monitor

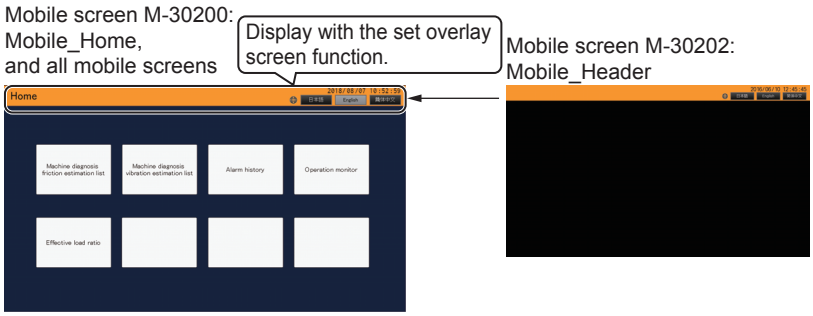


Mobile screen

The following shows the screen configuration of the mobile screen.

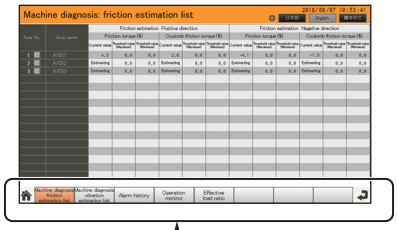
Mobile_Header (M-30202)

The header screen for the mobile screen is displayed as a header in each mobile screen with the set overlay screen function.
This screen is not displayed independently.



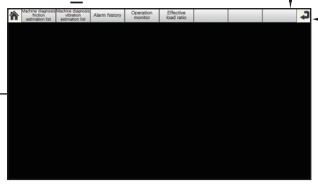
Mobile_Footer (M-30204)

The footer screen for the mobile screen is displayed as a footer in each mobile screen with the set overlay screen function.
This screen is not displayed independently.



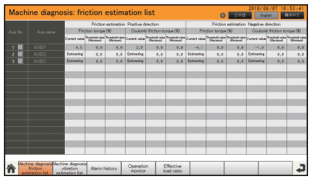
Touch and switch to each screen

Mobile screen M-30204:
Mobile_Footer

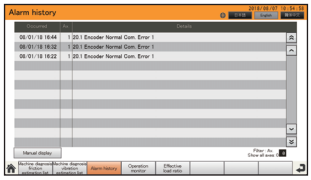


Display with the set overlay screen function.

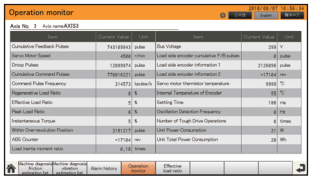
Mobile screen M-30000 to M-30001:
Mobile_Machine Diag. Fric Est.,
Mobile_Machine Diag. Vib Est.



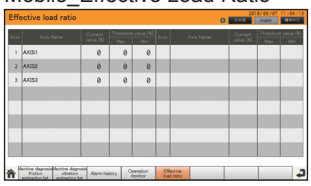
Mobile screen M-30030:
Mobile_Alarm History



Mobile screen M-30040:
Mobile_Operation Monitor

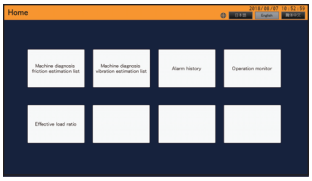


Mobile screen M-30050:
Mobile_Effective Load Ratio

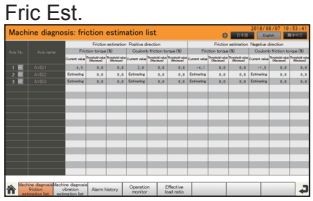


Mobile_Home (M-30200)

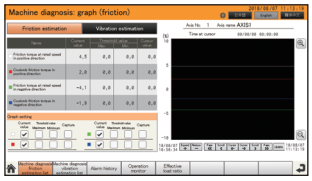
Mobile screen M-30200:
Mobile_Home



Mobile screen
M-30000: Mobile_Machine Diag. Fric Est.

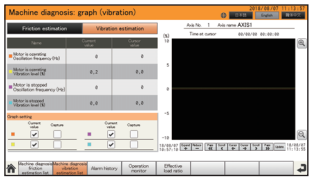


Mobile screen M-30001:
Mobile_Machine Diag.Graph (Fric)

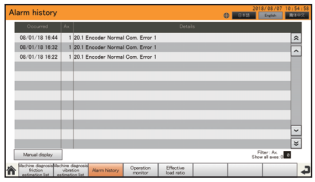


Mobile screen
M-30010: Mobile_Machine Diag. Vib Est.

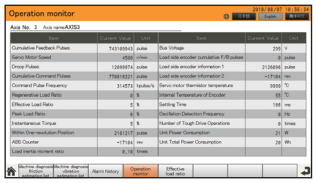
Mobile screen M-30011:
Mobile_Machine Diag.Graph (Vib)



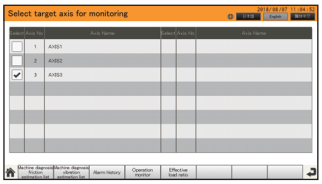
Mobile screen M-30030:
Mobile_Alarm History



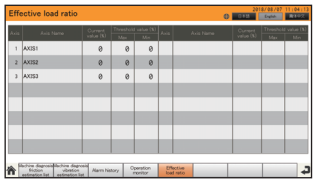
Mobile screen M-30040:
Mobile_Operation Monitor



Mobile screen M-30210:
Mobile_Monitor Axis Select



Mobile screen M-30050:
Mobile_Effective Load Ratio



2.3 Base Screen Details

The following shows the details of the base screen.

Menu (B-30000)

This screen is displayed at startup and transfers to each menu screen.

Display contents

No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Valid/Invalid Axis settings]	Displays the [Valid/Invalid Axis settings] window (W-32501).
3)	[Startup/Adjustment]	Displays the [Startup/Adjustment Menu] screen (B-30061). The switch does not operate when all axes are invalid.
4)	[Maintenance]	Displays the [Maintenance Menu] screen (B-30062). The switch does not operate when all axes are invalid.
5)	[Troubleshooting]	Displays the [Troubleshooting Menu] screen (B-30063). The switch does not operate when all axes are invalid.
6)	[Monitor]	Displays the [Monitor Menu] screen (B-30064). The switch does not operate when all axes are invalid.

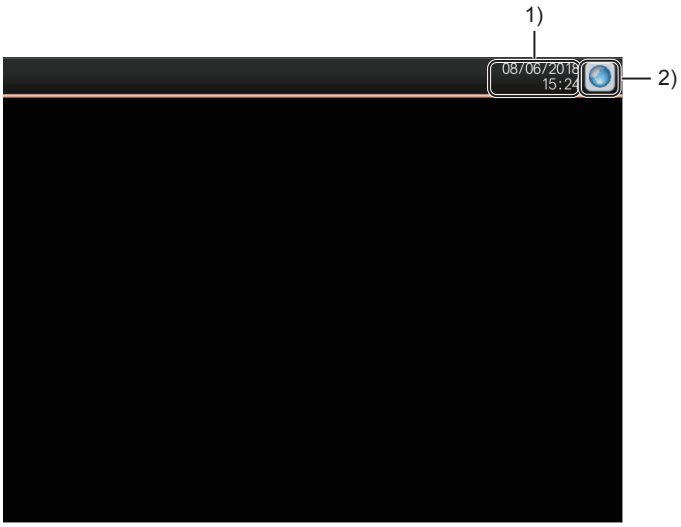
Header (B-30050)

This screen is used as the header.

This screen is displayed on each page with the set overlay screen function.

This screen is not displayed independently.

Display contents

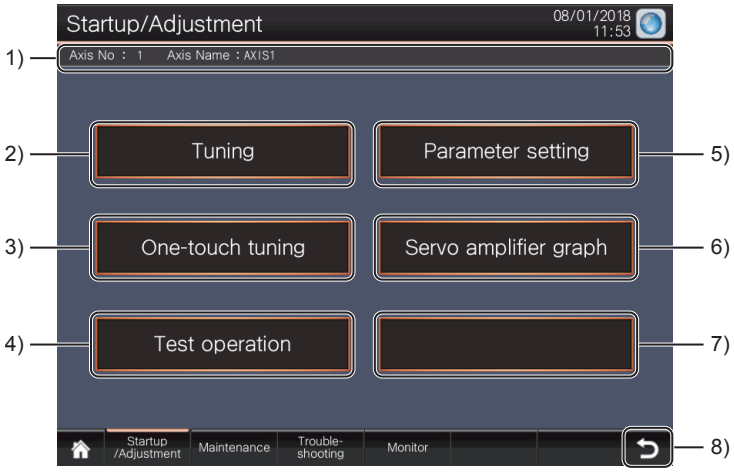


No.	Item	Description
1)	Date display	Displays the current date set in the GOT. Touch this item to display the [Clock Settings] window (W-30002).
2)	Language settings	Displays the [Language Settings] window (W-30001).

Startup/Adjustment Menu (B-30061)

This menu screen is for transferring to the screen for startup or adjustment.

Display contents

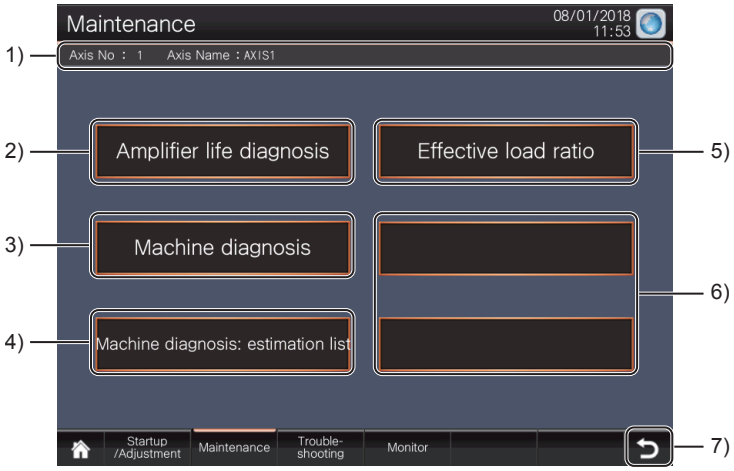


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Tuning]	Displays the [Tuning] screen (B-30100).
3)	[One-touch tuning]	Displays the [One-touch Tuning] screen (B-30200).
4)	[Test operation]	Displays the [Test Operation Menu] screen (B-30300).
5)	[Parameter setting]	Displays the [Parameter Setting Menu] screen (B-30400).
6)	[Servo amplifier graph]	Displays the [Servo amplifier graph] screen of the extended function.
7)	Empty switch	The go to screen switches that are not used. Use this switch to set the destination screen.
8)	Back	Returns to the previous screen.

Maintenance Menu (B-30062)

This menu screen is for transferring to the screen for maintenance.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Amplifier life diagnosis]	Displays the [Amplifier Life Diagnosis] screen (B-30500).
3)	[Machine diagnosis]	Displays the [Machine Diagnosis] screen (B-30600).
4)	[Machine diagnosis: estimation list]	Displays the [Machine Diag .Estimation (Fric)] screen (B-30700).
5)	[Effective load ratio]	Displays the [Effective Load Ratio] screen (B-30900).
6)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
7)	Back	Returns to the previous screen.

Troubleshooting Menu (B-30063)

This menu screen is for transferring to the screen for troubleshooting.

Display contents

No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Alarm display]	Displays the [Alarm Display] screen (B-31000).
3)	[Alarm history]	Displays the [Alarm History] screen (B-31100).
4)	[Drive recorder]	Displays the [Drive Recorder] screen (extension function).
5)	[Manual display]	Displays the [Manual Display] screen (B-31200).
6)	[System launcher]	Displays the [System launcher] screen of the extended function.
7)	Empty switch	The go to screen switches that are not used. Use this switch to set the destination screen.
8)	Back	Returns to the previous screen.

Monitor Menu (B-30064)

This menu screen is for transferring to the screen for monitor.

Display contents

No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Operation monitor]	Displays the [Operation Monitor 1] screen (B-31300).
3)	[Input/output monitor]	Displays the [I/O Monitor] screen (B-31400).
4)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
5)	Back	Returns to the previous screen.

Tuning (B-30100)

This screen is for adjusting the gain parameter, and automatically setting the optimum gain according to the purpose.

Display contents

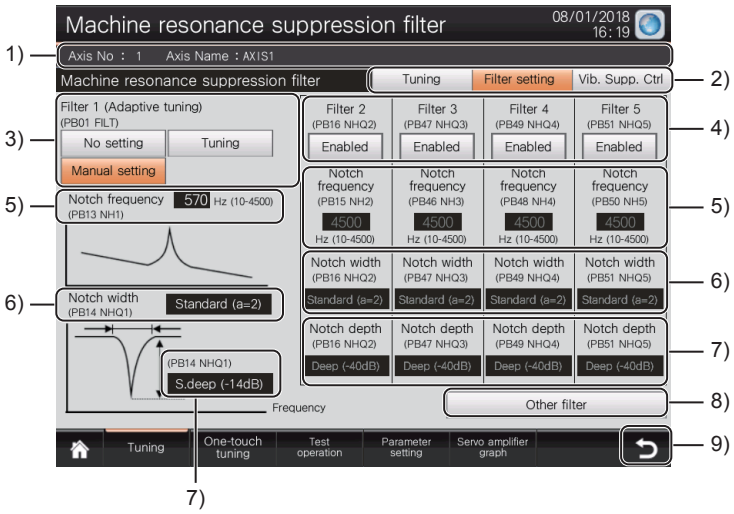
No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Tuning] [Filter setting] [Vib. Supp. Ctrl]	These switches transfer the screen to the [Tuning] screen (B-30100), [Machine Resonance Supp. Filter] screen (B-30110), and [Vibration Suppression Control] screen (B-30130). The switch of the displayed screen is displayed in orange. The display can be switched to the [Vibration Suppression Control] screen (B-30130) when the gain adjustment mode is in either of the following modes. • Auto tuning mode 2 • 2 gain adjustment mode 2 • Manual mode
3)	[Gain adjustment mode selection]	Selects the gain adjustment mode. • Auto tuning mode 1 This mode always estimates the load inertia moment ratio of the machine, and automatically sets the appropriate gain. • Auto tuning mode 2 This mode is used when normal gain adjustment cannot be performed in the auto tuning mode 1. Since this mode does not estimate the load inertia moment ratio, set the correct load inertia moment ratio value. • 2 gain adjustment mode 1 This mode always estimates the load inertia moment ratio, and automatically sets the other parameters for gain adjustment to appropriate gain depending on the responsiveness of the auto tuning. Manually set the model loop gain which determines the command tracking performance. • 2 gain adjustment mode 2 This mode is used when normal gain adjustment cannot be performed in the 2 gain adjustment mode 1. Since this mode does not estimate the load inertia moment ratio, set the correct load inertia moment ratio. • Manual mode This mode is used to adjust all the gains manually when the adjustment by the auto tuning is not satisfactory. For the details of each mode, refer to the following. MR-J4-_B_(-RJ) SERVO AMPLIFIER INSTRUCTION MANUAL
4)	[Load inertia moment ratio setting]	Set the load inertia moment ratio. It can be set manually when the gain adjustment mode is either of the following modes. • Auto tuning mode 2 • 2 gain adjustment mode 2 • Manual mode
5)	[Response level setting]	Sets the response level. It can be set manually when the gain adjustment mode is either of the following modes. • Auto tuning mode 1 • Auto tuning mode 2 • 2 gain adjustment mode 1 • 2 gain adjustment mode 2

No.	Item	Description
6)	[Gain parameter setting]	Sets the gain parameter. It can be set manually when the gain adjustment mode is in the following mode. • Manual mode The model loop gain can be set manually when the gain adjustment mode is in either of the following modes. • Manual mode • 2 gain adjustment mode 1 • 2 gain adjustment mode 2
7)	[Overshoot amount compensation]	Displays and sets the overshoot amount.
8)	Back	Returns to the previous screen.

Machine Resonance Supp. Filter (B-30110)

This screen is for enabling and disabling each filter, performing automatic setting, and setting the related parameters.
For the setting details, refer to the following.
MR-J4-_B_(-RJ) SERVO AMPLIFIER INSTRUCTION MANUAL

Display contents

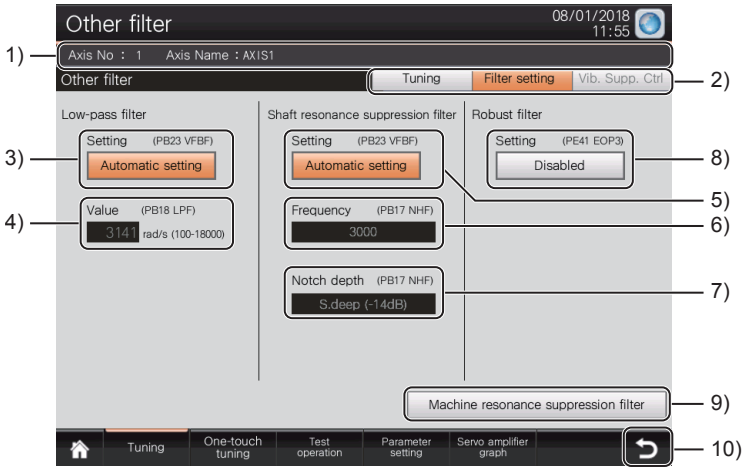


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Tuning] [Filter setting] [Vib. Supp. Ctrl]	These switches transfer the screen to the [Tuning] screen (B-30100), [Machine Resonance Supp. Filter] screen (B-30110), and [Vibration Suppression Control] screen (B-30130). The switch of the displayed screen is displayed in orange. The display can be switched to the [Vibration Suppression Control] screen (B-30130) when the gain adjustment mode is in either of the following modes. • Auto tuning mode 2 • 2 gain adjustment mode 2 • Manual mode
3)	Adjustment mode of filter 1	Selects the adjustment mode of machine resonance suppression filter 1. The switch of the selected adjustment mode is displayed in orange. [Tuning] can be selected only when the servo is turned on.
4)	Settings of filter 2 to filter 5	Enables and disables filter 2 to filter 5. Displays [Disabled] on the switch when the setting is disabled. Displays [Enabled] on the switch in orange when the setting is enabled. When the robust filter is enabled, filter 5 cannot be set.
5)	[Notch frequency]	Sets the notch frequency of machine resonance suppression filter 1 to filter 5. The notch frequency cannot be input when [Disabled] is selected in the filter setting. When the robust filter is enabled, inputting to filter 5 is disabled.
6)	[Notch width]	Displays the currently selected settings in [Notch width] of machine resonance suppression filter 1 to filter 5. Touch this item to display the [Notch Width] window (W-30110 to 30114) of machine resonance suppression filter 1 to filter 5. The switch does not operate when [Disabled] is selected in the filter setting. The switch of filter 5 does not operate when the robust filter is enabled.
7)	[Notch depth]	Displays the currently selected settings in [Notch depth] of machine resonance suppression filter 1 to filter 5. Touch this item to display the [Notch Depth] window (W-30115 to 30119) of machine resonance suppression filter 1 to filter 5. The switch does not operate when [Disabled] is selected in the filter setting. The switch of filter 5 does not operate when the robust filter is enabled.
8)	[Other filter]	Displays the [Other filter] screen (B-30111).
9)	Back	Returns to the previous screen.

Other filter (B-30111)

This screen is for setting the low-pass filter, shaft resonance suppression filter, and robust filter.

Display contents



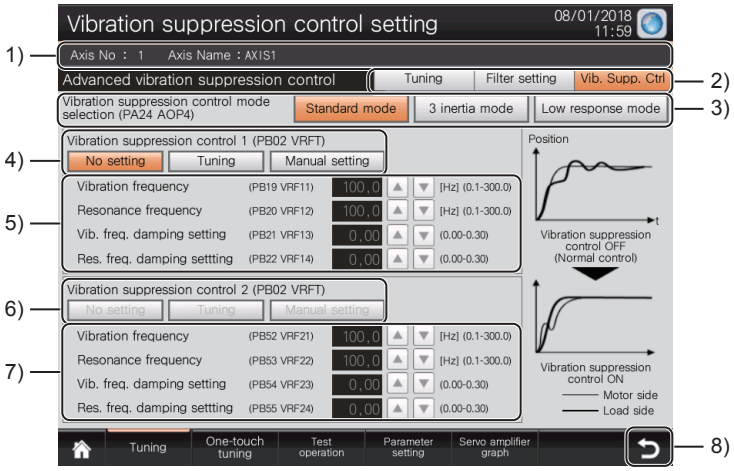
No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Tuning] [Filter setting] [Vib. Supp. Ctrl]	These switches transfer the screen to the [Tuning] screen (B-30100), [Machine Resonance Supp. Filter] screen (B-30110), and [Vibration Suppression Control] screen (B-30130). The switch of the displayed screen is displayed in orange. The display can be switched to the [Vibration Suppression Control] screen (B-30130) when the gain adjustment mode is in either of the following modes. • Auto tuning mode 2 • 2 gain adjustment mode 2 • Manual mode
3)	Setting of low-pass filter	Sets the low-pass filter. Touch this item to display the [Low-pass Filter Settings] window (W-30120). Select the item to be set from the following. • Automatic setting • Manual setting • Disabled
4)	Setting value of low-pass filter	Sets the setting value of the low-pass filter. The setting value cannot be set when [Disabled] or [Automatic setting] is selected in the low-pass filter setting.
5)	Setting of shaft resonance suppression filter	Sets the shaft resonance suppression filter. Touch this item to display the [Shaft Res.Supp.Filter Settings] window (W-30121). Select the item to be set from the following. • Automatic setting • Manual setting • Disabled The switch does not operate when filter 4 of the [Machine Resonance Supp. Filter] screen (B-30110) is enabled.
6)	Frequency of shaft resonance suppression filter	Sets the frequency of the shaft resonance suppression filter. Touch this item to display the [Shaft Res.Supp.Filter Frequency] window (W-30122). Select the item to be set from the following. • Disabled • 290 to 4500 The setting value cannot be set when [Disabled] or [Automatic setting] is selected in the shaft resonance suppression filter setting.

No.	Item	Description
7)	Notch depth of shaft resonance suppression filter	Sets the notch depth of the shaft resonance suppression filter. Touch this item to display the [Shaft Res.Supp.Fltr Notch Depth] window (W-30123). Select the item to be set from the following. • Deep (-40dB) • S.deep (-14dB) • S.shal. (-8dB) • Shallow (-4dB) The setting value cannot be set when [Disabled] or [Automatic setting] is selected in the shaft resonance suppression filter setting.
8)	Setting of robust filter	Enables or disables the robust filter. Displays [Disabled] on the switch when the setting is disabled. Displays [Enabled] on the switch in orange when the setting is enabled.
9)	[Machine resonance suppression filter]	Displays the [Machine Resonance Supp. Filter] screen (B-30110).
10)	Back	Returns to the previous screen.

Vibration Suppression Control (B-30130)

This screen is for setting the vibration suppression control.

Display contents

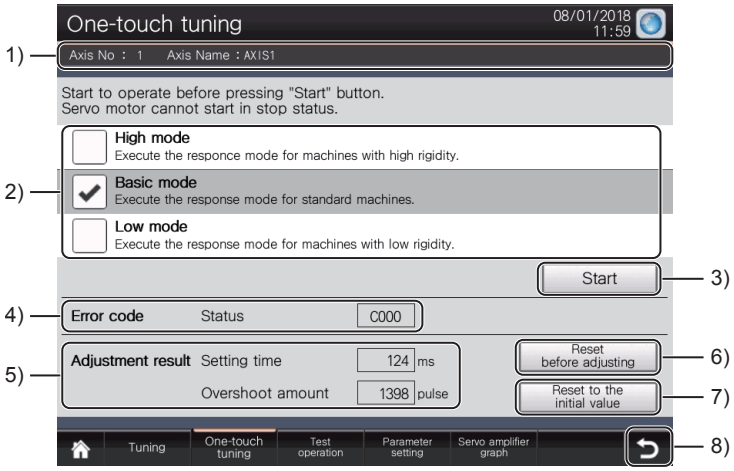


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. The monitoring target axis cannot be switched in this screen.
2)	[Tuning] [Filter setting] [Vib. Supp. Ctrl]	These switches transfer the screen to the [Tuning] screen (B-30100), [Machine Resonance Supp. Filter] screen (B-30110), and [Vibration Suppression Control] screen (B-30130). The switch of the displayed screen is displayed in orange.
3)	[Vibration suppression control mode selection]	Selects the vibration suppression control mode. The switch of the selected adjustment mode is displayed in orange.
4)	Setting of vibration suppression control 1	Selects the setting of vibration suppression control 1. The switch of the selected adjustment mode is displayed in orange.
5)	Parameter settings of vibration suppression control 1	Sets each parameter of the vibration suppression control 1. The parameter cannot be set when [No setting] or [Tuning] is selected in the vibration suppression control 1.
6)	Setting of vibration suppression control 2	Selects the setting of vibration suppression control 2. The switch of the selected adjustment mode is displayed in orange. This item cannot be set when the vibration suppression control mode is [Standard mode] or [Low response mode].
7)	Parameter settings of vibration suppression control 2	Sets each parameter of the vibration suppression control 2. The parameter cannot be set when [No setting] or [Tuning] is selected in the vibration suppression control 2.
8)	Back	Returns to the previous screen.

One-touch Tuning (B-30200)

This screen is for selecting the mode of one-touch tuning.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	Response mode	Selects the response mode.
3)	[Start]	Executes the automatic adjustment with the mode selected in the response mode. Displays the [One-touch Tuning Progress] window (W-30200) during the execution.
4)	[Error code]	Displays the error code when the result of the one-touch adjustment has an error. For details of the error codes, refer to the following. MR-J4-_B_(-RJ) SERVO AMPLIFIER INSTRUCTION MANUAL
5)	[Adjustment result]	Displays the setting time and overshoot amount in the adjustment result after the one-touch adjustment.
6)	[Reset]	Changes the parameter to the state before the one-touch tuning. Touch this item to display the [Setting Change Confirmation] window (W-30201).
7)	[Reset to the]	Changes the parameter to the initial value. Touch this item to display the [Setting Change Confirmation] window (W-30201).
8)	Back	Returns to the previous screen.

Additional information

Do not touch the [Reset before adjusting] switch or [Reset to the initial value] switch during the one-touch tuning execution.

An error occurs.

Test Operation Menu (B-30300)

This menu screen is for transferring to the screen for test operation.

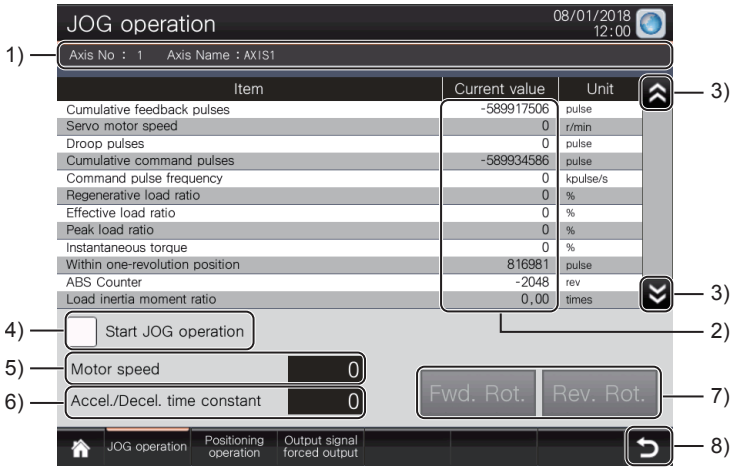
Display contents

No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[JOG operation]	Displays the [JOG Operation] screen (B-30310).
3)	[Positioning operation]	Displays the [Positioning Operation] screen (B-30320).
4)	[Output signal forced output]	Displays the [Output Signal(DO) Forced Output] screen (B-30330).
5)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
6)	Back	Returns to the previous screen.

JOG Operation (B-30310)

This screen is for testing the JOG operation, which rotates the motor at the motor speed and the acceleration/deceleration time constant that the user has specified.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500). The switch does not operate when [Start JOG operation] is selected.
2)	[Current value]	Displays the current value of each item.
3)	Scroll	Switch the display items. • When the [Test Operation Status 1] window (W-30300) is displayed, the window switches to the [Test Operation Status 2] window (W-30301). • When the [Test Operation Status 2] window (W-30301) is displayed, the window switches to the [Test Operation Status 1] window (W-30300).
4)	[Start JOG operation]	Touch this to select or clear the check box. Selected: Starts the test mode of the JOG operation mode. Cleared: Cancels the test mode.
5)	[Motor speed]	Sets the motor speed. This can be set when [Start JOG operation] is selected.
6)	[Accel./Decel. time constant]	Sets the acceleration/deceleration time constants. This can be set when [Start JOG operation] is selected.
7)	Operating JOG operation	Operate the JOG operation. Each switch can be set when [Start JOG operation] is selected. • [Fwd. Rot.]: Starts the JOG operation in forward rotation while this button is touched. Displays the switch in green during the forward rotation. • [Rev. Rot.]: Starts the JOG operation in reverse rotation while this button is touched. Displays the switch in green during the reverse rotation.
8)	Back	Returns to the previous screen. The switch does not operate when [Start JOG operation] is selected.

Additional information

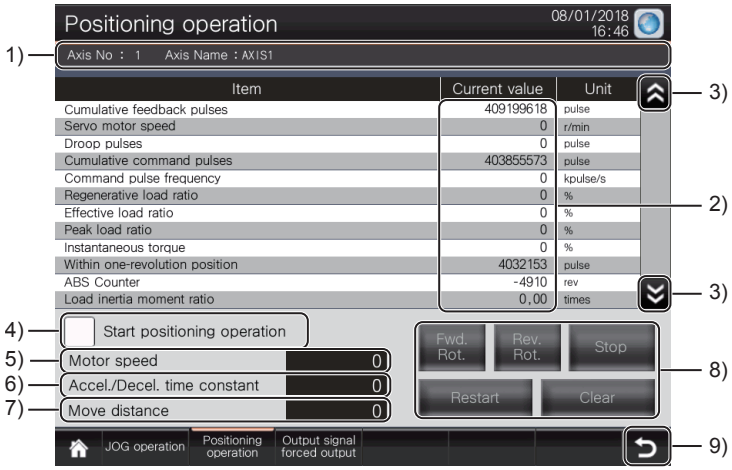
- In the JOG operation mode, the logging that collects the estimated value of the machine diagnosis is stopped.
- The normal operation cannot be performed after the test operation (JOG operation, positioning operation, or output signal (DO) forced output) is performed due to the servo amplifier specifications.

Turn off the servo amplifier once, and turn it on again.

Positioning Operation (B-30320)

This screen is for testing the positioning operation, which rotates the motor at the motor speed, the acceleration/deceleration time constant and the move distance that the user has specified.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500). The switch does not operate when [Start positioning operation] is selected.
2)	[Current value]	Displays the current value of each item. Each item is displayed by calling the [Test Operation Status 1] window (W-30300) and [Test Operation Status 2] window (W-30301).
3)	Scroll	Switch the display items. • When the [Test Operation Status 1] window (W-30300) is displayed, the window switches to the [Test Operation Status 2] window (W-30301). • When the [Test Operation Status 2] window (W-30301) is displayed, the window switches to the [Test Operation Status 1] window (W-30300).
4)	[Start positioning operation]	Touch this to select or clear the check box. Selected: Starts the test mode of the positioning operation mode. Cleared: Cancels the test mode.
5)	[Motor speed]	Sets the motor speed. This can be set when [Start positioning operation] is selected.
6)	[Accel./Decel. time constant]	Sets the acceleration/deceleration time constants. This can be set when [Start positioning operation] is selected.
7)	[Move distance]	Sets the move distance. This can be set when [Start positioning operation] is selected.
8)	Operating the positioning operation	Operates the positioning operation. Each switch can be set when [Start positioning operation] is selected. • [Fwd]: Starts the positioning operation in forward rotation. Displays the switch in green when the switch is touched. • [Rev.]: Starts the positioning operation in reverse rotation. Displays the switch in green when the switch is touched. • [Stop]: Temporarily stops the positioning operation being executed. Displays the switch in orange when the switch is touched. • [Restart]: Restarts the positioning operation that is stopped. • [Clear]: Clears the remaining distance of the positioning operation that is stopped.
9)	Back	Returns to the previous screen. The switch does not operate when [Start positioning operation] is selected.

Additional information

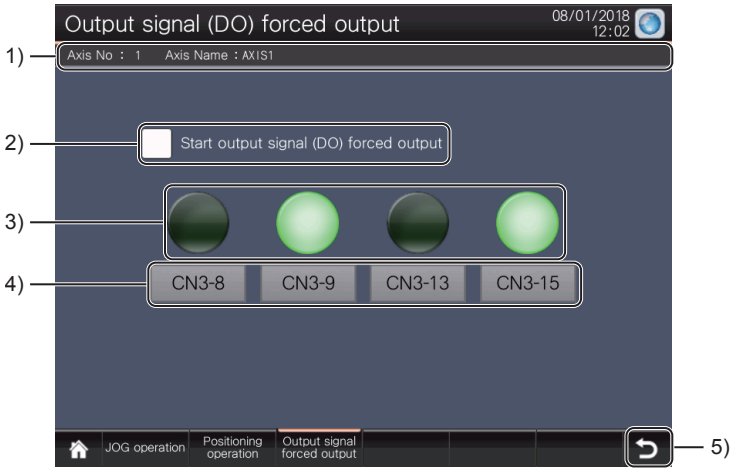
- In the positioning operation mode, the logging that collects the estimated value of the machine diagnosis is stopped.
- The normal operation cannot be performed after the test operation (JOG operation, positioning operation, or output signal (DO) forced output) is performed due to the servo amplifier specifications.

Turn off the servo amplifier once, and turn it on again.

Output Signal(DO) Forced Output (B-30330)

This screen is for performing the test in which the output signal of the servo amplifier is forcibly turned on and off by inputting the ON signal forcibly to the servo amplifier from the GOT.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500). The switch does not operate when [Start output signal (DO) forced output] is selected.
2)	[Start output signal (DO) forced output]	Touch this to select or clear the check box. Selected: Starts the test mode of the output signal (DO) forced output mode. Cleared: Cancels the test mode.
3)	Output signal lamp	Monitors the output signal of the servo amplifier. Turns on when the output signal is on.
4)	Forced output button	Executes the forced output for the output signal on the button. This can be operated when [Start output signal (DO) forced output] is selected.
5)	Back	Returns to the previous screen. The switch does not operate when [Start output signal (DO) forced output] is selected.

Additional information

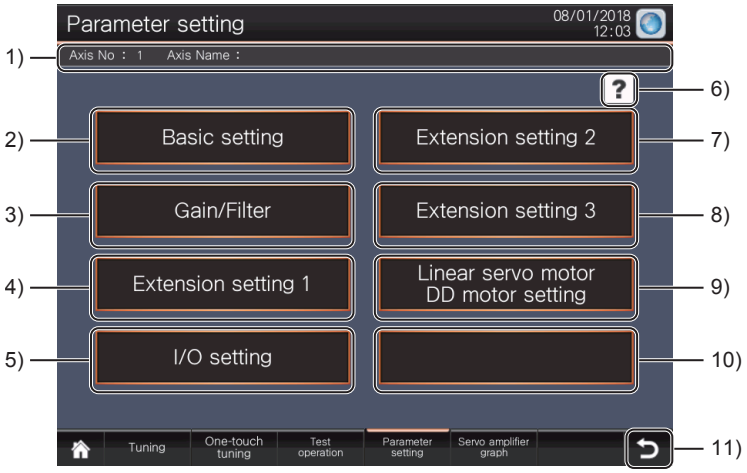
- The normal operation cannot be performed after the test operation (JOG operation, positioning operation, or output signal (DO) forced output) is performed due to the servo amplifier specifications.

Turn off the servo amplifier once, and turn it on again.

Parameter Setting Menu (B-30400)

This screen is for transferring to the screen for parameter settings.

Display contents

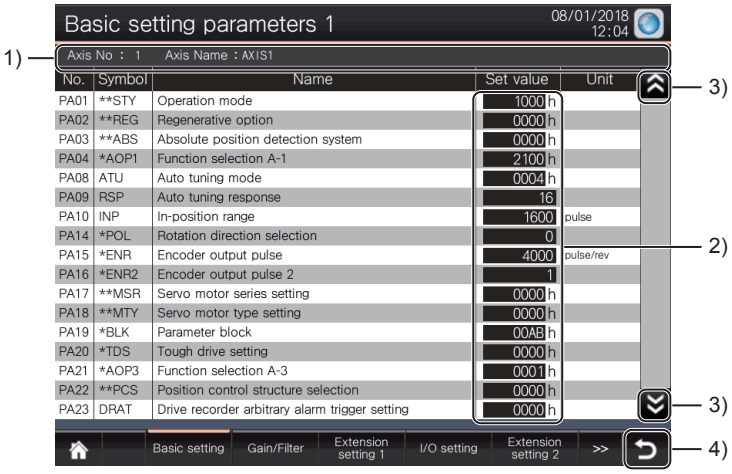


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Basic setting]	Displays the [Basic Settings Parameters1] screen (B-30410).
3)	[Gain/Filter]	Displays the [Gain/Filter Parameters1] screen (B-30420).
4)	[Extension setting 1]	Displays the [Ext.Settings1 Parameters1] screen (B-30430).
5)	[I/O setting]	Displays the [I/O Settings Parameters] screen (B-30440).
6)	Parameter settings help	Displays the [Parameter Settings Help] window (W-30400).
7)	[Extension setting 2]	Displays the [Ext.Settings2 Parameters1] screen (B-30450).
8)	[Extension setting 3]	Displays the [Ext.Settings3 Parameters1] screen (B-30460).
9)	[Linear servo motor/DD motor setting]	Displays the [Linear/DD Motor Parameters] screen (B-30470).
10)	Empty switch	The go to screen switches that are not used. Use this switch to set the destination screen.
11)	Back	Returns to the previous screen.

Basic Settings Parameters1 (B-30410)

This screen is for setting and displaying the values of the basic settings parameters for EEP-ROM in the servo amplifier.

Display contents

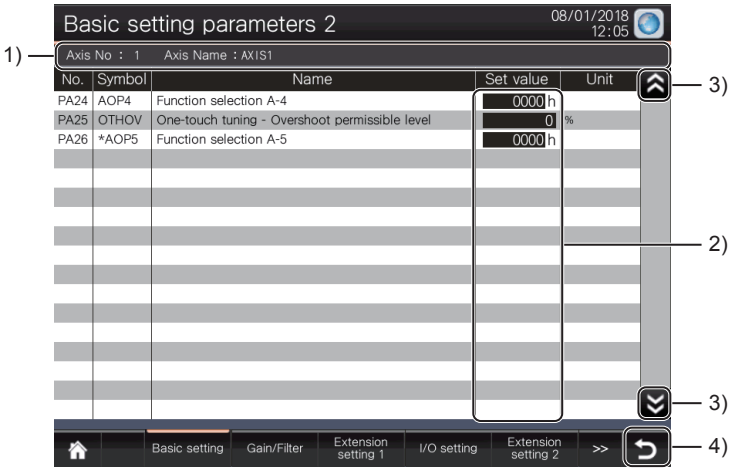


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Scroll	Switches the screen to the [Basic Settings Parameters2] screen (B-30411).
4)	Back	Returns to the previous screen.

Basic Settings Parameters2 (B-30411)

This screen is for setting and displaying the values of the basic settings parameters for EEP-ROM in the servo amplifier.

Display contents

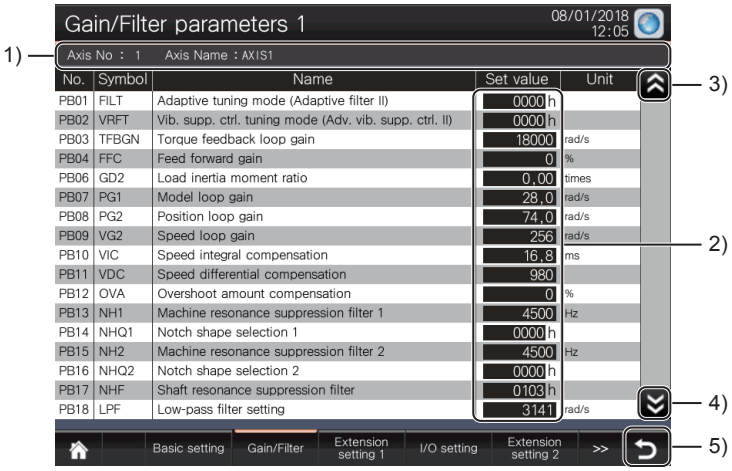


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Scroll	Switches the screen to the [Basic Settings Parameters1] screen (B-30410).
4)	Back	Returns to the previous screen.

Gain/Filter Parameters1 (B-30420)

This screen is for displaying and setting the values of the gain and filter parameters for EEP-ROM in the servo amplifier.

Display contents

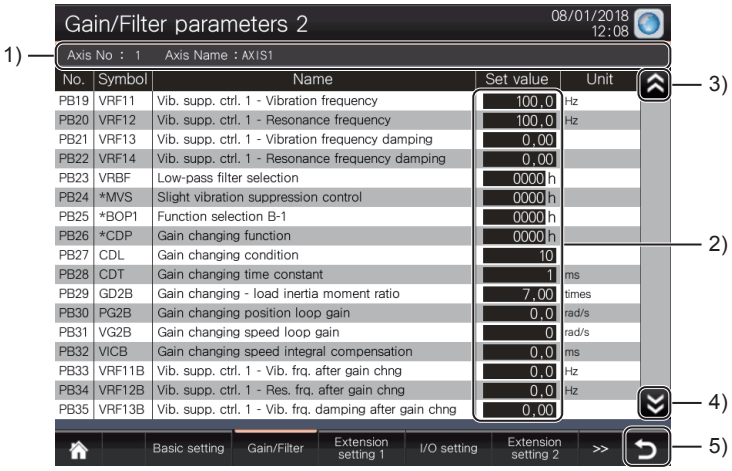


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Up scroll	Switches the screen to the [Gain/Filter Parameters3] screen (B-30422).
4)	Down scroll	Switches the screen to the [Gain/Filter Parameters2] screen (B-30421).
5)	Back	Returns to the previous screen.

Gain/Filter Parameters2 (B-30421)

This screen is for displaying and setting the values of the gain and filter parameters for EEP-ROM in the servo amplifier.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Up scroll	Switches the screen to the [Gain/Filter Parameters1] screen (B-30420).
4)	Down scroll	Switches the screen to the [Gain/Filter Parameters3] screen (B-30422).
5)	Back	Returns to the previous screen.

Gain/Filter Parameters3 (B-30422)

This screen is for displaying and setting the values of the gain and filter parameters for EEP-ROM in the servo amplifier.

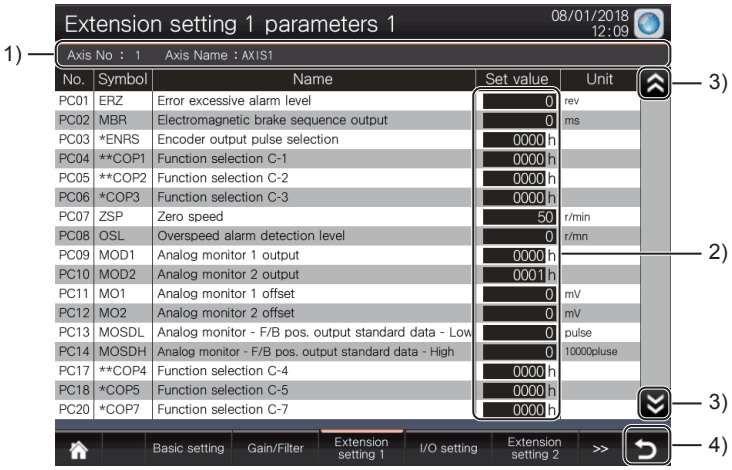
Display contents

No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Up scroll	Switches the screen to the [Gain/Filter Parameters2] screen (B-30421).
4)	Down scroll	Switches the screen to the [Gain/Filter Parameters1] screen (B-30420).
5)	Back	Returns to the previous screen.

Ext.Settings1 Parameters1 (B-30430)

This screen is for displaying and setting the values of the extension settings 1 parameters for EEP-ROM in the servo amplifier.

Display contents

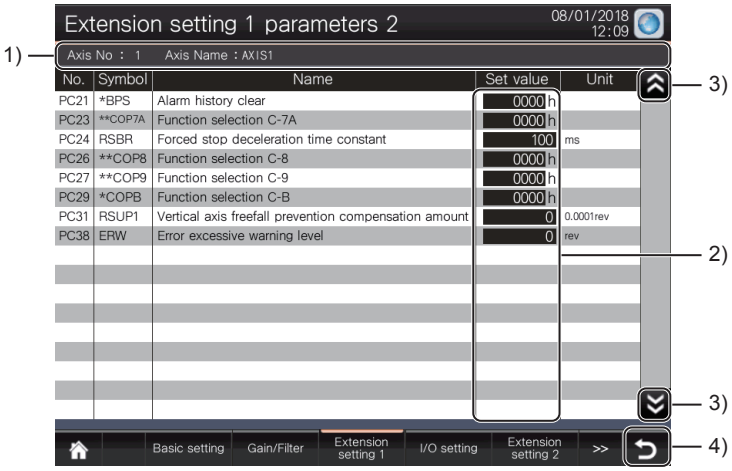


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Scroll	Switches the screen to the [Ext.Settings1 Parameters2] screen (B-30431).
4)	Back	Returns to the previous screen.

Ext.Settings1 Parameters2 (B-30431)

This screen is for displaying and setting the values of the extension settings 1 parameters for EEP-ROM in the servo amplifier.

Display contents

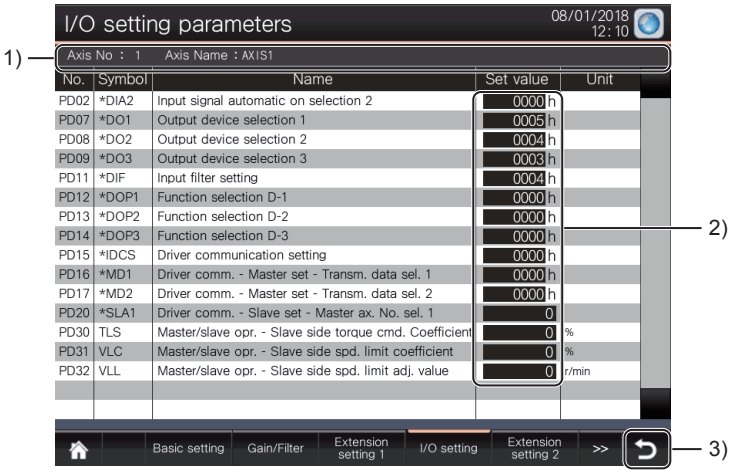


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Scroll	Switches the screen to the [Ext.Settings1 Parameters1] screen (B-30430).
4)	Back	Returns to the previous screen.

I/O Settings Parameters (B-30440)

This screen is for displaying the values of the I/O settings parameters for EEP-ROM in the servo amplifier.

Display contents

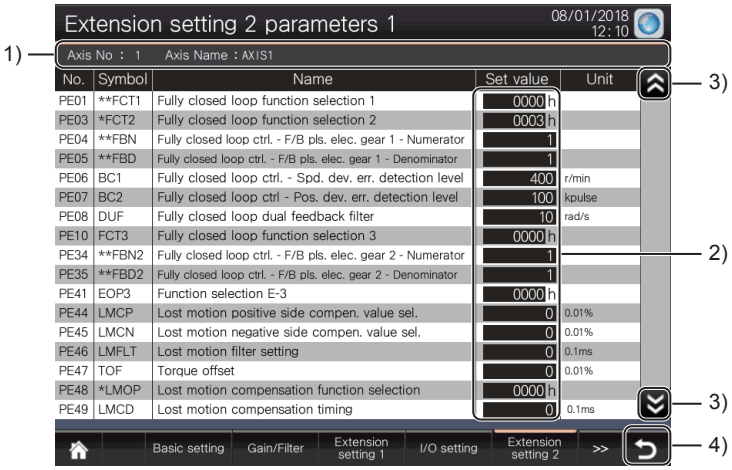


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Back	Returns to the previous screen.

Ext.Settings2 Parameters1 (B-30450)

This screen is for displaying and setting the values of the extension settings 2 parameters for EEP-ROM in the servo amplifier.

Display contents

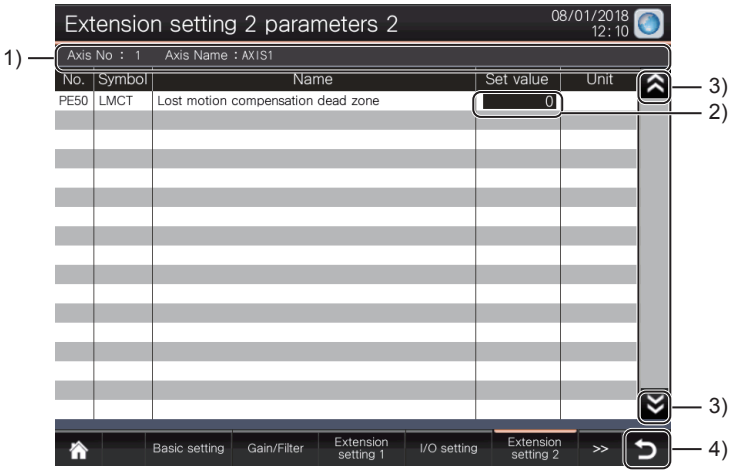


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Scroll	Switches the screen to the [Ext.Settings2 Parameters2] screen (B-30451).
4)	Back	Returns to the previous screen.

Ext.Settings2 Parameters2 (B-30451)

This screen is for displaying and setting the values of the extension settings 2 parameters for EEP-ROM in the servo amplifier.

Display contents

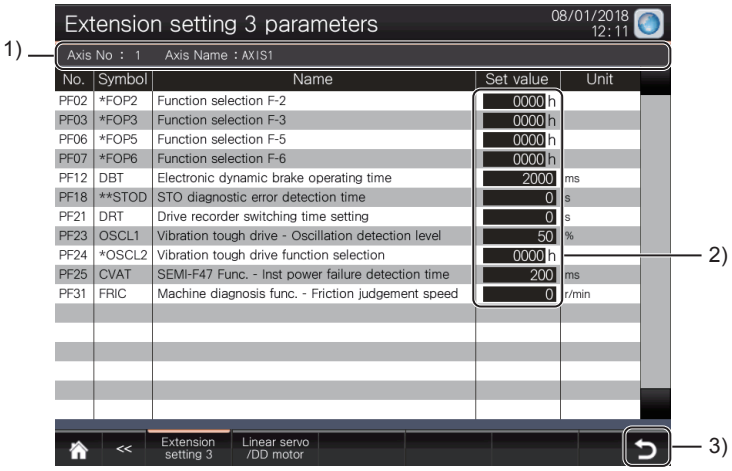


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Scroll	Switches the screen to the [Ext.Settings2 Parameters1] screen (B-30450).
4)	Back	Returns to the previous screen.

Ext.Settings3 Parameters (B-30460)

This screen is for displaying and setting the values of the extension settings 3 parameters for EEP-ROM in the servo amplifier.

Display contents

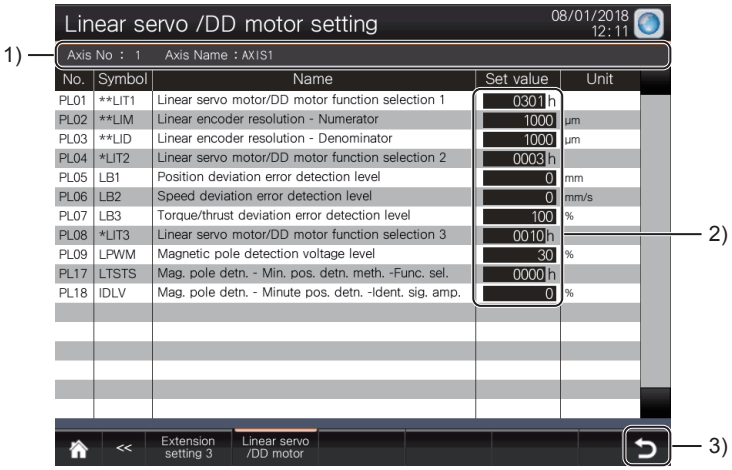


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Back	Returns to the previous screen.

Linear/DD Motor Parameters (B-30470)

This screen is for displaying and setting the values of the linear servo motor/DD motor settings parameters for EEP-ROM in the servo amplifier.

Display contents

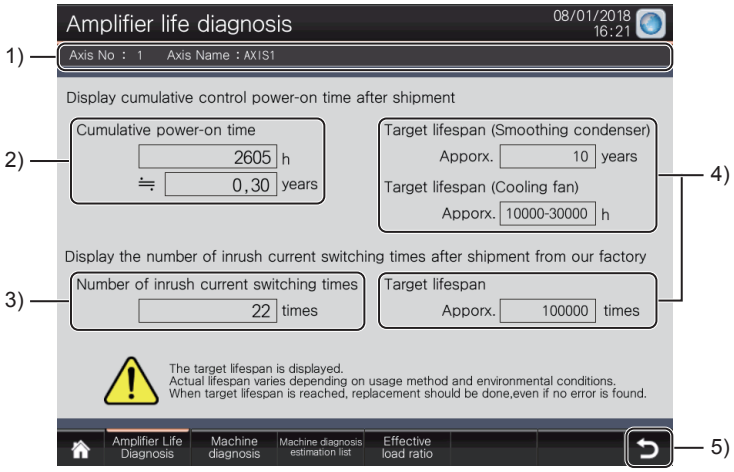


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Set value]	Displays and sets the parameter setting value. The setting value without "h" is set in decimal, and setting value with "h" is set in hexadecimal.
3)	Back	Returns to the previous screen.

Amplifier Life Diagnosis (B-30500)

This screen displays the cumulative power-on time and number of inrush current switching times.

Display contents

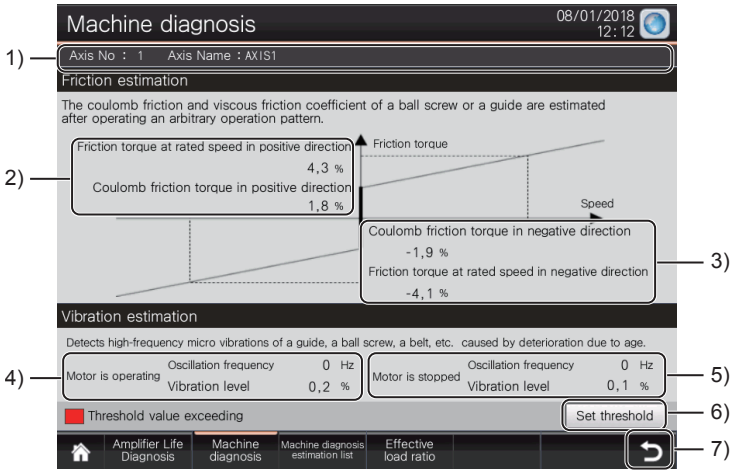


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Cumulative power-on time]	Displays the cumulative power-on time.
3)	[Number of inrush current switching times]	Displays the number of inrush current switching times.
4)	[Target lifespan (Smoothing condenser)] [Target lifespan (Cooling fan)] [Target lifespan]	Displays the target lifespan.
5)	Back	Returns to the previous screen.

Machine Diagnosis (B-30600)

This screen displays the machine information such as friction and vibration of each axis.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	Friction estimation of the torque in positive direction	Displays the friction estimation of the torque in positive direction. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. This value is not displayed when estimation is not set.
3)	Friction estimation of the torque in negative direction	Displays the friction estimation of the torque in negative direction. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. This value is not displayed when estimation is not set.
4)	Vibration estimation while motor is operating	Displays the vibration estimation while the motor is operating. Displays [Estimating] when the estimation of the machine diagnosis is not completed. This value is not displayed when estimation is not set.
5)	Vibration estimation while motor is stopped	Displays the vibration estimation while the motor is stopped. Displays [Estimating] when the estimation of the machine diagnosis is not completed. This value is not displayed when estimation is not set.
6)	[Set threshold]	Displays the [Machine Diag. Threshold Setting] window (W-30600).
7)	Back	Returns to the previous screen.

Additional information

• Acquiring the estimation for each item of the machine diagnosis or not can selected for each axis in the script symbol settings.

For the items whose estimations are not acquired, turn on the value of the script symbol (GTSV_AX*_FWD_EST_CANCEL, GTSV_AX*_RVS_EST_CANCEL, GTSV_AX*_VB_EST_CANCEL). (*: Axis No.)

• When acquiring the estimations of all the items is completed, logging the estimations starts.

For the items whose script symbol values are on, estimation values are not acquired.

• The logging collects the value once every hour.

The 20 collected data are accumulated in one file. Up to 12 files are created.

For the items whose script symbol values are on, error values (999) are substituted.

1 When all the following script symbol values are on, logging is not performed. (: Axis No.)
GTSV_AX*_FWD_EST_CANCEL
GTSV_AX*_RVS_EST_CANCEL
GTSV_AX*_VB_EST_CANCEL

*2 During the test operation, logging is not performed.

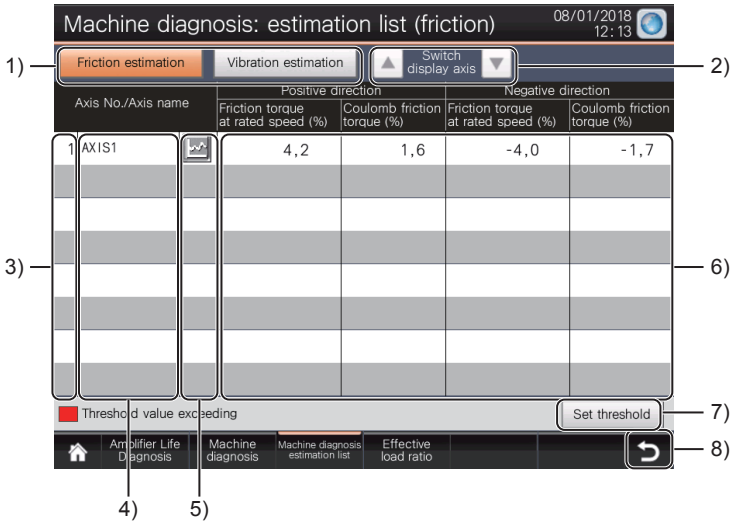
• The estimations for each item are displayed on the screen in the order of acquirement completion.

The order is different from the start timing of logging.

Machine Diag .Estimation (Fric) (B-30700)

This screen displays the machine information for friction of the valid axes (axis 1 to axis 16) in a list.

Display contents



No.	Item	Description
1)	[Friction estimation] [Vibration estimation]	This switch transfers the screen to the [Machine Diag .Estimation (Fric)] (B-30700) and [Machine Diag. Estimation (Vib)] screen (B-30710). The switch of the displayed screen is displayed in orange.
2)	[Switch display axis]	Switches the list display for eight axes when nine or more axes are valid. The list is displayed by calling the [Machine Diag. Friction Est.1] window (W-30700) and [Machine Diag. Friction Est.2] window (W-30701). This switch cannot be selected when eight or less axes are valid.
3)	Axis number	Displays the axis number.
4)	Axis name	Displays the axis name.
5)	Machine diagnosis graph (friction)	Displays the [Machine Diag. Graph (Friction)] window (W-30704).
6)	Friction estimation list	Displays the vibration estimation. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. This list is not displayed when the estimation is set to "No estimation".
7)	[Set threshold]	Displays the [Machine Diag. Threshold (Fric)1] window (W-30702).
8)	Back	Returns to the previous screen.

Additional information

• Only the axes that are set to valid are displayed on the list.

When there is an invalid axis between the valid axes, the invalid axis is skipped on the screen.

• Acquiring the estimation for each item or not can selected for each axis in the script symbol settings.

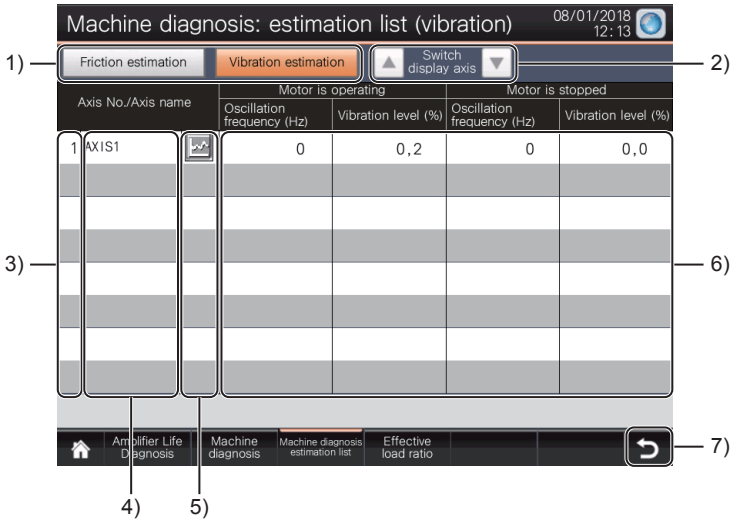
For the details, refer to the following.

☞ Page 94 Additional information

Machine Diag. Estimation (Vib) (B-30710)

This screen displays the machine information for vibration of the valid axes (axis 1 to axis 16) in a list.

Display contents



No.	Item	Description
1)	[Friction estimation] [Vibration estimation]	This switch transfers the screen to the [Machine Diag .Estimation (Fric)] (B-30700) and [Machine Diag. Estimation (Vib)] screen (B-30710). The switch of the displayed screen is displayed in orange.
2)	[Switch display axis]	Switches the list display for eight axes when nine or more axes are valid. The list is displayed by calling the [Machine Diag. Vibration Est.1] window (W-30710) and [Machine Diag. Vibration Est.2] window (W-30711). This switch cannot be selected when eight or less axes are valid.
3)	Axis number	Displays the axis number.
4)	Axis name	Displays the axis name.
5)	Machine diagnosis graph (vibration)	Displays the [Machine Diag. Graph (Vibration)] window (W-30714).
6)	Vibration estimation list	Displays the vibration estimation. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
7)	Back	Returns to the previous screen.

Additional information

• Only the axes that are set to valid are displayed on the list.

When there is an invalid axis between the valid axes, the invalid axis is skipped on the screen.

• Acquiring the estimation for each item or not can selected for each axis in the script symbol settings.

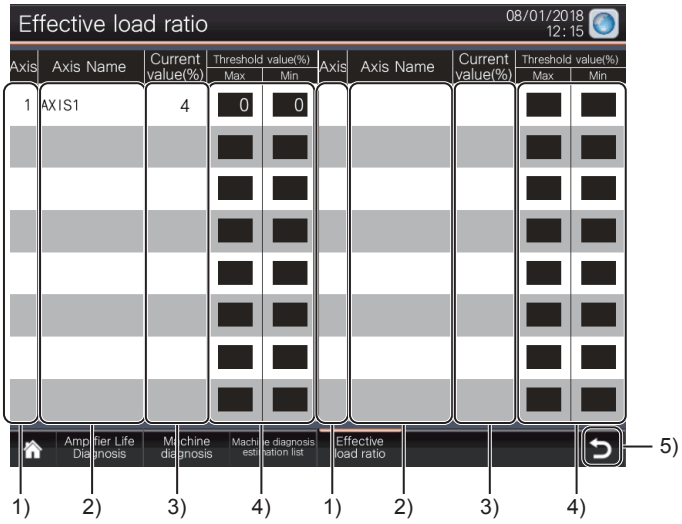
For the details, refer to the following.

☞ Page 94 Additional information

Effective Load Ratio (B-30900)

This screen displays the effective load ratio information of the valid axes (axis 1 to axis 16) in a list.

Display contents



No.	Item	Description
1)	[Axis]	Displays the axis number.
2)	[Axis Name]	Displays the axis name.
3)	[Current value(%)]	Displays the estimation of the effective load ratio as the current value. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed.
4)	[Threshold value(%)]	Displays and sets the maximum threshold value and minimum threshold value for the effective load ratio of each axis. The skip setting range is 0 to 999 [%]. The initial value is 0.
5)	Back	Returns to the previous screen.

Additional information

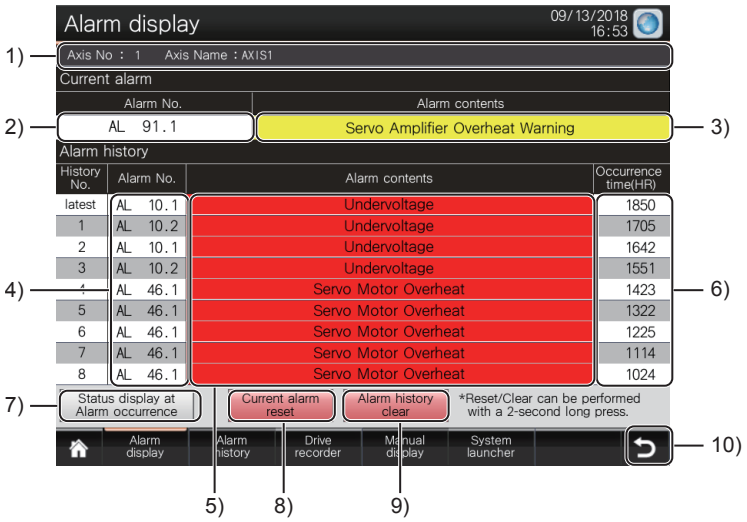
• Only the axes that are set to valid are displayed on the list.

When there is an invalid axis between the valid axes, the invalid axis is skipped on the screen.

Alarm Display (B-31000)

This screen displays the alarm and warning occurring at the servo amplifier in details for each axis.

Display contents



No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	Number of current alarm	Displays the alarm number that is occurring currently.
3)	Details of current alarm	Displays the contents of the alarm number that is occurring currently. Displays the background of the comment in yellow when the occurring alarm number indicates the warning. Displays the background of the comment in yellow when the occurring alarm number indicates the alarm.
4)	Alarm number of alarm history	Displays the latest (alarm that occurred last) to eighth alarm number occurred in the past (nine alarms).
5)	Alarm contents of alarm history	Displays the contents of the alarm number that occurred in the past. Displays the background of the comment in red when the alarm number indicates the alarm.
6)	Time elapsed from alarm occurrence	Displays the time elapsed from the alarm occurrence that occurred in the past.
7)	[Status display at Alarm occurrence]	Displays the [Status at Alarm Occurrence 1] window (W-30900).
8)	[Current alarm reset]	Resets the current alarm by being touched for two seconds.
9)	[Alarm history clear]	Clears the alarm history by being touched for two seconds.
10)	Back	Returns to the previous screen.

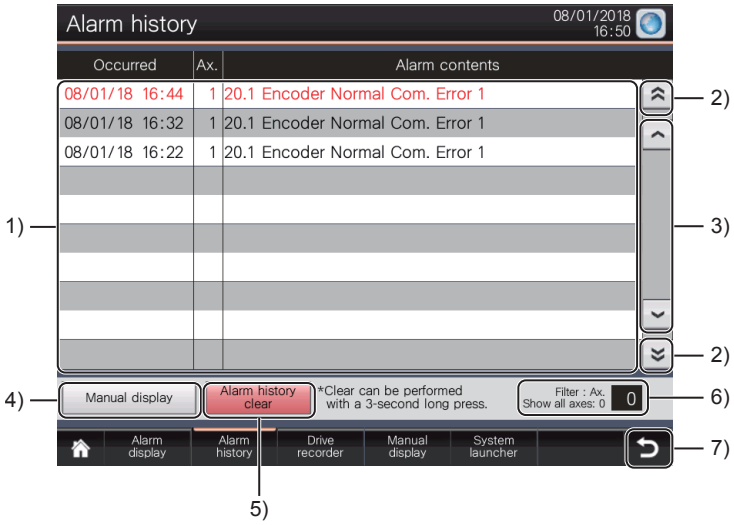
Additional information

- When the [Manual display] switch in the footer is touched while the alarm is occurring, the screen is switched to the [Manual Display] screen (B-31200), and the page number of the document for the occurring alarm is displayed.

Alarm History (B-31100)

The current alarm and warning occurred in the servo amplifier are acquired with the alarm function of the GOT, and the acquired alarm information of multiple axes is displayed in a list.

Display contents



No.	Item	Description
1)	Alarm list	Displays the time data of the GOT when the alarm occurred, axis number of the servo amplifier, and the detail number and name of the alarm for all the axes being monitored. Displays the comment in yellow when the alarm indicates the occurring warning. Displays the comment in red when the alarm indicates the occurring alarm. Displays the comment in black when the alarm indicates the warning and alarm are recovered. Displays the cursor when an alarm is touched. Scrolls the displayed contents upward and downward when the display is flicked upward and downward. One flick scrolls the display for a half page.
2)	Page scroll	Scrolls the alarm per page.
3)	Row scroll	Scrolls the alarm per row.
4)	[Manual display]	Switches to the [Manual Display] screen (B-31200). When the alarm is selected, the page corresponding to the alarm is displayed.
5)	[Alarm history clear]	Clears the alarm history by being touched for two seconds.
6)	[Filter : Ax.]	Displays the alarm number filtered with axis number. When 0 is set, cancels the filter and displays all the axes.
7)	Back	Returns to the previous screen.

Additional information

- When the GOT is restarted during the alarm occurrence, the alarm recovers at power shutoff and is added as a new alarm at restart.

If the alarm is recovered before restart, it is not added as a new alarm.

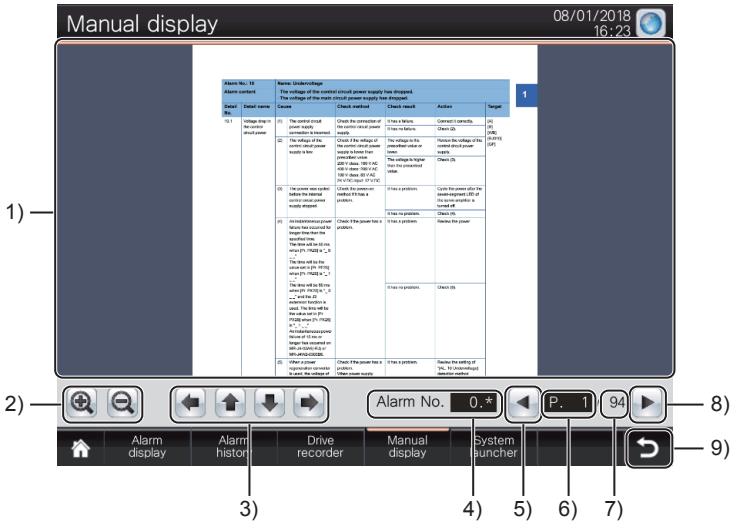
- When the [Manual display] switch is touched with the alarm selected from the alarm list, the screen switches to the [Manual Display] screen (B-31200), and the page with details of the selected alarm is displayed.

Manual Display (B-31200)

This screen displays the troubleshooting manual of the servo amplifier.

The page of the document corresponding to the alarm number occurring currently or specified is displayed.

Display contents



No.	Item	Description
1)	Manual display area	This screen displays the troubleshooting manual of the servo amplifier. Touch the document display to operate it. • Flick: Scrolls in eight directions. Flick while displaying the edge of the document to switch the page. • Pinch in/out: Reduces or enlarges the document size to a size at 25% to 400% magnification.
2)	Expand, reduce	Expands and reduces the displayed document in the following magnification. • 25% • 37.5% • 50% • 62.5% • 75% • 87.5% • 100% • 125% • 150% • 200% • 400%
3)	Scroll	Scrolls the displayed document up, down, right, or left for a fixed space.
4)	[Alarm No.]	Input the alarm number to display the page corresponding to the input alarm number. When an alarm number that does not exist is input, the page does not switch.
5)	Previous page	Returns to the previous page of the displayed document.
6)	Page number	Displays the page number of the displayed document. The page number to be displayed can be input.
7)	Last page number	Displays the last page number of the displayed document.
8)	Next page	Goes to the next page of the displayed document.
9)	Back	Returns to the previous screen.

Additional information

- The language in the manual displayed by the manual display is automatically switched according to the display language of the GOT.

The following shows the relation of the comment group column No., language, document ID, and file name of the displayed document for each language.

■For Japanese project

Comment group column No.	Language	Document ID	File name
1	Japanese	30000	30000_j.pdf
2	English	30001	30001_e.pdf
3	Chinese (Simplified)	30002	30002_c.pdf

■For English project

Comment group column No.	Language	Document ID	File name
1	English	30001	30001_e.pdf
2	Japanese	30000	30000_j.pdf
3	Chinese (Simplified)	30002	30002_c.pdf

■For Chinese project

Comment group column No.	Language	Document ID	File name
1	Chinese (Simplified)	30002	30002_c.pdf
2	Japanese	30000	30000_j.pdf
3	English	30001	30001_e.pdf

- The following shows the file storage positions.

```
Drive A (SD card)
├── Package1
│   └── userdata
│       ├── 30000_j.pdf  : Manual for alarm display (GOT Mobile function) in Japanese
│       ├── 30001_e.pdf : Manual for alarm display (GOT Mobile function) in English
│       └── 30002_c.pdf : Manual for alarm display (GOT Mobile function) in Chinese
└── PDFDAT
    ├── 30000_j.pdf          : Manual for alarm display (document display) in Japanese
    ├── 30001_e.pdf          : Manual for alarm display (document display) in English
    └── 30002_c.pdf          : Manual for alarm display (document display) in Chinese
```

- For the updating method of the servo manual, refer to the following.

☞ Page 213 Updating Servo Manual

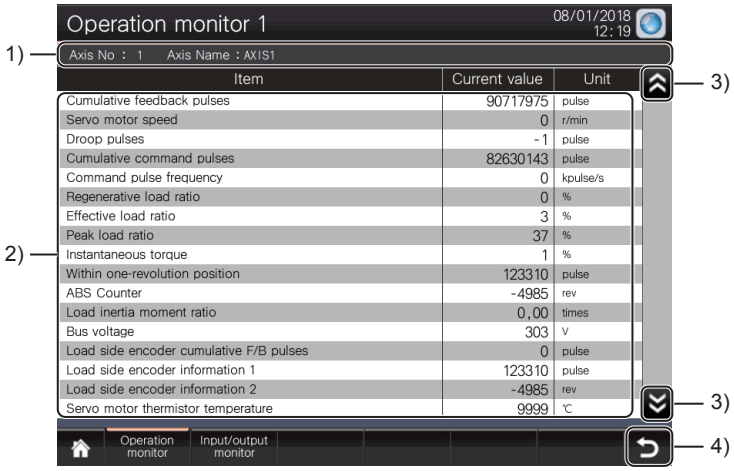
Point

The folders referred by the hyperlink and document display cannot be changed from the above folder configuration due to the system restriction.

Operation Monitor 1 (B-31300)

The status of the operating servo amplifier is displayed.

Display contents

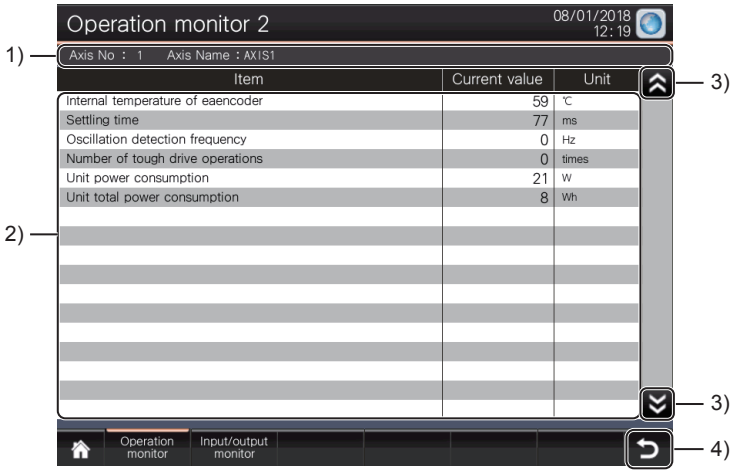


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	Monitor list	Displays the current value of each item.
3)	Scroll	Switches the screen to the [Operation Monitor 2] screen (B-31301).
4)	Back	Returns to the previous screen.

Operation Monitor 2 (B-31301)

The status of the operating servo amplifier is displayed.

Display contents

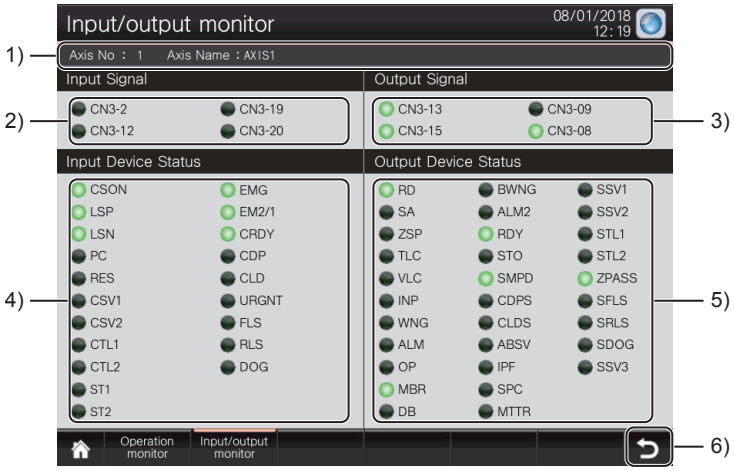


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	Monitor list	Displays the current value of each item.
3)	Scroll	Switches the screen to the [Operation Monitor 1] screen (B-31300).
4)	Back	Returns to the previous screen.

I/O Monitor (B-31400)

The I/O signal and I/O device status of the servo amplifier are displayed in real-time.

Display contents

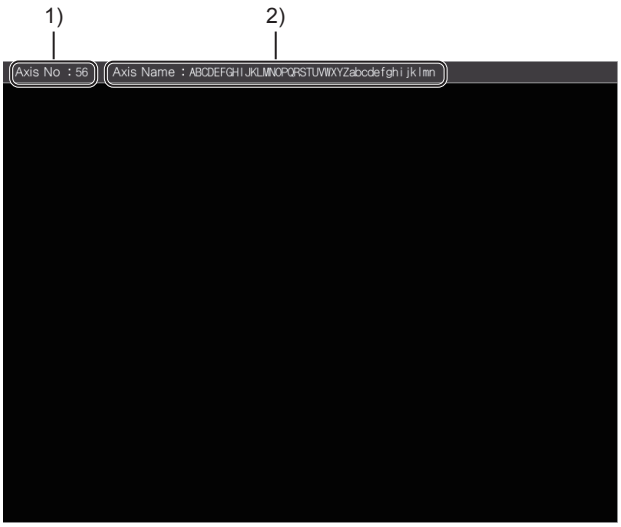


No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. At startup of the GOT, a valid axis with the lowest number is monitored. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	[Input Signal]	Displays the status of the input signal. Turns on the lamp when the signal is in the input state.
3)	[Output Signal]	Displays the status of the output signal. Turns on the lamp when the signal is in the output state.
4)	[Input Device Status]	Displays the status of the input device. Turns on the lamp when the signal is in the input state.
5)	[Output Device Status]	Displays the status of the output device. Turns on the lamp when the signal is in the output state.
6)	Back	Returns to the previous screen.

Axis No./Axis Name (B-32500)

The axis number and axis name currently being monitored are displayed.
The monitoring target axis can be switched in the [Monitoring Target Axis Selection] window (W-32500), which is displayed by touching the screen.
This screen is called by the set overlay screen function and displayed in each base screen.
This screen is not displayed independently.

Display contents



No.	Item	Description
1)	Axis number	Displays the monitoring target axis number. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).
2)	Axis name	Displays the monitoring target axis name. Touch this item to display the [Monitoring Target Axis Selection] window (W-32500).

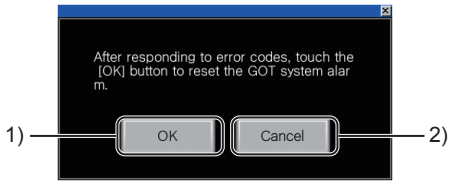
2.4 Window Screen Details

The following shows the details of the window screen.

GOT System Alarm Reset (W-30000)

This screen is for resetting the GOT system alarm.
Touch the system alarm of the GOT displayed in the alarm popup to display this window.

Display contents

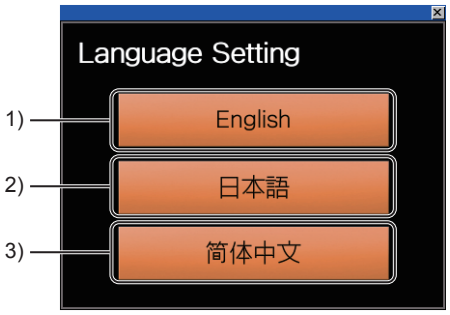


No.	Item	Description
1)	[OK]	Resets the system alarm and closes the window screen one second later.
2)	[Cancel]	Closes the window screen.

Language Settings (W-30001)

This screen is for switching the language displayed in the GOT.
This window is displayed by touching the language setting switch in the header.

Display contents



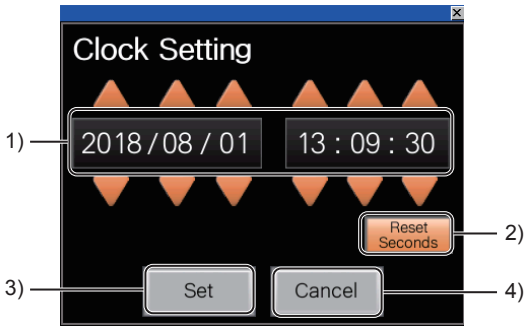
No.	Item	Description
1)	[English]	Switches the display language and system language to English and closes the window screen.
2)	[日本語]	Switches the display language and system language to Japanese and closes the window screen.
3)	[简体中文]	Switches the display language and system language to Chinese and closes the window screen.

Clock Settings (W-30002)

This screen is for changing the clock data of the GOT.

This window is displayed by touching the date and time display switch in the header.

Display contents



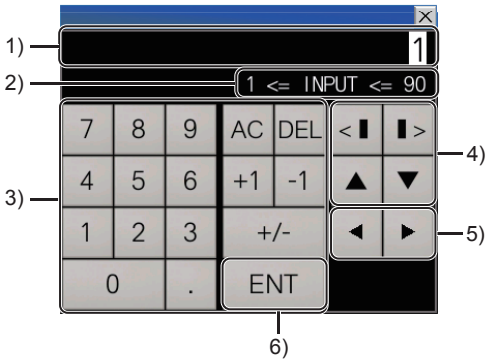
No.	Item	Description
1)	[Clock Setting]	Sets the date to be changed.
2)	[Reset]	Sets the second of the date to be changed to 0.
3)	[Set]	Reflects the set date to the clock data of the GOT and closes the window screen one second later.
4)	[Cancel]	Closes the window screen without changing the clock data.

Key Window (Dec) (W-30010)

This key window is for numerical input of decimal numbers.

Display this window to input decimal numbers by numerical input.

Display contents



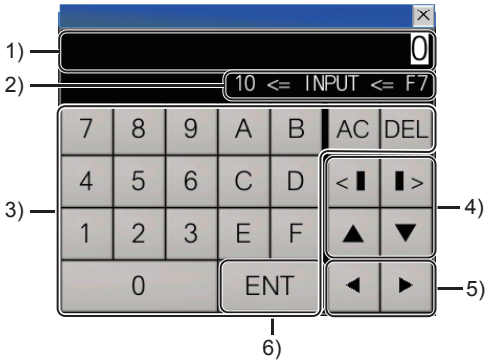
No.	Item	Description
1)	Input value display	Displays the value being input.
2)	Input range display	Displays the range of numbers that can be input. The following shows the meaning of displayed symbols. • [INPUT]: Value to be input • [<]: The left side value is smaller than the right side value. • [<=]: The left side value is equal to or smaller than the right side value. • [==]: The left side value is equal to the right side value. • [!=]: The left side value differs from the right side value.
3)	Key	[0] to [9]: Inputs a numerical value. [.]: Inputs a decimal point. [AC]: Deletes the input value. [DEL]: Deletes the least significant digit in the numerical value. [+1]: Adds 1 to the numerical value in the input value display. [-1]: Subtracts 1 from the numerical value in the input value display. [+/-]: Switches the input value between + and -.
4)	Cursor keys (screen)	Moves the input cursor in the screen.
5)	Cursor keys (object)	Moves the cursor in the currently input object.
6)	[ENT]	Writes the input value to the device.

Key Window (HEX) (W-30011)

This key window is for numerical input of hexadecimal numbers.

Display this window to input hexadecimal numbers by numerical input.

Display contents



No.	Item	Description
1)	Input value display	Displays the value being input.
2)	Input range display	Displays the range of numbers that can be input. The following shows the meaning of displayed symbols. • [INPUT]: Value to be input • [<]: The left side value is smaller than the right side value. • [<=]: The left side value is equal to or smaller than the right side value. • [==]: The left side value is equal to the right side value. • [!=]: The left side value differs from the right side value.
3)	Key	[0] to [F]: Inputs a numerical value. [AC]: Deletes the input value. [DEL]: Deletes the least significant digit in the numerical value.
4)	Cursor keys (screen)	Moves the input cursor in the screen.
5)	Cursor keys (object)	Moves the cursor in the currently input object.
6)	[ENT]	Writes the input value to the device.

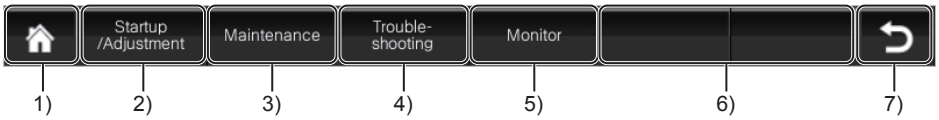
Footer1 (W-30060)

This screen is used as the footer.

This screen is displayed on the base screens related to the menu with the set overlay screen function.

This screen is not displayed independently.

Display contents



No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	[Startup/Adjustment]	Displays the [Startup/Adjustment Menu] screen (B-30061). When the [Startup/Adjustment Menu] screen (B-30061) is displayed, the upper part of the switch is displayed in orange.
3)	[Maintenance]	Displays the [Maintenance Menu] screen (B-30062). When the [Maintenance Menu] screen (B-30062) is displayed, the upper part of the switch is displayed in orange.
4)	[Troubleshooting]	Displays the [Troubleshooting Menu] screen (B-30063). When the [Troubleshooting Menu] screen (B-30063) is displayed, the upper part of the switch is displayed in orange.
5)	[Monitor]	Displays the [Monitor Menu] screen (B-30064). When the [Monitor Menu] screen (B-30064) is displayed, the upper part of the switch is displayed in orange.
6)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
7)	Back	Switches to the previous screen.

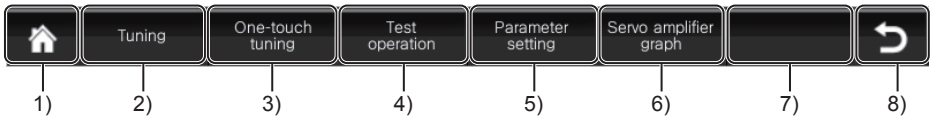
Footer2 (W-30061)

This screen is used as the footer.

This screen is displayed on the base screens related to the startup and adjustment with the set overlay screen function.

This screen is not displayed independently.

Display contents



No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	[Tuning]	Displays the [Tuning] screen (B-30100). When the [Tuning] screen (B-30100), [Machine Resonance Supp. Filter] screen (B-30110), [Other filter] screen (B-30111), or [Vibration Suppression Control] screen (B-30130) is displayed, the upper part of the switch is displayed in orange.
3)	[One-touch tuning]	Displays the [One-touch Tuning] screen (B-30200). When the [One-touch Tuning] screen (B-30200) is displayed, the upper part of the switch is displayed in orange.
4)	[Test operation]	Displays the [Test Operation Menu] screen (B-30300). When the [Test Operation Menu] screen (B-30300) is displayed, the upper part of the switch is displayed in orange.
5)	[Parameter setting]	Displays the [Parameter Setting Menu] screen (B-30400). When the [Parameter Setting Menu] screen (B-30400) is displayed, the upper part of the switch is displayed in orange.
6)	[Servo amplifier graph]	Displays the [Servo amplifier graph] screen (extended function).
7)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
8)	Back	Switches to the previous screen.

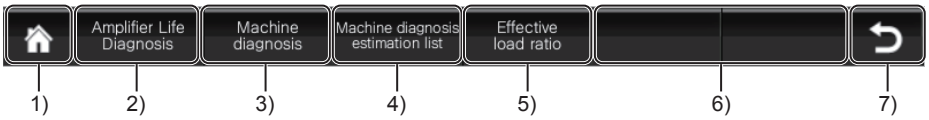
Footer3 (W-30062)

This screen is used as the footer.

This screen is displayed on the base screens related to the maintenance with the set overlay screen function.

This screen is not displayed independently.

Display contents



No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	[Amplifier life diagnosis]	Displays the [Amplifier Life Diagnosis] screen (B-30500). When the [Amplifier Life Diagnosis] screen (B-30500) is displayed, the upper part of the switch is displayed in orange.
3)	[Machine diagnosis]	Displays the [Machine Diagnosis] screen (B-30600). When the [Machine Diagnosis] screen (B-30600) is displayed, the upper part of the switch is displayed in orange.
4)	[Machine diagnosis: estimation list]	Displays the [Machine Diag .Estimation (Fric)] screen (B-30700). When the [Machine Diag .Estimation (Fric)] screen (B-30700) or [Machine Diag. Estimation (Vib)] (B-30710) screen is displayed, the upper part of the switch is displayed in orange.
5)	[Effective load ratio]	Displays the [Effective Load Ratio] screen (B-30900). When the [Effective Load Ratio] screen (B-30900) is displayed, the upper part of the switch is displayed in orange.
6)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
7)	Back	Switches to the previous screen.

Footer4 (W-30063)

This screen is used as the footer.

This screen is displayed on the base screens related to the troubleshooting with the set overlay screen function.

This screen is not displayed independently.

Display contents

No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	[Alarm display]	Displays the [Alarm Display] screen (B-31000). When the [Alarm Display] screen (B-31000) is displayed, the upper part of the switch is displayed in orange.
3)	[Alarm history]	Displays the [Alarm History] screen (B-31100). When the [Alarm History] screen (B-31100) is displayed, the upper part of the switch is displayed in orange.
4)	[Drive recorder]	Displays the [Drive Recorder] screen (extension function).
5)	[Manual display]	Displays the [Manual Display] screen (B-31200). When the [Manual Display] screen (B-31200) is displayed, the upper part of the switch is displayed in orange. Displays the page number of the document for the selected alarm or alarm occurring in the [Alarm Display] screen (B-31000) or [Alarm History] screen (B-31100).
6)	[System launcher]	Displays the [System Launcher] screen (extended function).
7)	Empty switch	The go to screen switches that are not used. Use this switch to set the destination screen.
8)	Back	Switches to the previous screen.

Footer5 (W-30064)

This screen is used as the footer.

This screen is displayed on the base screens related to the monitor with the set overlay screen function.

This screen is not displayed independently.

Display contents

No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	[Operation monitor]	Displays the [Operation Monitor 1] screen (B-31300). When the [Operation Monitor 1] screen (B-31300) or [Operation Monitor 2] screen (B-31301) is displayed, the upper part of the switch is displayed in orange.
3)	[Input/output monitor]	Displays the [I/O Monitor] screen (B-31400). When the [I/O Monitor] screen (B-31400) is displayed, the upper part of the switch is displayed in orange.
4)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
5)	Back	Switches to the previous screen.

Footer6 (W-30065)

This screen is used as the footer.

This screen is displayed on the base screens related to the test operation with the set overlay screen function.

This screen is not displayed independently.

Display contents

No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	[JOG operation]	Displays the [JOG Operation] screen (B-30310). When the [JOG Operation] screen (B-30310) is displayed, the upper part of the switch is displayed in orange.
3)	[Positioning operation]	Displays the [Positioning Operation] screen (B-30320). When the [Positioning Operation] screen (B-30320) is displayed, the upper part of the switch is displayed in orange.
4)	[Output signal forced output]	Displays the [Output Signal(DO) Forced Output] screen (B-30330). When the [Output Signal(DO) Forced Output] screen (B-30330) is displayed, the upper part of the switch is displayed in orange.
5)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
6)	Back	Switches to the previous screen.

Additional information

- When [Start JOG operation] in the [JOG Operation] screen (B-30310) is selected, the GOT becomes the test mode of the JOG operation mode, and the Go To Screen switches do not operate.
- When [Start positioning operation] in the [Positioning Operation] screen (B-30320) is selected, the GOT becomes the test mode of the positioning operation mode, and the Go To Screen switches do not operate.
- When [Start output signal (DO) forced output] in the [Output Signal(DO) Forced Output] screen (B-30330) is selected, the GOT becomes the test mode of the output signal (DO) forced output mode, and the Go To Screen switches do not operate.

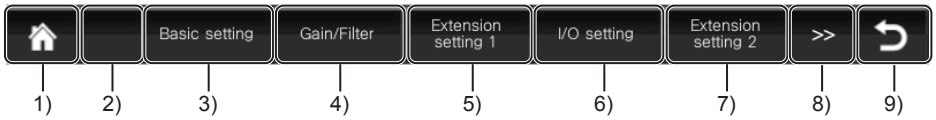
Footer7 (W-30066)

This screen is used as the footer.

This screen is displayed on the base screens related to the parameter setting with the superimpose window.

This screen is not displayed independently.

Display contents



No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	Empty switch	The go to screen switches that are not used. Use this switch to set the destination screen.
3)	[Basic setting]	Displays the [Basic Settings Parameters1] screen (B-30410). When the [Basic Settings Parameters1] screen (B-30410) or [Basic Settings Parameters2] screen (B-30411) is displayed, the upper part of the switch is displayed in orange.
4)	[Gain/Filter]	Displays the [Gain/Filter Parameters1] screen (B-30420). When the [Gain/Filter Parameters1] screen (B-30420), [Gain/Filter Parameters2] screen (B-30421), or [Gain/Filter Parameters3] screen (B-30422) is displayed, the upper part of the switch is displayed in orange.
5)	[Extension setting 1]	Displays the [Ext.Settings1 Parameters1] screen (B-30430). When the [Ext.Settings1 Parameters1] screen (B-30430) or [Ext.Settings1 Parameters2] screen (B-30431) is displayed, the upper part of the switch is displayed in orange.
6)	[I/O setting]	Displays the [I/O Settings Parameters] screen (B-30440). When the [I/O Settings Parameters] screen (B-30440) is displayed, the upper part of the switch is displayed in orange.
7)	[Extension setting 2]	Displays the [Ext.Settings2 Parameters1] screen (B-30450). When the [Ext.Settings2 Parameters1] screen (B-30450) or [Ext.Settings2 Parameters2] screen (B-30451) is displayed, the upper part of the switch is displayed in orange.
8)	Screen switching	Switches the footer display of the calling screen to the [Footer8] window (W-30067).
9)	Back	Switches to the previous screen.

Footer8 (W-30067)

This screen is used as the footer.

This screen is displayed on the base screens related to the parameter setting with the superimpose window.

This screen is not displayed independently.

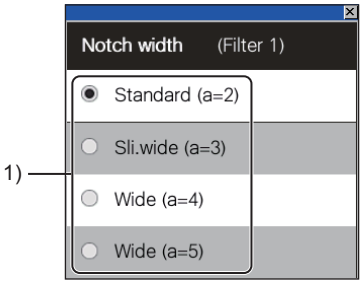
Display contents

No.	Item	Description
1)	Menu	Displays the [Menu] screen (B-30000).
2)	Screen switching	Switches the footer display of the calling screen to the [Footer7] window (W-30066).
3)	[Extension setting 3]	Displays the [Ext.Settings3 Parameters] screen (B-30460). When the [Ext.Settings3 Parameters] (B-30460) is displayed, the upper part of the switch is displayed in orange.
4)	[Linear servo/DD motor]	Displays the [Linear/DD Motor Parameters] screen (B-30470). When the [Linear/DD Motor Parameters] screen (B-30470) is displayed, the upper part of the switch is displayed in orange.
5)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.
6)	Back	Switches to the previous screen.

Resonance.Supp.Fltr1 Notch Width (W-30110)

This window is for setting the shape of the machine resonance suppression filter 1 (notch width) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

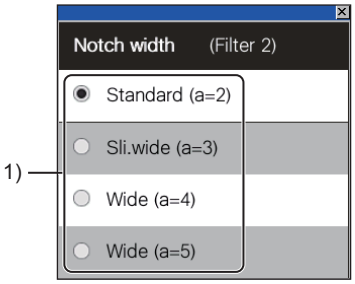


No.	Item	Description
1)	[Notch width (Filter 1)]	Selects and sets the notch width. The setting currently selected is displayed in a radio button. This window closes when the notch width is set.

Resonance.Supp.Fltr2 Notch Width (W-30111)

This window is for setting the shape of the machine resonance suppression filter 2 (notch width) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

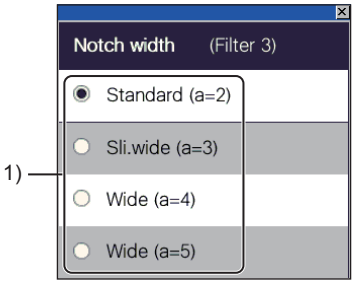


No.	Item	Description
1)	[Notch width (Filter 2)]	Selects and sets the notch width. The setting currently selected is displayed in a radio button. This window closes when the notch width is set.

Resonance.Supp.Fltr3 Notch Width (W-30112)

This window is for setting the shape of the machine resonance suppression filter 3 (notch width) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

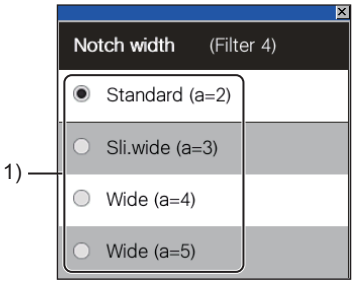


No.	Item	Description
1)	[Notch width (Filter 3)]	Selects and sets the notch width. The setting currently selected is displayed in a radio button. This window closes when the notch width is set.

Resonance.Supp.Fltr4 Notch Width (W-30113)

This window is for setting the shape of the machine resonance suppression filter 4 (notch width) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

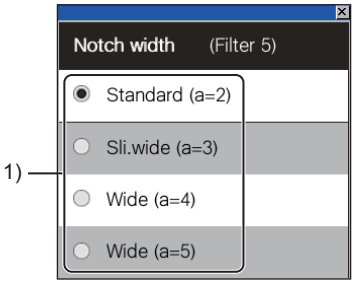


No.	Item	Description
1)	[Notch width (Filter 4)]	Selects and sets the notch width. The setting currently selected is displayed in a radio button. This window closes when the notch width is set.

Resonance.Supp.Fltr5 Notch Width (W-30114)

This window is for setting the shape of the machine resonance suppression filter 5 (notch width) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

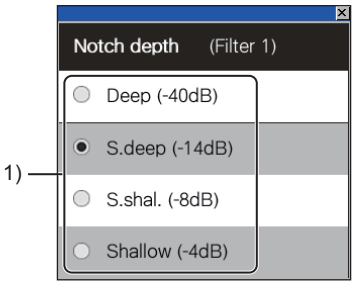


No.	Item	Description
1)	[Notch width (Filter 5)]	Selects and sets the notch width. The setting currently selected is displayed in a radio button. This window closes when the notch width is set.

Resonance.Supp.Fltr1 Notch Depth (W-30115)

This window is for setting the shape of the machine resonance suppression filter 1 (notch depth) of the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

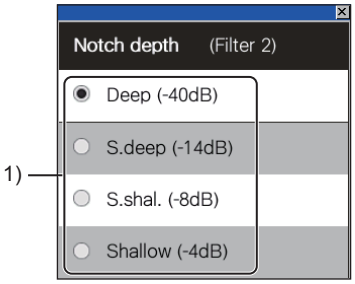


No.	Item	Description
1)	[Notch depth (Filter 1)]	Selects and sets the notch depth. The setting currently selected is displayed in a radio button. This window closes when the notch depth is set.

Resonance.Supp.Fltr2 Notch Depth (W-30116)

This window is for setting the shape of the machine resonance suppression filter 2 (notch depth) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

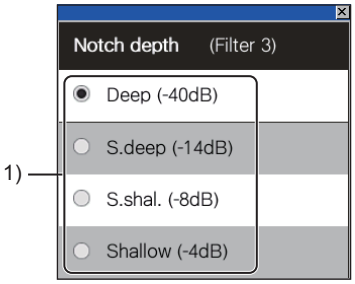


No.	Item	Description
1)	[Notch depth (Filter 2)]	Selects and sets the notch depth. The setting currently selected is displayed in a radio button. This window closes when the notch depth is set.

Resonance.Supp.Fltr3 Notch Depth (W-30117)

This window is for setting the shape of the machine resonance suppression filter 3 (notch depth) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

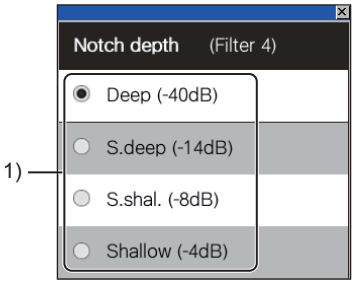


No.	Item	Description
1)	[Notch depth (Filter 3)]	Selects and sets the notch depth. The setting currently selected is displayed in a radio button. This window closes when the notch depth is set.

Resonance.Supp.Fltr4 Notch Depth (W-30118)

This window is for setting the shape of the machine resonance suppression filter 4 (notch depth) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

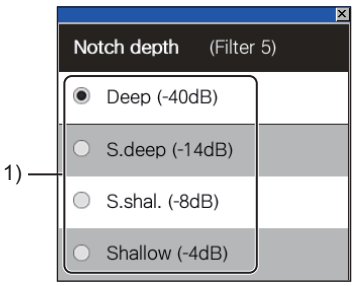


No.	Item	Description
1)	[Notch depth (Filter 4)]	Selects and sets the notch depth. The setting currently selected is displayed in a radio button. This window closes when the notch depth is set.

Resonance.Supp.Fltr5 Notch Depth (W-30119)

This window is for setting the shape of the machine resonance suppression filter 5 (notch depth) in the [Machine Resonance Supp. Filter] screen (B-30110).

Display contents

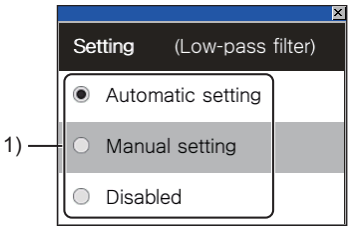


No.	Item	Description
1)	[Notch depth (Filter 5)]	Selects and sets the notch depth. The setting currently selected is displayed in a radio button. This window closes when the notch depth is set.

Low-pass Filter Settings (W-30120)

This window is for changing the low-pass filter in the [Other filter] screen (B-30111).

Display contents

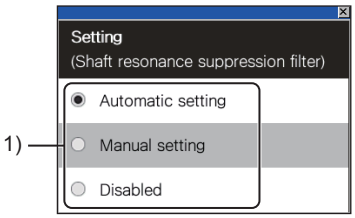


No.	Item	Description
1)	[Setting (Low-pass filter)]	Selects and sets the low-pass filter. The setting currently selected is displayed in a radio button. This window closes when the low-pass filter is set.

Shaft Res.Supp.Filter Settings (W-30121)

This window is for changing the shaft resonance suppression filter settings in the [Other filter] screen (B-30111).

Display contents

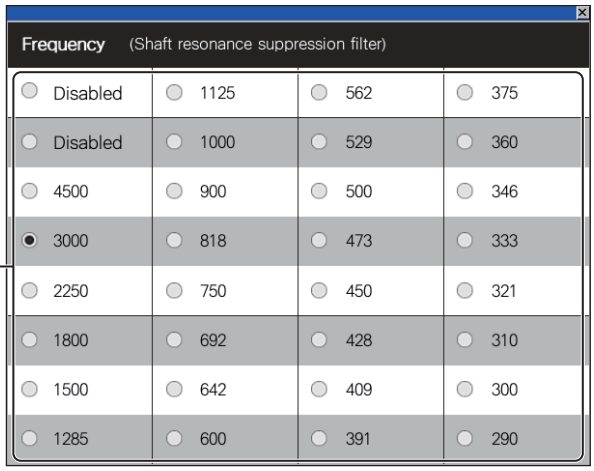


No.	Item	Description
1)	[Setting (Shaft resonance suppression filter)]	Selects and sets the shaft resonance suppression filter settings. The setting currently selected is displayed in a radio button. This window closes when the shaft resonance suppression filter is set.

Shaft Res.Supp.Filter Frequency (W-30122)

This window is for setting the frequency of the shaft resonance suppression filter in the [Other filter] screen (B-30111).

Display contents

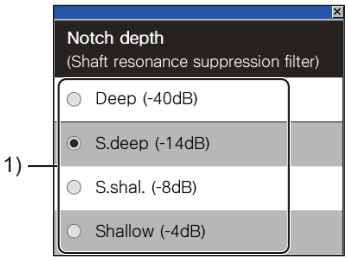


No.	Item	Description
1)	[Frequency (Shaft resonance suppression filter)]	Selects and sets the frequency of the shaft resonance suppression filter. The setting currently selected is displayed in a radio button. This window closes when the shaft resonance suppression filter frequency is set.

Shaft Res.Supp.Filter Notch Depth (W-30123)

This window is for setting the notch depth of the shaft resonance suppression filter in the [Other filter] screen (B-30111).

Display contents

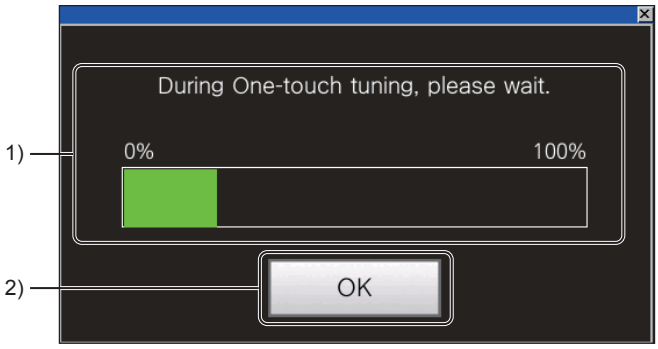


No.	Item	Description
1)	[Notch depth (Shaft resonance suppression filter)]	Selects and sets the notch depth of the shaft resonance suppression filter. The setting currently selected is displayed in a radio button. This window closes when the notch depth of the shaft resonance suppression filter is set.

One-touch Tuning Progress (W-30200)

Touch the [Start] switch in the [One-touch Tuning] screen (B-30200) to display this window.

Display contents

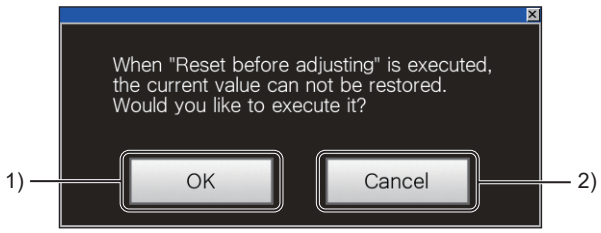


No.	Item	Description
1)	One-touch Tuning Progress	Displays the status of the one-touch tuning by a progress bar.
2)	[OK]	Closes the window screen.

Setting Change Confirmation (W-30201)

When the [Reset before adjusting] switch or [Reset to the initial value] switch on the [One-touch Tuning] screen (B-30200) is touched, a message for confirming the setting change appears.

Display contents



No.	Item	Description
1)	[OK]	Executes the operation in the displayed message.
2)	[Cancel]	Closes the window screen.

Test Operation Status 1 (W-30300)

This window displays the monitor data of the servo amplifier as the display items of the [JOG Operation] screen (B-30310).

Display contents

Cumulative feedback pulses		0	pulse
Servo motor speed		0	r/min
Droop pulses		0	pulse
Cumulative command pulses		0	pulse
Command pulse frequency		0	kpulse/s
Regenerative load ratio		0	%
Effective load ratio		0	%
Peak load ratio		0	%
Instantaneous torque		0	%
Within one-revolution position		0	pulse
ABS Counter		0	rev
Load inertia moment ratio		0.00	times

1)

No.	Item	Description
1)	Current	Displays the current value of each item.

Test Operation Status 2 (W-30301)

This window displays the monitor data of the servo amplifier as the display items of the [JOG Operation] screen (B-30310).

Display contents

Bus voltage		0	V
Load side encoder cumulative F/B pulses		0	pulse
Load side encoder information 1		0	pulse
Load side encoder information 2		0	rev
Servo motor thermistor temperature		0	℃
Internal temperature of eaencoder		0	℃
Settling time		0	ms
Oscillation detection frequency		0	Hz
Number of tough drive operations		0	times
Unit power consumption		0	W
Unit total power consumption		0	Wh

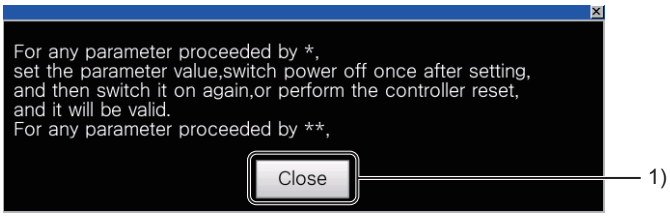
1)

No.	Item	Description
1)	Current	Displays the current value of each item.

Parameter settings help (W-30400)

This window is for displaying the help when setting the parameter of the servo amplifier.

Display contents

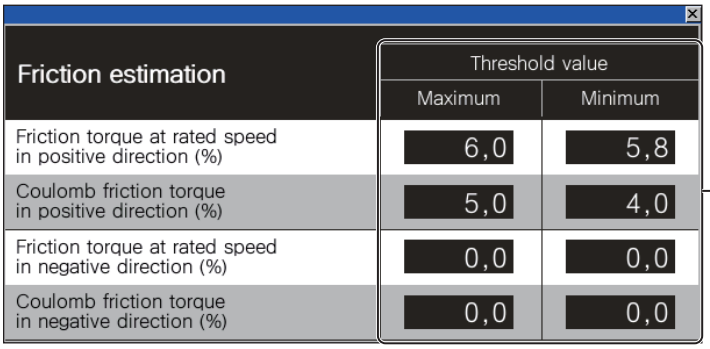


No.	Item	Description
1)	[Close]	Closes the window screen.

Machine Diag. Threshold Setting (W-30600)

This window is for setting the threshold value for the friction estimation in the [Machine Diagnosis] screen (B-30600).
This window is displayed when the [Machine Diagnosis] screen (B-30600) is displayed for the first time, or when the [Set threshold] switch is touched.

Display contents



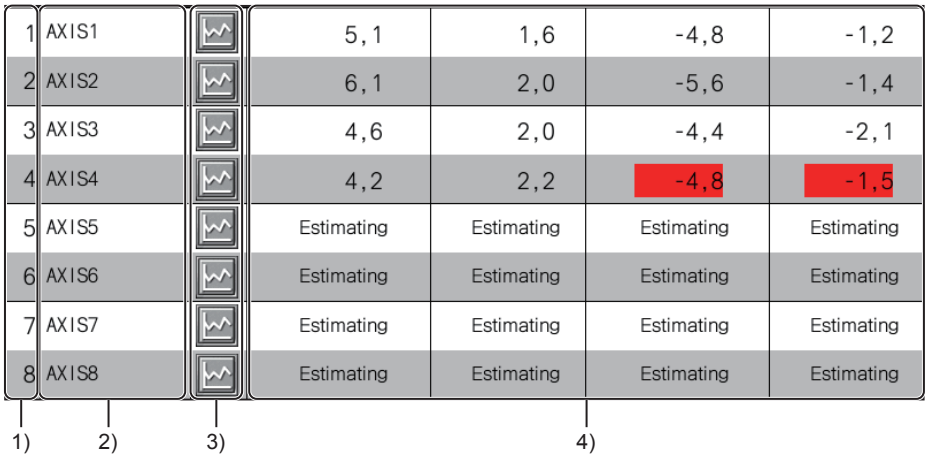
No.	Item	Description
1)	[Set threshold]	Displays and sets the maximum threshold value and minimum threshold value for the estimation of each item. The following shows the setting range for the maximum threshold value and minimum threshold value of each item. • [Friction torque at rated speed in positive direction (%)]: 0 to 3276.7 • [Coulomb friction torque in positive direction (%)]: 0 to 3276.7 • [Friction torque at rated speed in negative direction (%)]: -3276.8 to 0 • [Coulomb friction torque in negative direction (%)]: -3276.8 to 0 The initial values are all 0.

Machine Diag. Friction Est.1 (W-30700)

This window displays the friction information of multiple axes on the [Machine Diag .Estimation (Fric)] screen (B-30700) in a list.

This window is displayed when eight or less axes are valid.

Display contents



No.	Item	Description
1)	Axis number	Displays the axis number.
2)	Axis name	Displays the axis name.
3)	Machine diagnosis graph (friction)	Displays the [Machine Diag. Graph (Friction)] window (W-30704).
4)	Friction estimation	Displays the friction estimation. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.

Additional information

- For the details, refer to the following.

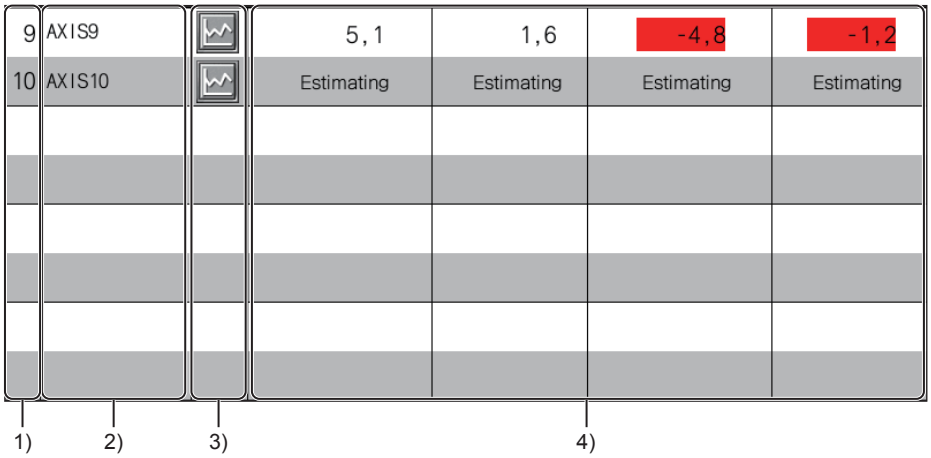
☞ Page 95 Machine Diag .Estimation (Fric) (B-30700)

Machine Diag. Friction Est.2 (W-30701)

This window displays the friction information of multiple axes on the [Machine Diag .Estimation (Fric)] screen (B-30700) in a list.

This window is displayed when nine or more axes are valid.

Display contents



No.	Item	Description
1)	Axis number	Displays the axis number.
2)	Axis name	Displays the axis name.
3)	Machine diagnosis graph (friction)	Displays the [Machine Diag. Graph (Friction)] window (W-30704).
4)	Friction estimation	Displays the friction estimation. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.

Additional information

• When nine or more axes are valid, up to eight axes are displayed in the [Machine Diag. Friction Est.1] window (W-30700). Display axis 9 or later in the [Machine Diag. Friction Est.2] window (W-30701) by switching the screen with the [Switch display axis] switch in the [Machine Diag .Estimation (Fric)] screen (B-30700).

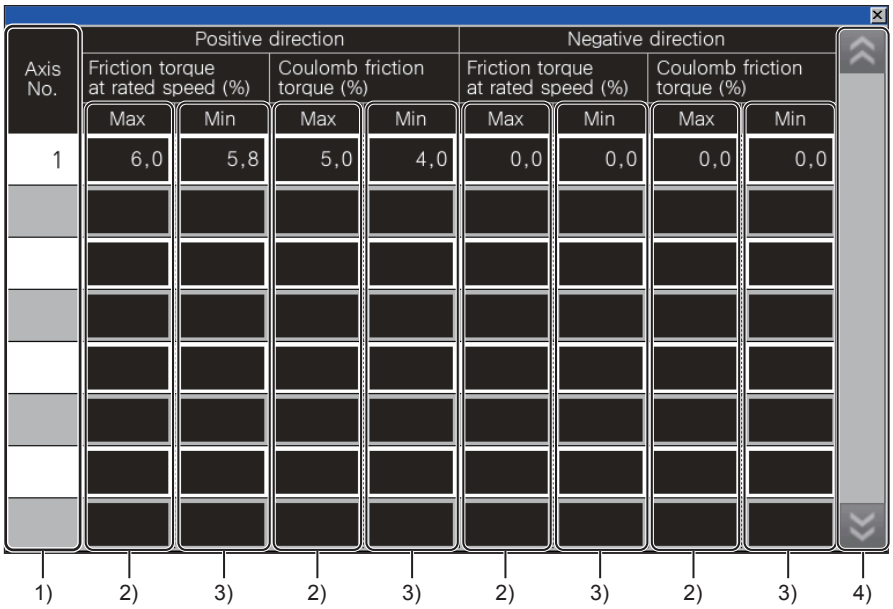
• For the details, refer to the following.

☞ Page 95 Machine Diag .Estimation (Fric) (B-30700)

Machine Diag. Threshold (Fric)1 (W-30702)

This window is for setting the threshold value for the estimation in the [Machine Diag .Estimation (Fric)] screen (B-30700).
This window is displayed when the [Machine Diag .Estimation (Fric)] screen (B-30700) is displayed for the first time, or when the [Set threshold] switch is touched.
This window is displayed when eight or less axes are valid.

Display contents

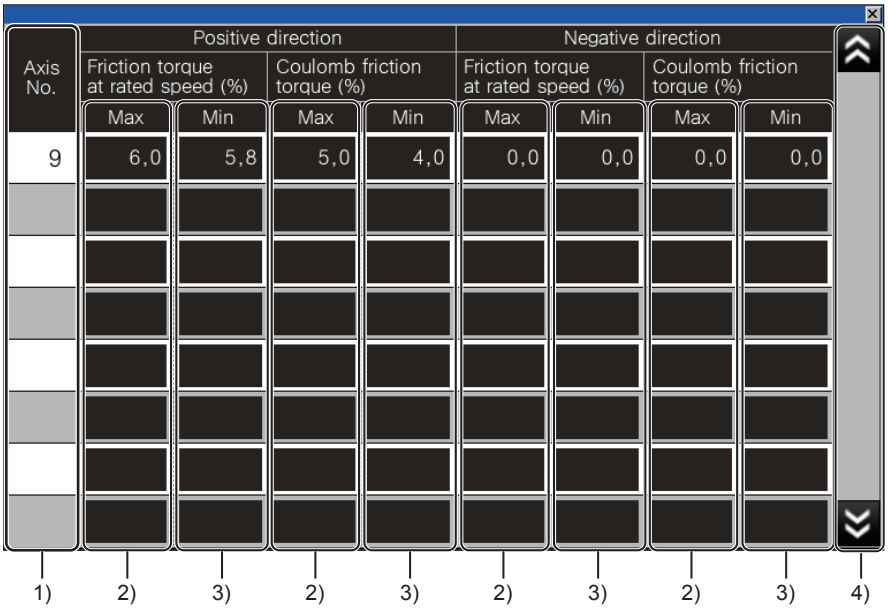


No.	Item	Description
1)	[Axis No.]	Displays the axis number.
2)	Maximum threshold value	Displays and sets the maximum threshold value for the friction estimation. The following shows the setting range for the maximum threshold value of each item. [Positive direction] • [Friction torque at rated speed (%)]: 0 to 3276.7 • [Coulomb friction torque (%)]: 0 to 3276.7 [Negative direction] • [Friction torque at rated speed (%)]: -3276.8 to 0 • [Coulomb friction torque (%)]: -3276.8 to 0 The initial values are all 0.
3)	Minimum threshold value	Displays and sets the minimum threshold value for the friction estimation. The following shows the setting range for the minimum threshold value of each item. [Positive direction] • [Friction torque at rated speed (%)]: 0 to 3276.7 • [Coulomb friction torque (%)]: 0 to 3276.7 [Negative direction] • [Friction torque at rated speed (%)]: -3276.8 to 0 • [Coulomb friction torque (%)]: -3276.8 to 0 The initial values are all 0.
4)	Scroll	Displays the [Machine Diag. Threshold (Fric)2] window (W-30703). This operates when nine or more axes are valid.

Machine Diag. Threshold (Fric)2 (W-30703)

This window is for setting the threshold value for the estimation in the [Machine Diag .Estimation (Fric)] screen (B-30700).
This window is displayed when nine or more axes are valid.

Display contents

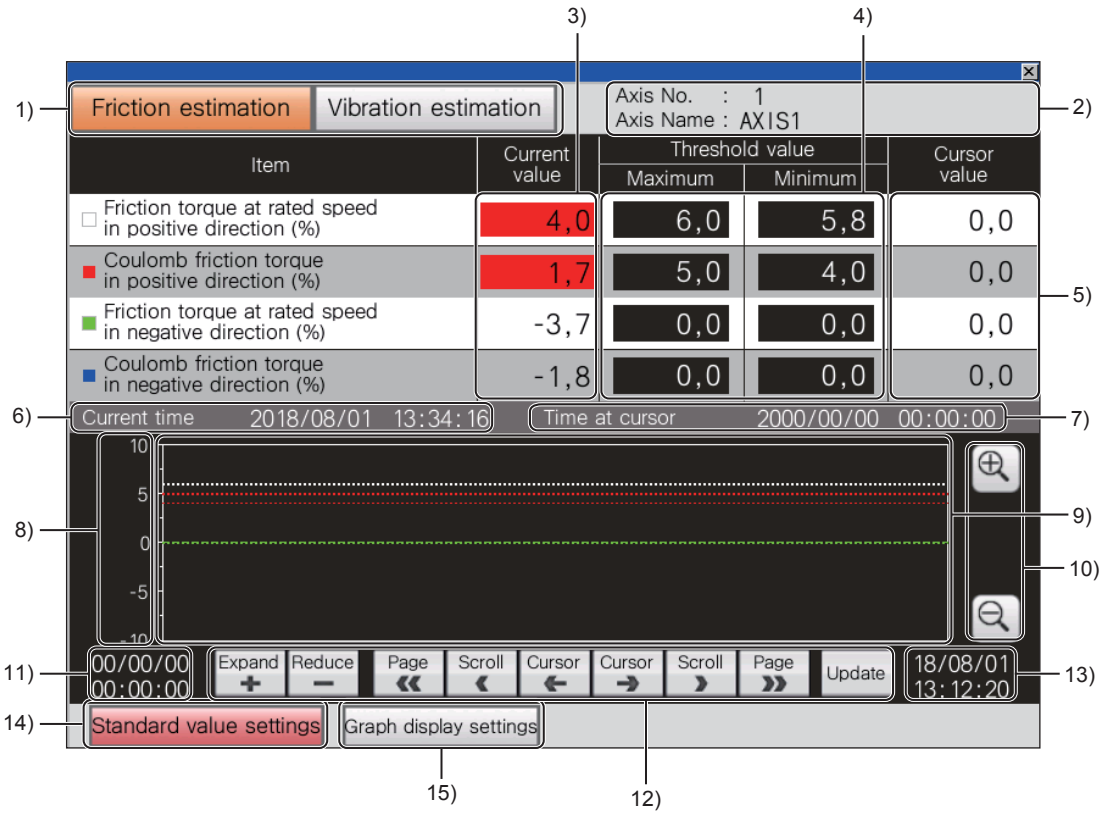


No.	Item	Description
1)	[Axis No.]	Displays the axis number.
2)	Maximum threshold value	Displays and sets the maximum threshold value for the friction estimation. The following shows the setting range for the maximum threshold value of each item. [Positive direction] • [Friction torque at rated speed (%)]: 0 to 3276.7 • [Coulomb friction torque (%)]: 0 to 3276.7 [Negative direction] • [Friction torque at rated speed (%)]: -3276.8 to 0 • [Coulomb friction torque (%)]: -3276.8 to 0 The initial values are all 0.
3)	Minimum threshold value	Displays and sets the minimum threshold value for the friction estimation. The following shows the setting range for the minimum threshold value of each item. [Positive direction] • [Friction torque at rated speed (%)]: 0 to 3276.7 • [Coulomb friction torque (%)]: 0 to 3276.7 [Negative direction] • [Friction torque at rated speed (%)]: -3276.8 to 0 • [Coulomb friction torque (%)]: -3276.8 to 0 The initial values are all 0.
4)	Scroll	Displays the [Machine Diag. Threshold (Fric)1] window (W-30702).

Machine Diag. Graph (Friction) (W-30704)

This window displays the transition, threshold value, and standard value of the friction estimation for each item of the axis selected in the [Machine Diag .Estimation (Fric)] screen (B-30700) in a graph.
This window is displayed when the machine diagnosis graph (friction) switch of the axis to be displayed in a graph is touched in the [Machine Diag .Estimation (Fric)] screen (B-30700).

Display contents



No.	Item	Description
1)	[Friction estimation] [Vibration estimation]	This switch transfers the window to the [Machine Diag. Graph (Friction)] window (W-30704) and [Machine Diag. Graph (Vibration)] window (W-30714). The switch of the displayed screen is displayed in orange.
2)	Axis No., Axis Name	Displays the information of the monitoring target axis. The monitoring target axis cannot be changed.
3)	[Current value]	Displays the friction estimation of each item for the monitoring target axis as the current value. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
4)	[Set threshold]	Displays and sets the maximum threshold value and minimum threshold value for the friction estimation. The following shows the setting range for the maximum threshold value and minimum threshold value of each item. • [Friction torque at rated speed in positive direction (%)]: 0 to 3276.7 • [Coulomb friction torque in positive direction (%)]: 0 to 3276.7 • [Friction torque at rated speed in negative direction (%)]: -3276.8 to 0 • [Coulomb friction torque in negative direction (%)]: -3276.8 to 0 The initial values are all 0.
5)	[Cursor value]	Displays the cursor value of the historical trend graph. Displays 0 when the cursor is hidden.
6)	[Current time]	Displays the current time.
7)	[Time at cursor]	Displays the time at the cursor position.

No.	Item	Description
8)	Display range of the historical trend graph	Displays the display range of the historical trend graph in a scale. The following is the initial display range. When logging is being performed, the maximum and minimum of the scale changes according to the maximum absolute value of the current value when this window is displayed. The variation of the scale is 10 (%). Example) • When the values of four parameters are 4.6(%), 2.0 (%), -4.4 (%), -2.1 (%) Maximum value: 10 (%) Minimum value: -10 (%) • When the values of four parameters are 14.2(%), 6.4 (%), -10.1 (%), -9.0 (%) Maximum value: 20 (%) Minimum value: -20 (%) When logging is stopped, displays -100.0 (%) to 100.0 (%). The maximum display range is -200.0 (%) to 200.0 (%). The minimum display range is -10.0 (%) to 10.0 (%).
9)	Historical trend graph	• Specifications of the historical trend graph Displays the estimation of each item in a historical trend graph, and maximum threshold value, minimum threshold value, and standard value in drawing function of the object script. Displays only the estimation line when the screen is displayed. Displays it only during logging. The graph line of the item that was not estimated is not displayed. Displays 336 points of data (for 2 weeks). Displays the estimation in a solid line, maximum threshold value in a dotted line (2 dot), minimum threshold value in a dotted line (1 dot), and standard value in a broken line. Displays the graph line in white for positive direction friction torque at rated speed, red for positive direction coulomb friction, green for negative direction friction torque at rated speed, and blue for negative direction coulomb friction.
		• Operation of the historical trend graph Touch the graph to display the cursor. While touching the graph, flick right and left to scroll the display contents right and left. Pinch in and out horizontally to reduce and expand the graph by using the time axis as a reference.
10)	Expand/reduce the historical trend graph display range	Expands and reduces the display range of the historical trend graph by 10.0(%).
11)	End position time of historical trend graph	Displays the end position time of the historical trend graph.
12)	Operating the historical trend graph	Operate the historical trend graph. Expand: Expands the time axis of the graph based on the axis of the new data (double). Reduce: Reduces the time axis of the graph based on the axis of new data (half). Page<<: Scrolls the page to the left. Scroll<: Scrolls the graph to the left. Cursor←: Displays the cursor and scrolls it to the old data direction. Cursor→: Displays the cursor and scrolls it to the new data direction. Scroll>: Scrolls the graph to the right. Page>>: Scrolls the page to the right. Update: Deletes the cursor and updates to the latest data.
13)	Beginning position time of historical trend graph	Displays the beginning position time of the historical trend graph.
14)	[Standard value settings]	Displays the [Machine Diag.Standard Val.Set] window (W-30706).
15)	[Graph display settings]	Displays the [Machine Diag.Graph Set (Fric)] window (W-30705).

Additional information

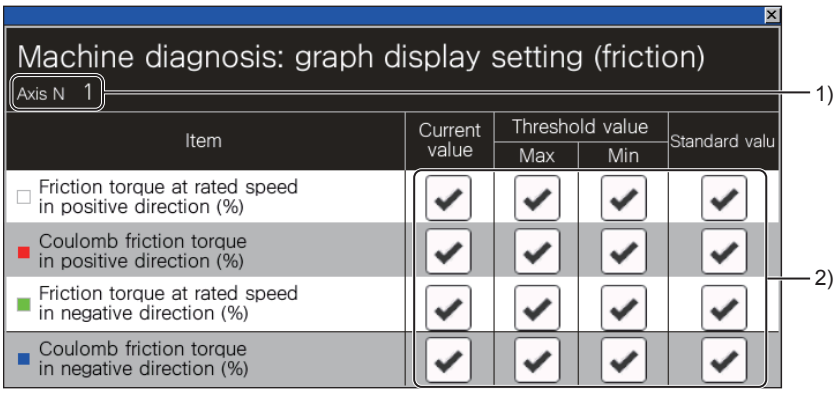
• For the details, refer to the following.

☞ Page 95 Machine Diag .Estimation (Fric) (B-30700)

Machine Diag. Graph Disp (Fric) (W-30705)

This window is for setting the items to be displayed in a graph in the [Machine Diag. Graph (Friction)] window (W-30704).
This window is displayed when the [Graph display settings] switch in the [Machine Diag. Graph (Friction)] window (W-30704) is touched.

Display contents



No.	Item	Description
1)	Axis No.	Displays the axis number of the monitoring target axis. The monitoring target axis cannot be changed.
2)	Display/hide switch	Switches displaying and hiding the graph line of the historical trend graph. • Selected: Display • Cleared: Hide • Black square: Disabled When [Current value] is cleared, [Threshold value] ([Max], [Min]) and [Standard value] is cleared. When [Current value] is selected, [Threshold value] ([Max], [Min]) and [Standard value] can be selected The items for which the estimation is uncompleted or skipped cannot be operated. The items that cannot be operated are disabled (black square).

Additional information

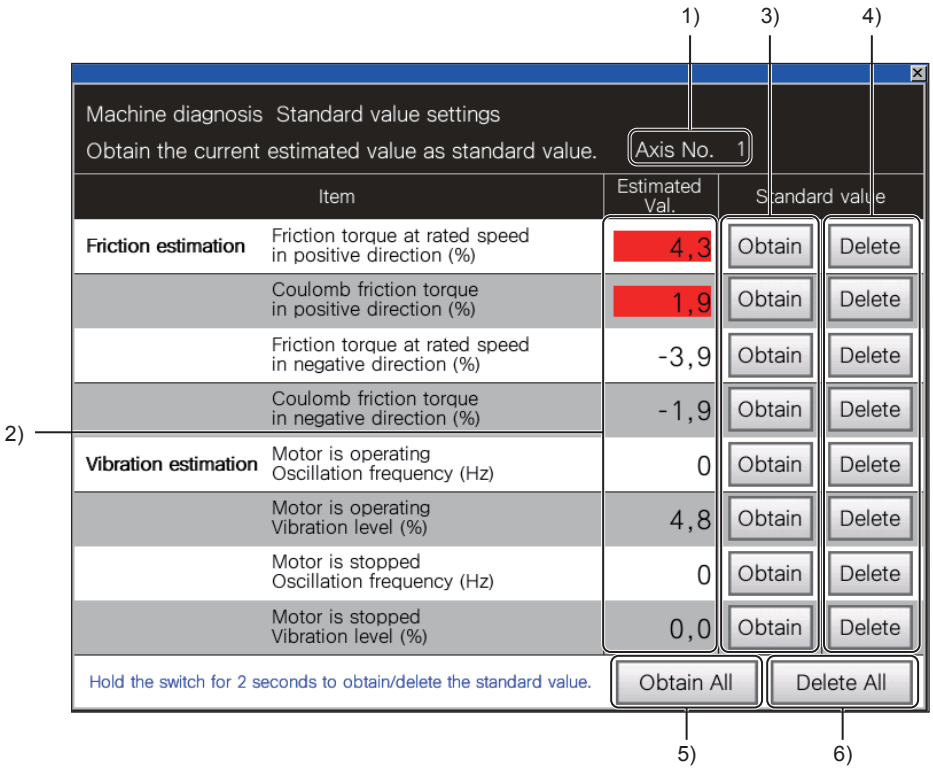
• For the details, refer to the following.

☞ Page 128 Machine Diag. Graph (Friction) (W-30704)

Machine Diag.Standard Val.Set (W-30706)

This window is for acquiring and deleting the standard value displayed in the [Machine Diag. Graph (Friction)] window (W-30704) and [Machine Diag. Graph (Vibration)] window (W-30714).
This window is displayed when the [Machine Diag. Graph (Friction)] window (W-30704) or [Machine Diag. Graph (Vibration)] window (W-30714) is displayed for the first time, or when the [Standard value settings] switch is touched.

Display contents



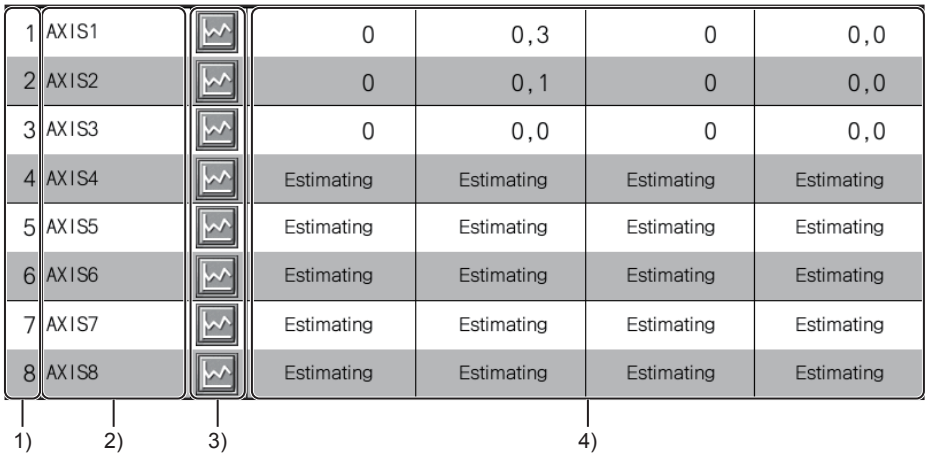
No.	Item	Description
1)	Axis No.	Displays the axis number of the monitoring target axis. The monitoring target axis cannot be changed.
2)	[Estimated Val.]	Displays the estimated value. Displays the background in red when each estimation of friction exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
3)	[Obtain]	Obtains the standard value of each item by being touched for two seconds.
4)	[Delete]	Deletes the standard value of each item by being touched for two seconds.
5)	[Obtain All]	Obtains the standard value of all items in a batch by touching this item for two seconds.
6)	[Delete All]	Deletes the standard value of each item in a batch by touching this item for two seconds.

Machine Diag. Vibration Est.1 (W-30710)

This window displays the vibration information of multiple axes on the [Machine Diag. Estimation (Vib)] screen (B-30710) in a list.

This window is displayed when eight or less axes are valid.

Display contents



No.	Item	Description
1)	Axis number	Displays the axis number.
2)	Axis name	Displays the axis name.
3)	Machine diagnosis graph (vibration)	Displays the [Machine Diag. Graph (Vibration)] window (W-30714) of the selected axis.
4)	Vibration estimation	Displays the vibration estimation. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.

Additional information

- For the details, refer to the following.

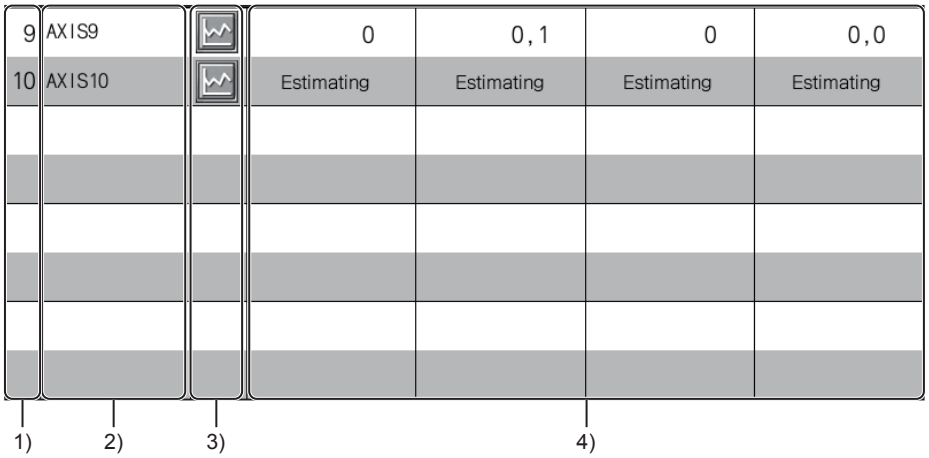
☞ Page 96 Machine Diag. Estimation (Vib) (B-30710)

Machine Diag. Vibration Est.2 (W-30711)

This window displays the vibration information of multiple axes on the [Machine Diag. Estimation (Vib)] screen (B-30710) in a list.

This window is displayed when nine or more axes are valid.

Display contents



No.	Item	Description
1)	Axis number	Displays the axis number.
2)	Axis name	Displays the axis name.
3)	Machine diagnosis graph (vibration)	Displays the [Machine Diag. Graph (Vibration)] window (W-30714) of the selected axis.
4)	Vibration estimation	Displays the vibration estimation. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.

Additional information

• When nine or more axes are valid, up to eight axes are displayed in the [Machine Diag. Vibration Est.1] window (W-30710). Display axis 9 or later in the [Machine Diag. Vibration Est.2] window (W-30711) by switching the screen with the [Switch display axis] switch in the [Machine Diag .Estimation (Vib)] screen (B-30710).

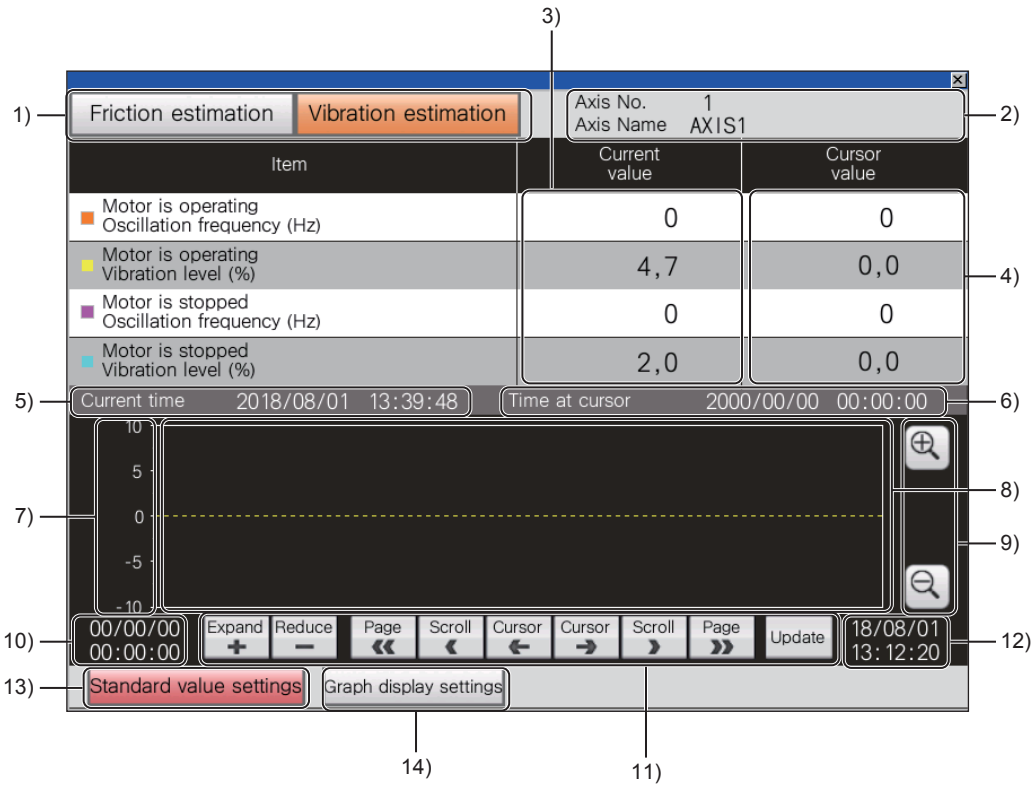
• For the details, refer to the following.

☞ Page 96 Machine Diag. Estimation (Vib) (B-30710)

Machine Diag. Graph (Vibration) (W-30714)

This window displays the transition and standard value of the vibration estimation for each item of the axis selected in the [Machine Diag .Estimation (Vib)] screen (B-30710).
This window is displayed when the machine diagnosis graph (vibration) switch of the axis to be displayed in a graph is touched in the [Machine Diag .Estimation (Vib)] screen (B-30710).

Display contents



No.	Item	Description
1)	[Friction estimation] [Vibration estimation]	This switch transfers the window to the [Machine Diag. Graph (Friction)] window (W-30704) and [Machine Diag. Graph (Vibration)] window (W-30714). The switch of the displayed screen is displayed in orange.
2)	Axis No., Axis Name	Displays the information of the monitoring target axis. The monitoring target axis cannot be changed.
3)	[Current value]	Displays the vibration estimation. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
4)	[Cursor value]	Displays the cursor value of the historical trend graph. Displays 0 when the cursor is hidden.
5)	[Current time]	Displays the current time.
6)	[Time at cursor]	Displays the time at the cursor position.
7)	Display range of historical trend graph	Displays the display range of the historical trend graph in scale. The following is the initial display range. When logging is being performed, the maximum and minimum of the scale changes according to the maximum absolute value of the current value when this window is displayed. The variation of the scale is 10 regardless of the unit (%, Hz). Example) • When the value of four parameters are 4.6, 2.0, -4.4, -2.1 Maximum value: 10 Minimum value: -10 • When the value of four parameters are 14.2, 6.4, -10.1, -9.0 Maximum value: 20 Minimum value: -20 When logging is stopped, displays -100.0 to 100.0. The maximum display range is -200.0 to 200.0. The minimum display range is -10.0 to 10.0.

No.	Item	Description
8)	Historical trend graph	• Specifications of the historical trend graph Displays the estimation and standard value of each item in the historical trend graph. Displays it only during logging. The graph line of the item that was not estimated is not displayed. Displays 336 points of data (for 2 weeks). Displays the estimation in a solid line and standard value in a broken line. Displays "Motor is operating Oscillation frequency" in orange, "Motor is operating Vibration level" in yellow, "Motor is stopped Oscillation frequency" in purple, and "Motor is stopped Vibration level" in light blue.
		• Operation of the historical trend graph Touch the graph to display the cursor. While touching the graph, flick right and left to scroll the display contents right and left. Pinch in and out horizontally to reduce and expand the graph by using the time axis as a reference.
9)	Expand/reduce the historical trend graph display range	Expands and reduces the display range of the historical trend graph by 10.0 (% or Hz).
10)	End position time of historical trend graph	Displays the end position time of the historical trend graph.
11)	Operating the historical trend graph	Operate the historical trend graph. Expand: Expands the time axis of the graph based on the axis of the new data (double). Reduce: Reduces the time axis of the graph based on the axis of new data (half). Page<<: Scrolls the page to the left. Scroll<: Scrolls the graph to the left. Cursor←: Displays the cursor and scrolls it to the old data direction. Cursor→: Displays the cursor and scrolls it to the new data direction. Scroll>: Scrolls the graph to the right. Page>>: Scrolls the page to the right. Update: Deletes the cursor and updates to the latest data.
12)	Beginning position time of historical trend graph	Displays the beginning position time of the historical trend graph.
13)	[Standard value settings]	Displays the [Machine Diag.Standard Val.Set] window (W-30706).
14)	[Graph display settings]	Displays the [Machine Diag.Graph Setting (Vib)] window (W-30715).

Additional information

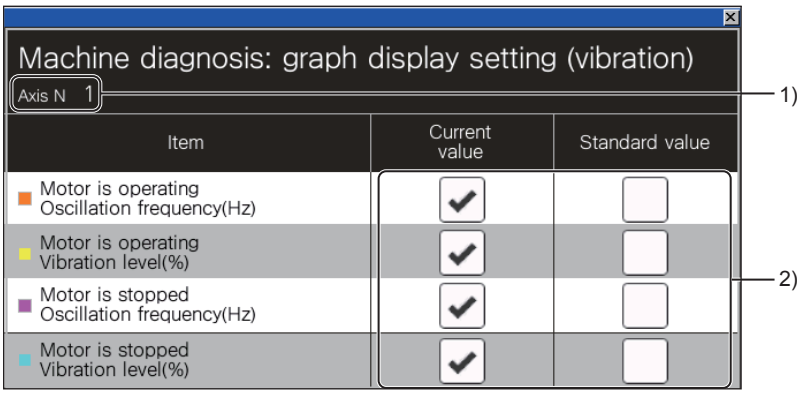
• For the details, refer to the following.

☞ Page 96 Machine Diag. Estimation (Vib) (B-30710)

Machine Diag. Graph Disp (Vib) (W-30715)

This window is for setting the items to be displayed in a graph in the [Machine Diag. Graph (Vibration)] window (W-30714). This window is displayed when the [Graph display settings] switch in the [Machine Diag. Graph (Vibration)] window (W-30714) is touched.

Display contents



No.	Item	Description
1)	Axis No.	Displays the axis number of the monitoring target axis. The monitoring target axis cannot be changed.
2)	Display/hide switch	Switches displaying and hiding the graph line of the historical trend graph. • Selected: Display • Cleared: Hide • Black square: Disabled When [Current value] is cleared, [Standard value] is cleared. When [Current value] is selected, [Standard value] can be selected. The items for which the estimation is uncompleted or skipped cannot be operated. The items that cannot be operated are disabled (black square).

Additional information

• For the details, refer to the following.

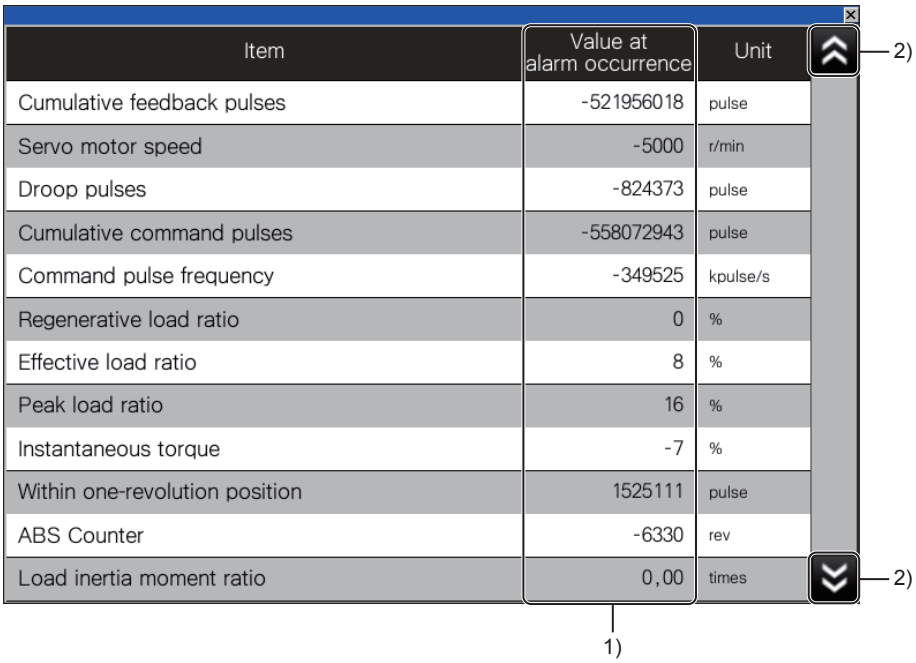
☞ Page 134 Machine Diag. Graph (Vibration) (W-30714)

Status at Alarm Occurrence 1 (W-30900)

This window displays the servo amplifier monitor data at the occurrence of [Current alarm] displayed in the [Alarm Display] screen (B-31000).

This window is displayed when the [Status display at Alarm occurrence] switch in the [Alarm Display] screen (B-31000) is touched.

Display contents



No.	Item	Description
1)	[Value at alarm occurrence]	Displays the value of each item at alarm occurrence.
2)	Page scroll	Switches the window to the [Test Operation Status 2] window (W-30901).

Additional information

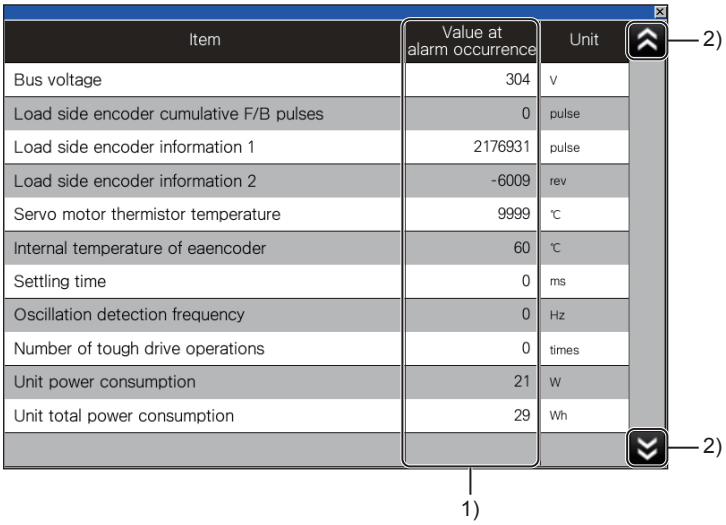
• The value of [Value at alarm occurrence] is updated when an alarm occurs.

Therefore, the current value of previous alarm is displayed until a new alarm occurs.

Status at Alarm Occurrence 2 (W-30901)

This window displays the servo amplifier monitor data at the occurrence of [Current alarm] displayed in the [Alarm Display] screen (B-31000).

Display contents



No.	Item	Description
1)	[Value at alarm occurrence]	Displays the value of each item at alarm occurrence.
2)	Page scroll	Switches the window to the [Test Operation Status 1] window (W-30900).

Additional information

• The value of [Value at alarm occurrence] is updated when an alarm occurs.

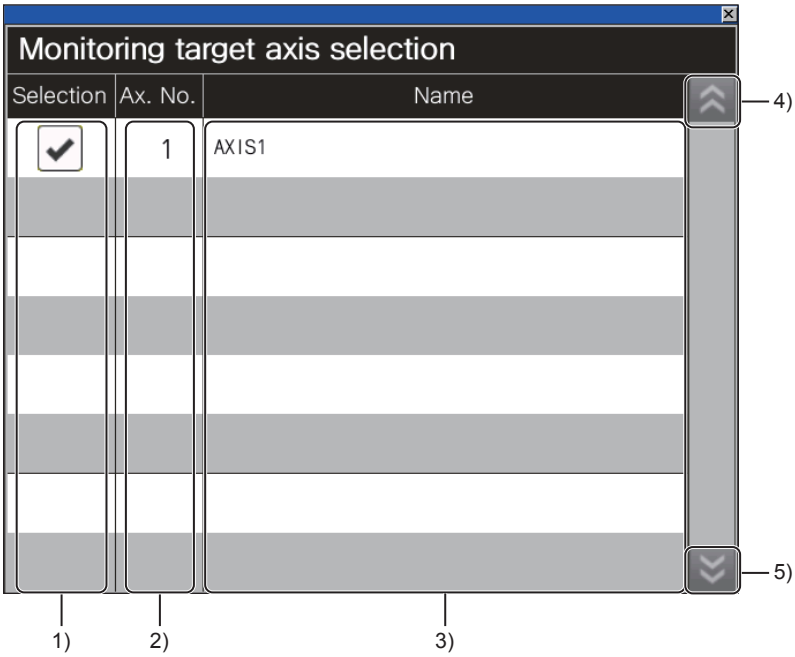
Therefore, the current value of previous alarm is displayed until a new alarm occurs.

Monitoring Target Axis Selection (W-32500)

This window is for selecting the axis of the servo amplifier to be monitored on the GOT.

This window is displayed when the monitoring target axis of the base screen is touched.

Display contents



No.	Item	Description
1)	[Selection]	Selects the monitoring target axis and closes the window screen. The currently selected monitoring target axis is selected.
2)	[Axis No.]	Displays the axis number.
3)	[Name]	Displays the axis name.
4)	Up scroll	Switches the display of valid axis for eight axes. The switch does not operate when the first valid axis is displayed.
5)	Down scroll	Switches the display of valid axis for eight axes. The switch does not operate when the last valid axis is displayed.

Additional information

• For the axis that can be selected, only the axis set to valid is displayed.

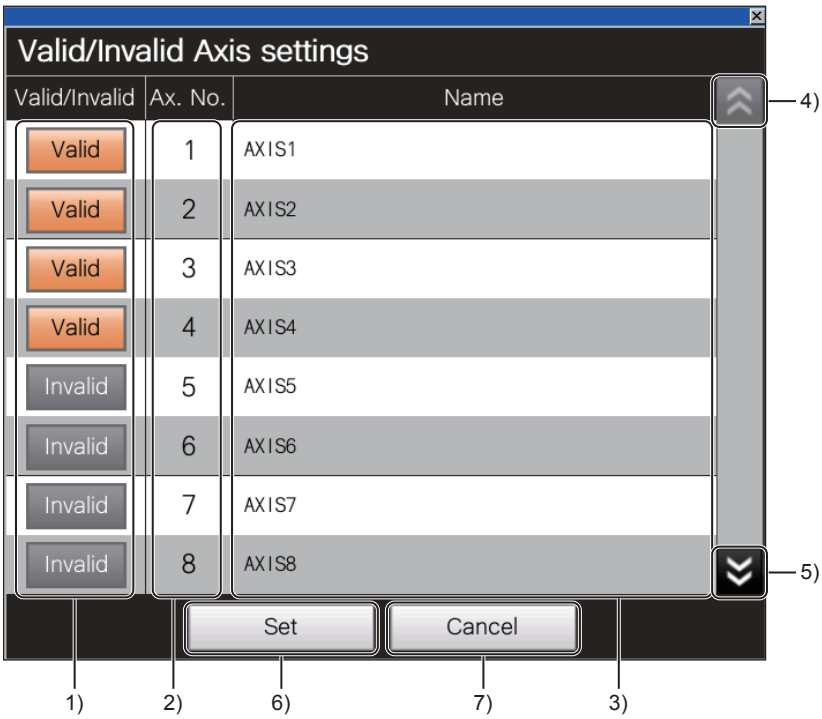
When there is an invalid axis between the valid axes, the invalid axis is skipped on the screen.

Valid/Invalid Axis Settings (W-32501)

This window is for setting the axis of the servo amplifier to enable monitoring.

This window is displayed when all the axis settings are set to [Invalid] at the GOT startup, or when the [Valid/Invalid Axis settings] switch in the [Menu] screen (B-30000) is touched.

Display contents



No.	Item	Description
1)	[Valid/Invalid]	Set valid and invalid for each axis. Displays [Enabled] on the switch in orange when the setting is enabled.
2)	[Axis No.]	Displays the axis number.
3)	[Name]	Displays the axis name.
4)	Up scroll	Switches the display of axis for eight axes. The switch does not operate when the first axis is displayed.
5)	Down scroll	Switches the display of axis for eight axes. The switch does not operate when the last axis is displayed.
6)	[Set]	Saves the information and closes the window screen.
7)	[Cancel]	Cancels the setting, and closes the window screen.

Additional information

• Change the displayed range of the axis number according to the total number of the axis.

The total number of axis can be changed by the script symbol according to the system configuration.

The initial value is 16 axes.

• The axis name is user-changeable.

For the setting method of the axis name, refer to the following.

☞ Page 214 Setting the Axis Name

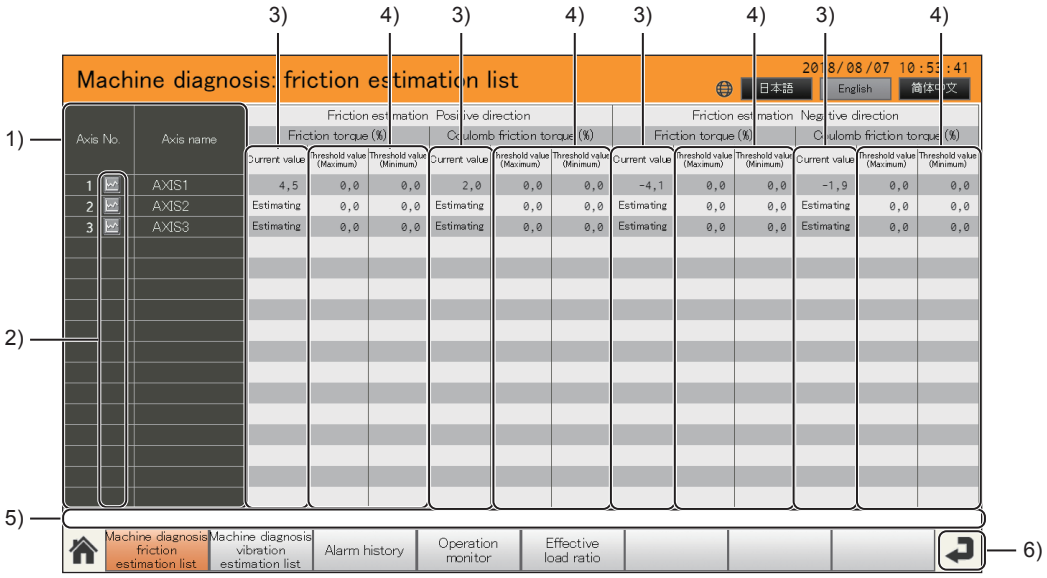
2.5 Mobile Screen Details

The following shows the details of the mobile screen.

Mobile_Machine Diag. Fric Est. (M-30000)

This screen displays the machine information for friction of the valid axes (axis 1 to axis 16) in a list on the mobile screen.

Display contents



No.	Item	Description
1)	[Axis No.] [Axis name]	Displays the axis No. and axis name.
2)	Mobile_Machine diagnosis: graph (friction)	Switches to the [Mobile_Machine Diag.Graph (Fric)] screen (M-30001).
3)	[Current value]	Displays the friction estimation of each item as the current value. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
4)	[Threshold value (Maximum)] [Threshold value (Minimum)]	Displays the maximum threshold value and minimum threshold value of each item.
5)	Alarm popup	Displays the current alarm.
6)	Back	Returns to the previous screen.

Additional information

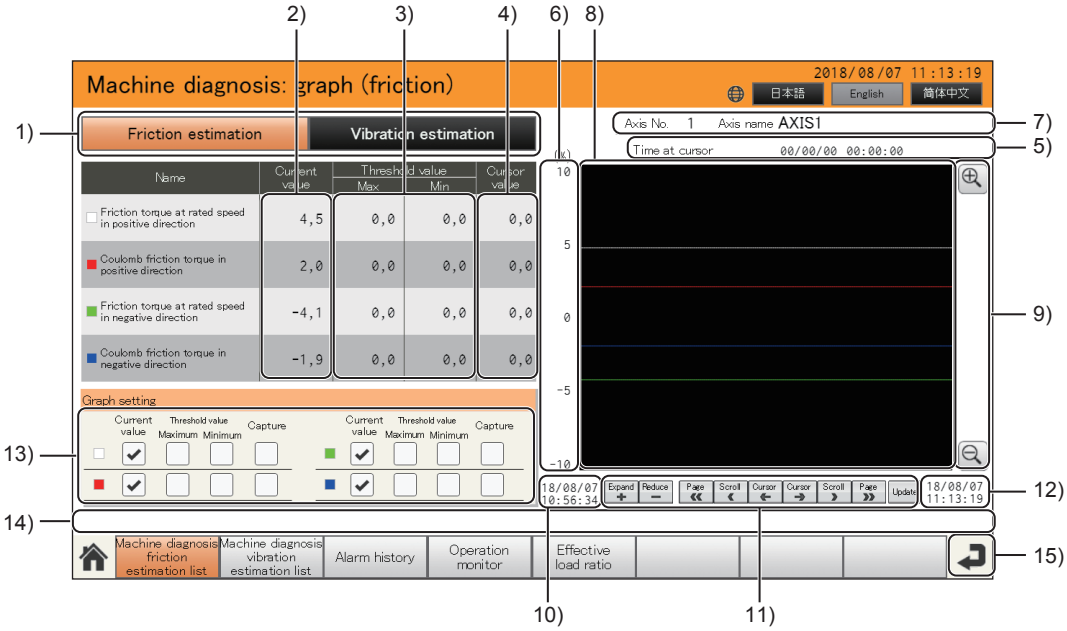
- For the details, refer to the following.

☞ Page 93 Machine Diagnosis (B-30600)

Mobile_Machine Diag.Graph (Fric) (M-30001)

This window displays the transition, threshold value, and standard value of the friction estimation items of the axis selected in the [Mobile_Machine Diag. Fric Est.] screen (M-30000) in a graph.

Display contents



No.	Item	Description
1)	[Friction estimation] [Vibration estimation]	This switch transfers the screen to the [Machine Diag. Graph (Friction)] screen (M-30010) or [Machine Diag. Graph (Vibration)] screen (M-30011). The switch of the displayed screen is displayed in orange.
2)	[Current value]	Displays the friction estimation of each item for the monitoring target axis as the current value. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
3)	[Set threshold]	Displays the maximum threshold value and minimum threshold value for the friction estimation.
4)	[Cursor value]	Displays the cursor value of the historical trend graph. Displays 0 when the cursor is hidden.
5)	[Time at cursor]	Displays the time at cursor display position.
6)	Display range of the historical trend graph	Displays the display range of the historical trend graph in a scale. The following is the initial display range. When logging is being performed, the maximum and minimum of the scale changes according to the maximum absolute value of the current value when this window is displayed. The variation of the scale is 10 (%). Example) • When the values of four parameters are 4.6(%), 2.0 (%), -4.4 (%), -2.1 (%) Maximum value: 10 (%) Minimum value: -10 (%) • When the values of four parameters are 14.2(%), 6.4 (%), -10.1 (%), -9.0 (%) Maximum value: 20 (%) Minimum value: -20 (%) When logging is stopped, displays -100.0 (%) to 100.0 (%). The maximum display range is -200.0 (%) to 200.0 (%). The minimum display range is -10.0 (%) to 10.0 (%).
7)	Axis No., Axis Name	Displays the information of the monitoring target axis. The monitoring target axis cannot be changed.

No.	Item	Description
8)	Historical trend graph	• Specifications of the historical trend graph Displays the estimation of each item in a historical trend graph, and maximum threshold value, minimum threshold value, and standard value in a line graph. Displays the estimation in a solid line, maximum threshold value in a dotted line (2 dot), minimum threshold value in a dotted line (1 dot), and standard value in a broken line. Displays the graph line in white for positive direction friction torque at rated speed, red for positive direction coulomb friction, green for negative direction friction torque at rated speed, and blue for negative direction coulomb friction.
		• Operation of the historical trend graph Touch the graph to display the cursor. While touching the graph, flick right and left to scroll the display contents right and left. Pinch in and out horizontally to reduce and expand the graph by using the time axis as a reference.
9)	Expand/reduce the historical trend graph display range	Expands and reduces the display range of the historical trend graph by 10.0(%).
10)	End position time of historical trend graph	Displays the end position time of the historical trend graph.
11)	Operating the historical trend graph	Operate the historical trend graph. Expand +: Expands the time axis in the graph. Reduce -: Reduces the time axis in the graph. Page<<: Scrolls the page to the left. Scroll<: Scrolls the graph to the left. Cursor←: Displays the cursor and scrolls it to the old data direction. Cursor→: Displays the cursor and scrolls it to the new data direction. Scroll>: Scrolls the graph to the right. Page>>: Scrolls the page to the right. Update: Deletes the cursor and updates to the latest data.
12)	Beginning position time of historical trend graph	Displays the beginning position time of the historical trend graph.
13)	Graph line of historical trend graph	Switches displaying and hiding the graph line of the historical trend graph. • Selected: Display • Cleared: Hide • Black square: Disabled When [Current value] is cleared, [Threshold value] ([Max], [Min]) and [Standard value] is cleared. When [Current value] is selected, [Threshold value] ([Max], [Min]) and [Standard value] can be selected The items for which the estimation is uncompleted or skipped cannot be operated. The items that cannot be operated are disabled (black square).
14)	Alarm popup	Displays the current alarm.
15)	Back	Returns to the previous screen.

Additional information

• Acquiring the estimation for each item or not can selected for each axis in the script symbol settings.

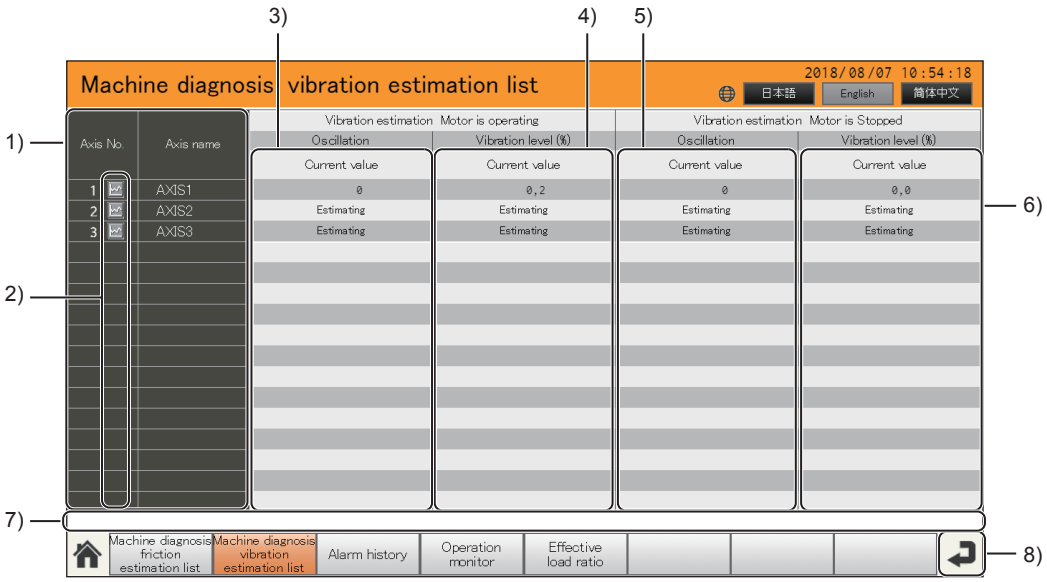
For the details, refer to the following.

☞ Page 94 Additional information

Mobile_Machine Diag. Vib Est. (M-30010)

This screen displays the machine information for vibration of the valid axes (axis 1 to axis 16) in a list on the mobile screen.

Display contents

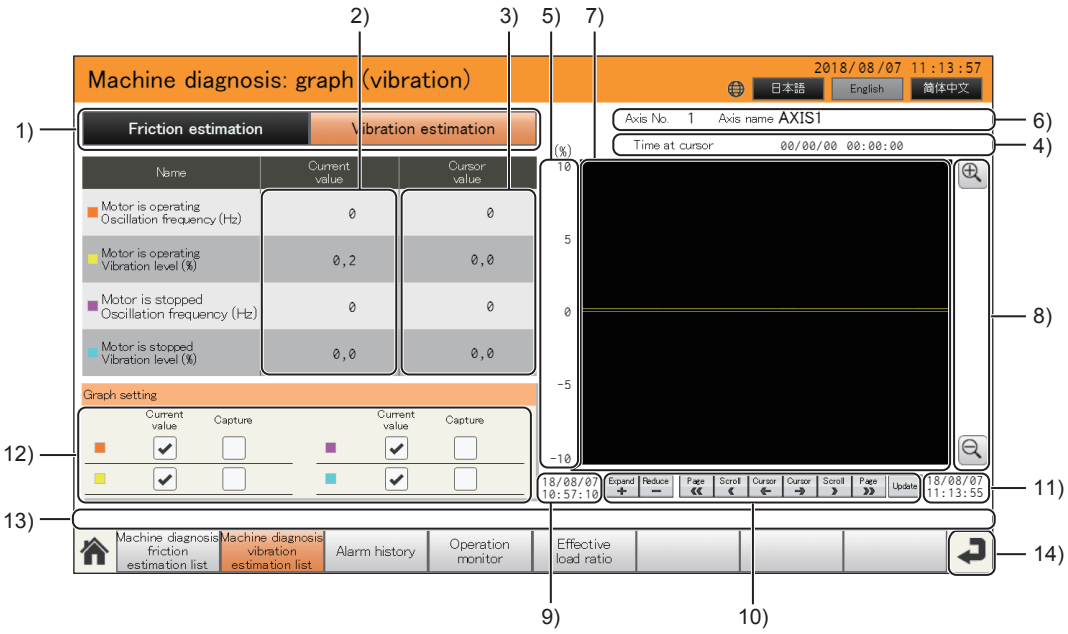


No.	Item	Description
1)	[Axis No.] [Axis name]	Displays the axis No. and axis name.
2)	Mobile_Machine diagnosis: graph (vibration)	Switches the screen to the [Mobile_Machine Diag.Graph (Vib)] screen (M-30011).
3)	[Oscillation] ([Vibration estimation Motor is operating])	Displays the oscillation frequency of the operating motor. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
4)	[Vibration level (%)] ([Vibration estimation Motor is operating])	Displays the vibration level of the operating motor. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
5)	[Oscillation] ([Vibration estimation Motor is Stopped])	Displays the oscillation frequency of the stopped motor. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
6)	[Vibration level (%)] ([Vibration estimation Motor is Stopped])	Displays the vibration level of the stopped motor. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
7)	Alarm popup	Displays the current alarm.
8)	Back	Returns to the previous screen.

Mobile_Machine Diag.Graph (Vib) (M-30011)

This window displays the transition and standard value of the vibration estimation for each item of the axis selected in the [Mobile_Machine Diag. Vib Est.] screen (M-30010) in a graph.

Display contents



No.	Item	Description
1)	[Friction estimation] [Vibration estimation]	This switch transfers the screen to the [Machine Diag. Graph (Friction)] screen (M-30010) or [Machine Diag. Graph (Vibration)] screen (M-30011). The switch of the displayed screen is displayed in orange.
2)	[Current value]	Displays the vibration estimation of each item for monitoring target axis as the current value. Displays [Estimating] when the estimation of the machine diagnosis is not completed. When "No estimation" is set, the value is not displayed.
3)	[Cursor value]	Displays the cursor value of the historical trend graph. Displays 0 when the cursor is hidden.
4)	Time at cursor display position	Displays the time at cursor display position.
5)	Display range of the historical trend graph	Displays the display range of the historical trend graph in a scale. The following is the initial display range. When logging is being performed, the maximum and minimum of the scale changes according to the maximum absolute value of the current value when this window is displayed. The variation of the scale is 10 regardless of the unit (%, Hz). Example) • When the value of four parameters are 4.6, 2.0, -4.4, -2.1 Maximum value: 10 Minimum value: -10 • When the value of four parameters are 14.2, 6.4, -10.1, -9.0 Maximum value: 20 Minimum value: -20 When logging is stopped, displays -100.0 to 100.0. The maximum display range is -200.0 to 200.0. The minimum display range is -10.0 to 10.0.
6)	Axis No., Axis Name	Displays the information of the monitoring target axis. The monitoring target axis cannot be changed.
7)	Historical trend graph	• Specifications of the historical trend graph Displays the estimation in a historical trend graph, and standard value in a line graph. Displays the estimation in a solid line and standard value in a broken line. Displays "Motor is operating Oscillation frequency" in orange, "Motor is operating Vibration level" in yellow, "Motor is stopped Oscillation frequency" in purple, and "Motor is stopped Vibration level" in light blue.
		• Operation of the historical trend graph Touch the graph to display the cursor. While touching the graph, flick right and left to scroll the display contents right and left. Pinch in and out horizontally to reduce and expand the graph by using the time axis as a reference.

No.	Item	Description
8)	Expand/reduce the historical trend graph display range	Expands and reduces the display range of the historical trend graph by 10.0 (% or Hz).
9)	End position time of historical trend graph	Displays the end position time of the historical trend graph.
10)	Operating the historical trend graph	Operate the historical trend graph. Expand +: Expands the time axis in the graph. Reduce -: Reduces the time axis in the graph. Page<<: Scrolls the page to the left. Scroll<: Scrolls the graph to the left. Cursor←: Displays the cursor and scrolls it to the old data direction. Cursor→: Displays the cursor and scrolls it to the new data direction. Scroll>: Scrolls the graph to the right. Page>>: Scrolls the page to the right. Update: Deletes the cursor and updates to the latest data.
11)	Beginning position time of historical trend graph	Displays the beginning position time of the historical trend graph.
12)	Graph line of historical trend graph	Switches displaying and hiding the graph line of the historical trend graph. • Selected: Display • Cleared: Hide • Black square: Disabled When [Current value] is cleared, [Standard value] is cleared. When [Current value] is selected, [Standard value] can be selected. The items for which the estimation is uncompleted or skipped cannot be operated. The items that cannot be operated are disabled (black square).
13)	Alarm popup	Displays the current alarm.
14)	Back	Returns to the previous screen.

Additional information

• Acquiring the estimation for each item or not can selected for each axis in the script symbol settings.

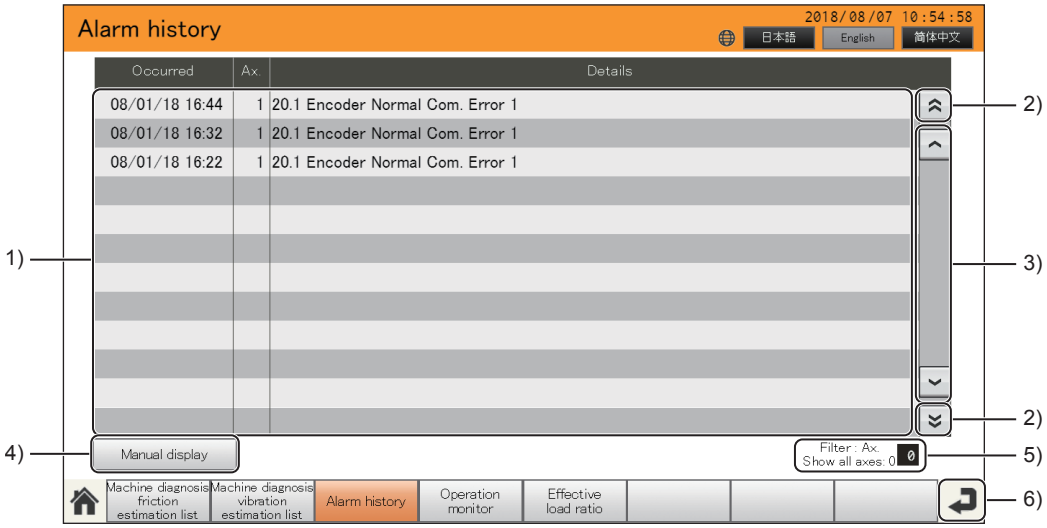
For the details, refer to the following.

☞ Page 94 Additional information

Mobile_Alarm History (M-30030)

The history of the alarm and warning occurred in the servo amplifier is acquired with the alarm function of the GOT, and the acquired alarm information of multiple axes is displayed in a list on the mobile screen.

Display contents



No.	Item	Description
1)	Alarm list	Displays the time data of the GOT when the alarm occurred, axis number of the servo amplifier, and the detail number and name of the alarm for all the axes being monitored. Displays the comment in yellow when the alarm indicates the occurring warning. Displays the comment in red when the alarm indicates the occurring alarm. Displays the comment in black when the alarm indicates the warning and alarm are recovered.
2)	Page scroll	Scrolls the alarm per page.
3)	Row scroll	Scrolls the alarm per row.
4)	[Manual display]	Displays the manual of the servo amplifier with the hyperlink function of the GOT.
5)	[Filter : Ax.]	Displays the alarm number filtered with axis number. When 0 is set, cancels the filter and displays all the axes.
6)	Back	Returns to the previous screen.

Additional information

- When the GOT is restarted during the alarm occurrence, the alarm recovers at power shutoff and is added as a new alarm at restart.

If the alarm is recovered before restart, it is not added as a new alarm.

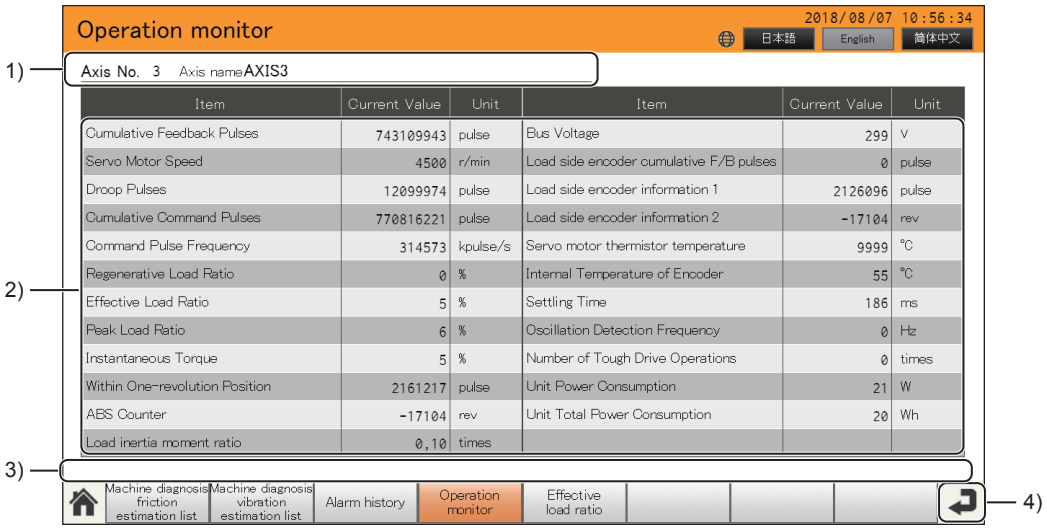
- The following shows the reference of the hyperlink.

Drive A (SD card)
- <Package1>
  - <userdata>
    - 30000_ j.pdf
    - 30001_e.pdf
    - 30002_c.pdf

Mobile_Operation Monitor (M-30040)

The monitor data of the operating servo amplifier is displayed.

Display contents



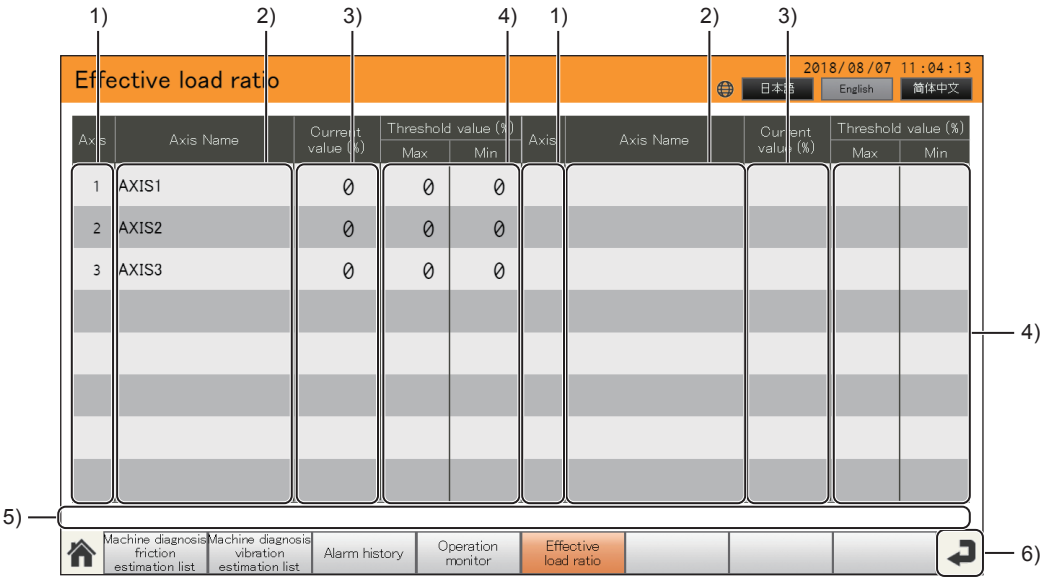
Item	Current Value	Unit	Item	Current Value	Unit
Cumulative Feedback Pulses	743109943	pulse	Bus Voltage	299	V
Servo Motor Speed	4500	r/min	Load side encoder cumulative F/B pulses	0	pulse
Droop Pulses	12099974	pulse	Load side encoder information 1	2126096	pulse
Cumulative Command Pulses	770816221	pulse	Load side encoder information 2	-17104	rev
Command Pulse Frequency	314573	kpulse/s	Servo motor thermistor temperature	9999	℃
Regenerative Load Ratio	0	%	Internal Temperature of Encoder	55	℃
Effective Load Ratio	5	%	Settling Time	186	ms
Peak Load Ratio	6	%	Oscillation Detection Frequency	0	Hz
Instantaneous Torque	5	%	Number of Tough Drive Operations	0	times
Within One-revolution Position	2161217	pulse	Unit Power Consumption	21	W
ABS Counter	-17104	rev	Unit Total Power Consumption	20	Wh
Load inertia moment ratio	0.10	times			

No.	Item	Description
1)	Axis No., Axis Name	Displays the information of the monitoring target axis. Touch this item to display the [Mobile_Monitor Axis Select] screen (M-30210).
2)	Monitor list	Displays the current value of each item.
3)	Alarm popup	Displays the current alarm.
4)	Back	Returns to the previous screen.

Mobile_Effective Load Ratio (M-30050)

This screen displays the effective load ratio information of the valid axes (axis 1 to axis 16) in a list on the mobile screen.

Display contents



No.	Item	Description
1)	[Axis]	Displays the axis number.
2)	[Axis Name]	Displays the axis name.
3)	[Current value (%)]	Displays the estimation of the effective load ratio as the current value. Displays the background in red when the estimation exceeds the maximum threshold value or minimum threshold value. When the threshold value is 0, the background color is not changed.
4)	[Threshold value (%)]	Displays the maximum threshold value and minimum threshold value for the effective load ratio of each axis.
5)	Alarm popup	Displays the current alarm.
6)	Back	Returns to the previous screen.

Additional information

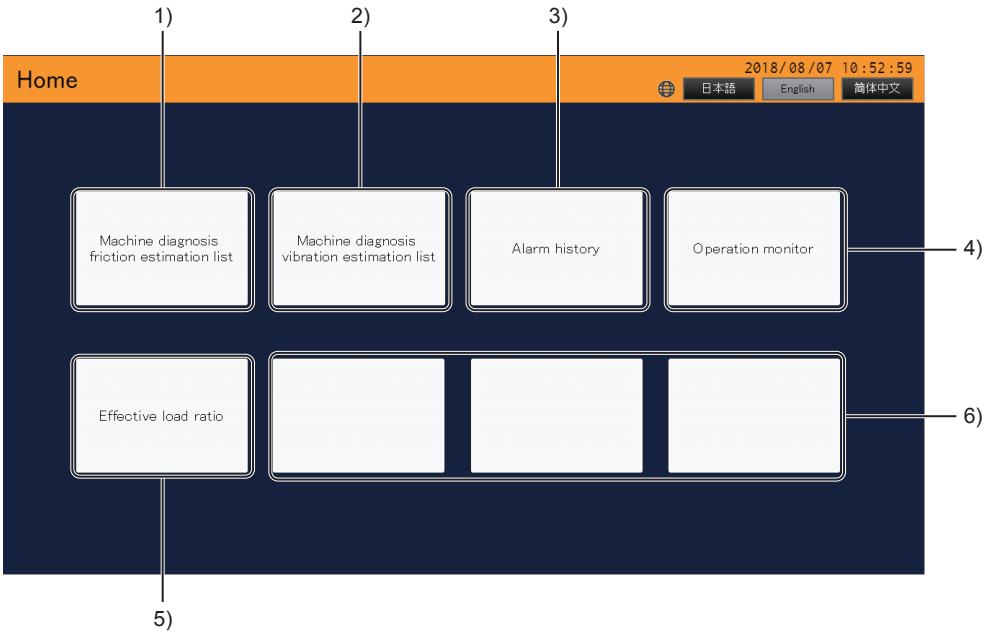
• Only the axes that are set to valid are displayed on the list.

When there is an invalid axis between the valid axes, the invalid axis is skipped on the screen.

Mobile_Home (M-30200)

This screen is displayed at startup and transfers to each menu screen.

Display contents



No.	Item	Description
1)	[Machine diagnosis friction estimation list]	Displays the [Mobile_Machine Diag. Fric Est. 1] screen (M-30000).
2)	[Machine diagnosis vibration estimation list]	Displays the [Mobile_Machine Diag. Vib Est.] screen (M-30010).
3)	[Alarm history]	Displays the [Mobile_Alarm History] screen (M-30030).
4)	[Operation monitor]	Displays the [Mobile_Operation Monitor] screen (M-30040).
5)	[Effective load ratio]	Displays the [Mobile_Effective Load Ratio] screen (M-30050).
6)	Empty switch	The go to screen switches that are not used. Use these switches to set the destination screens.

Additional information

- At the startup of the Mobile screen, the valid axis with lowest number is the monitoring target axis.

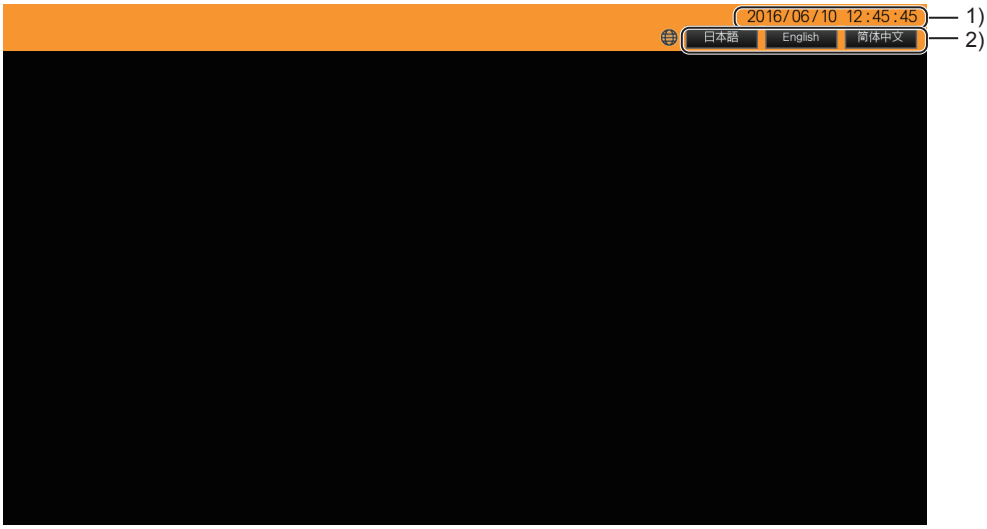
Mobile_Header (M-30202)

This screen is used as the header.

This screen is displayed on each mobile screen with the set overlay screen function.

This screen is not displayed independently.

Display contents



No.	Item	Description
1)	Date display	Displays the current date set in the GOT.
2)	Switch display language	Switches the display language to Japanese, English, or Chinese. The switch of the selected language is displayed in gray.

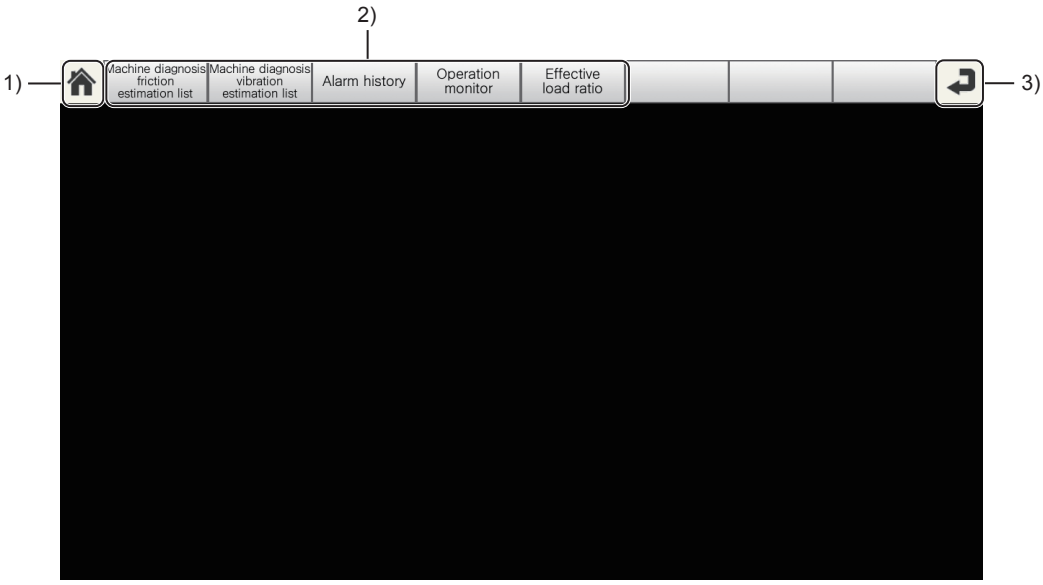
Mobile_Footer (M-30204)

This screen is used as the footer.

This screen is displayed on each mobile screen with the set overlay screen function.

This screen is not displayed independently.

Display contents

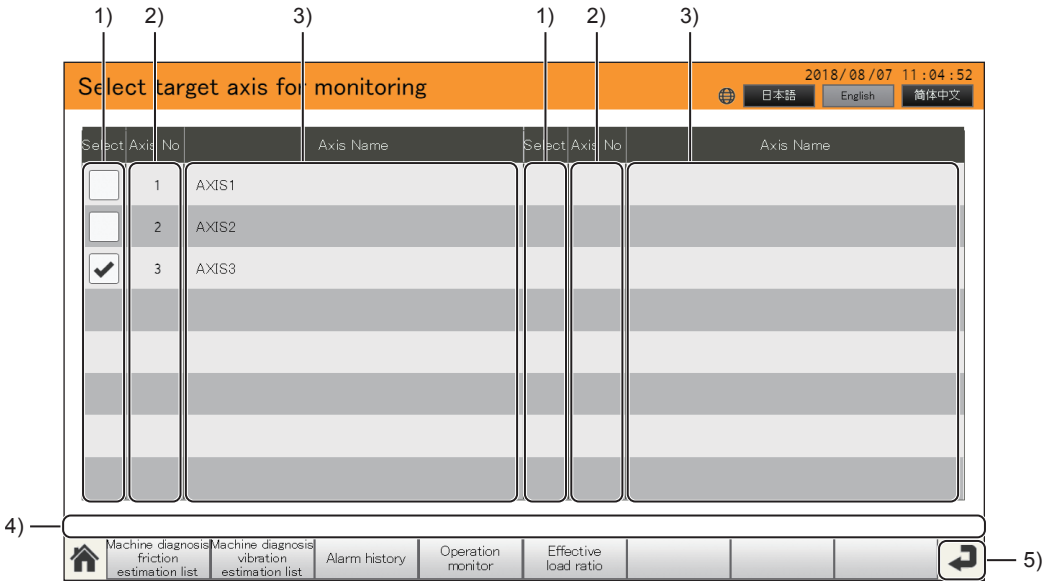


No.	Item	Description
1)	Mobile_Home	Displays the [Mobile_Home] screen (M-30200).
2)	[Machine diagnosis friction estimation list] [Machine diagnosis vibration estimation list] [Alarm history] [Operation monitor] [Effective load ratio]	Switches to the following screen. • [Mobile_Machine Diag. Fric Est.] screen (M-30000) • [Mobile_Machine Diag. Vib Est.] screen (M-30010) • [Mobile_Alarm History] screen (M-30030) • [Mobile_Operation Monitor] screen (M-30040) • [Mobile_Effective Load Ratio] screen (M-30050) The switch of the displayed screen is displayed in orange.
3)	Back	Returns to the previous screen.

Mobile_Monitor Axis Select (M-30210)

This screen is for selecting the axis of the servo amplifier to be monitored on the mobile screen.

Display contents



No.	Item	Description
1)	[Select]	Select the monitoring target axis in this screen. The currently selected monitoring target axis is selected.
2)	[Axis No.]	Displays the axis number.
3)	[Axis Name]	Displays the axis name.
4)	Alarm popup	Displays the current alarm.
5)	Back	Returns to the previous screen.

MEMO

3 PROJECT SPECIFICATIONS

3.1 Settings of Add-on Project for a Servo Amplifier

Resolution of add-on project for a servo amplifier

The add-on project for a servo amplifier is compatible with the resolution shown below.

Base screen

Resolution	GOT type	Model
1024×768	GT27**-X (1024x768)	GT2715-XTBA GT2715-XTBD
800×600	GT27**-S (800x600)	GT2712-STBA GT2712-STWA GT2712-STBD GT2712-STWD GT2710-STBA GT2710-STBD GT2708-STBA GT2708-STBD
	GT25**-S (800x600)	GT2512-STBA GT2512-STBD GT2512F-STNA GT2512F-STND
640×480	GT27**-V (640x480)	GT2710-VTBA GT2710-VTWA GT2710-VTBD GT2710-VTWD GT2708-VTBA GT2708-VTBD
	GT2705-V (640x480)	GT2705-VTBD
	GT25**-V (640x480)	GT2510-VTBA GT2510-VTWA GT2510-VTBD GT2510-VTWD GT2510F-VTNA GT2510F-VTND GT2508-VTBA GT2508-VTWA GT2508-VTBD GT2508-VTWD GT2508F-VTNA GT2508F-VTND GT2506HS-VTBD
	GT2505-V (640x480)	GT2505-VTBD GT2505HS-VTBD
1280×800	GT25**-WX (1280x800)	GT2512-WXTBD GT2512-WXTSD GT2510-WXTBD GT2510-WXTSD
	GS25**-WX (1280x800)*1	GS2512-WXTBD
800×480	GT25**-W (800x480)	GT2507-WTBD GT2507-WTSD GT2507T-WTSD

*1 For GS25, use the screen for GT25**-WX by changing the GOT type.

Mobile screen

The mobile screen size is set to 1280 × 720 (HD) regardless of the model.

System application

Type	Name		
Standard function	Standard system application		
	Standard font		Japanese
Communication driver	Ethernet connection		Ethernet (MITSUBISHI ELECTRIC), Gateway
Extended function	Standard font		Chinese (Simplified)
	Outline font	Gothic	Alphanumeric characters /KANA
			Japanese (Kanji)
			Chinese (Simplified) (Kanji)
	Device data transfer		
	Drive recorder		
	Document display		
	System launcher (standard)		
	System launcher (servo network)		
	Servo amplifier graph		
	GOT Mobile function		

Communication setting

CH1

Setting item	Setting value
GOT network number	1
GOT station number	2
GOT standard Ethernet setting	Refer to the following. ☞ Page 157 GOT standard Ethernet setting
GOT communication port No.	5001
Retry (Times)	3
Startup time (Sec)	3
Timeout time (Sec)	3
Delay time (ms)	0
Servo axis switching device first No.	10

CH2 *1

Setting item	Setting value
GOT network number	1
GOT station number	2
GOT standard Ethernet setting	Refer to the following. ☞ Page 157 GOT standard Ethernet setting
GOT communication port No.	5002
Retry (Times)	3
Startup time (Sec)	3
Timeout time (Sec)	3
Delay time (ms)	0
Servo axis switching device first No.	65400

*1 The servo amplifier devices are monitored and controlled in CH2.

GOT standard Ethernet setting

Setting item	Setting value
Reflect the GOT standard Ethernet setting in the GOT	Selected
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
Reflect the GOT extended Ethernet setting in the GOT	Without setting

Ethernet setting

The Ethernet setting of the add-on project for a servo amplifier is configured with the settings shown below.
Change the settings according to the existing system configuration.

CH1

Host station	Net No.	Station number	Equipment	IP address	Port No.	Communication format
*	1	1	QnUD(P)V/QnUDE(H)	192.168.3.39	5006	UDP

CH2

Host station	Net No.	Station number	Equipment	IP address	Port No.	Communication format
*	1	1	QnUD(P)V/QnUDE(H)	192.168.3.39	5007	TCP

Labels (GT Designer3)

Group No. 100 Com_Label

○: Available, ×: Unavailable

Label name	Assign (device)	Data type	Description	Attribute	Setting change
u16_Com_CngBsDv	GD65200	Unsigned BIN16	Screen switching device (for base screens)	Read, write	○
u16_Com_CngOvrRpDv1	GD65201	Unsigned BIN16	Screen switching device (overlap window 1)	Read, write	○
u16_Com_CngOvrRpDv2	GD65204	Unsigned BIN16	Screen switching device (overlap window 2)	Read, write	○
u16_Com_CngOvrRpDv3	GD65207	Unsigned BIN16	Screen switching device (overlap window 3)	Read, write	○
u16_Com_CngOvrRpDv4	GD65210	Unsigned BIN16	Screen switching device (overlap window 4)	Read, write	○
u16_Com_CngOvrRpDv5	GD65213	Unsigned BIN16	Screen switching device (overlap window 5)	Read, write	○
u16_Com_CngSprInpsDv1	GD65216	Unsigned BIN16	Screen switching device (superimpose window 1)	Read, write	○
u16_Com_CngSprInpsDv2	GD65217	Unsigned BIN16	Screen switching device (superimpose window 2)	Read, write	○
u16_Com_CngDlgDv	GD65218	Unsigned BIN16	Screen switching device (dialog windows)	Read, write	○
s16_Com_CngLngDv	GD65221	Signed BIN16	Language switching device	Read, write	○
s16_Com_CngSytmLanDv	GD65222	Signed BIN16	System language switching device	Read, write	○
s16_Com_StmInfRd	GD65231	Signed BIN16 [0..2]	System information read device	Read, write	○
s16_Com_StmInfWt	GD65241	Signed BIN16 [0..38]	System information write device	Read	○
u16_Com_DocIDNum	GD65280	Unsigned BIN16	Document display ID	Read, write	○
u16_Com_DocPageNum	GD65281	Unsigned BIN16	Document display page No.	Read, write	○
u16_Com_DocStNtcDspDv	GD65282	Unsigned BIN16	Document display status display notification device	Read	○
u16_Com_DocEndPageNum	GD65283	Unsigned BIN16	Document display last page no. notification device	Read	○
u16_Com_RcpCmCntlDv	GD65290	Unsigned BIN16 [0..2]	Recipe common setting external control information	Read, write	○
u16_Com_RcpCmNtcDv	GD65293	Unsigned BIN16 [0..2]	Recipe common setting external notification information	Read	○
u16_Com_StChgDv	GD65296	Unsigned BIN16	Station No. switching device	Read, write	○

Group No. 101 SV_Label

■Simple motion

○: Available, ×: Unavailable

Label name	Assign (device)	Data type	Description	Attribute	Setting change
s16_EfctLdRt	@2 U01-G2479	Signed BIN16	Device data transfer effective load ratio	Read	○

■Motion controller

○: Available, ×: Unavailable

Label name	Assign (device)	Data type	Description	Attribute	Setting change
s16_EfctLdRt	@2:0-FF/2 U3E1-11000	Signed BIN16	Device data transfer effective load ratio	Read	○

GOT environmental setting

Screen switching, windows

■Base screen

○: Available, ×: Unavailable

Setting item	Setting of base screen	Setting change
Screen switching device	$Com_Label:u16_Com_CngBsDv	×

■Overlap window

○: Available, ×: Unavailable

Setting item		Setting of overlap window 1	Setting of overlap window 2	Setting change
Screen switching device		$Com_Label:u16_Com_CngOvrRpDv1	$Com_Label:u16_Com_CngOvrRpDv2	×
Use also as a system window		Cleared	Cleared	○
Display position		Cleared	Cleared	○
Detail setting	Close the window when switching base screens	Cleared	Selected	×
	Display the title bar	Selected	Selected	×
	Specify the display order	Cleared	Cleared	○
	Disable the touch operation of a screen on the back	Cleared	Cleared	○

■Superimpose window

○: Available, ×: Unavailable

Setting item		Setting of superimpose window 1	Setting change
Screen switching device		$Com_Label:u16_Com_CngSprInpsDv1	×
Detail setting	Close the window when switching base screens	Selected	×

Language switching

○: Available, ×: Unavailable

Setting item	Setting of language switching	Setting change
Language switching device	$Com_Label:s16_Com_CngLngDv	×
System language switching device	$Com_Label:s16_Com_CngSytmLanDv	×

System information

○: Available, ×: Unavailable

Setting item	Setting of system information	Setting change
Read device	$Com_Label:s16_Com_StmInfRd[0]	×
Write device	$Com_Label:s16_Com_StmInfWt[0]	×

GOT Mobile setting

The following shows the GOT Mobile setting of the add-on project for a servo amplifier.
For items not described, the default settings are set. However, changing the settings is available.

Basic setting

○: Available, ×: Unavailable

Setting item	Setting	Setting change
Use GOT Mobile function	Selected	○
Simultaneous client connection	5	○
HTTP connection	Cleared	○
Automatically disconnect clients with no operation	Cleared	○
Allow external access to GOT public folder	Selected	×

Authentication setting

○: Available, ×: Unavailable

Setting item		Setting		Setting change
GOT Mobile authentication method		GOT Mobile exclusive authentication		○
Create an administrative operator	Selected	Operator name	Admin	○
		Password	Undone	○
Create a guest operator	Cleared	Undone		○
		Undone		○

Device allocation setting

○: Available, ×: Unavailable

Setting item			Setting	Setting change
Device (VGD, VGB) allocation	Word device (GD)	Point	1024	×
		Start device	GD60000	×
	Bit device (GB)	Point	1024	×
		Start device	GB60000	×
Initialize the devices (VGD, VGB) at the time of client connection			Selected	○

Screen switching

○: Available, ×: Unavailable

Setting item	Setting	Setting change
Screen switching device	VGD0	×
Screen switching device data type	BIN	×
Specify the No. of a screen to be displayed at the time of client connection	Selected	×
	30200	×

Advanced setting: Language switching

○: Available, ×: Unavailable

Setting item	Setting	Setting change
Language switching device	Selected	×
	VGD21	×

Advanced setting: Client information

○: Available, ×: Unavailable

Setting item	Setting	Setting change
Client No. notification device	Selected	×
	VGD22	×
Client IP address notification device	Selected	×
	VGD23	×
Client control device	Cleared	○
	Undone	○

Device

GOT internal device

○: Available, ×: Unavailable

Device name	Setting range	Setting change
GOT bit register (GB)	Use prohibited areas: GB30000 to GB59999, GB65120 to GB65535	×
	GOT Mobile area client 1: GB60000 to GB61023 (Use prohibited areas: GB60000 to GB60699)	×
	GOT Mobile area client 2: GB61024 to GB62047 (Use prohibited areas: GB61024 to GB61723)	×
	GOT Mobile area client 3: GB62048 to GB63071 (Use prohibited areas: GB62048 to GB62747)	×
	GOT Mobile area client 4: GB63072 to GB64095 (Use prohibited areas: GB63072 to GB63771)	×
	GOT Mobile area client 5: GB64096 to GB65119 (Use prohibited areas: GB64096 to GB64795)	×
GOT data register (GD)	Use prohibited areas: GD30000 to GD59999, GD65120 to GD65535	×
	GOT Mobile area client 1: GD60000 to GD61023 (Use prohibited areas: GD60000 to GD60699)	×
	GOT Mobile area client 2: GD61024 to GD62047 (Use prohibited areas: GD61024 to GD61723)	×
	GOT Mobile area client 3: GD62048 to GD63071 (Use prohibited areas: GD62048 to GD62747)	×
	GOT Mobile area client 4: GD63072 to GD64095 (Use prohibited areas: GD63072 to GD63771)	×
	GOT Mobile area client 5: GD64096 to GD65119 (Use prohibited areas: GD64096 to GD64795)	×

GOT Mobile device

○: Available, ×: Unavailable

Device name	Setting range	Setting change
GOT Mobile bit register (VGB)	GOT Mobile device areas: VGB0 to VGB1023 (Use prohibited areas: VGB0 to VGB699)	×
GOT Mobile data register (VGD)	GOT Mobile device areas: VGD0 to VGD1023 (Use prohibited areas: VGD0 to VGD699)	×

Comment

The following shows the list of comments used in the add-on project for a servo amplifier.

○: Available, ×: Unavailable

Comment group No.	Name	Application	Setting change
400	Screen title	Base screen title	×
		Startup/adjustment menu (B-30061)	×
		Maintenance menu (B-30062)	×
		Troubleshooting menu (B-30063)	×
		Monitor menu (B-30064)	×
		Footer 1 to 8 (W-30060 to W-30067)	×
401	Home/Menu screen comment	Menu (B-30000)	×
402	Tuning screen comment	Tuning 1 to 3 (B-30100 to B-30102)	×
		Machine Resonance Supp. Filter1 to 5 (B-30110 to B-30114)	×
		Other filter (B-30111)	×
		Vibration Suppression Control1 to 3 (B-30130 to B-30132)	×
		Resonance.Supp.Fltr 1 to 5 Notch Width (W-30110 to W-30114)	×
		Resonance.Supp.Fltr 1 to 5 Notch Depth (W-30115 to W-30119)	×
		Low-pass filter settings (W-30120)	×
		Shaft res.supp.filter settings (W-30121)	×
		Shaft res.supp.filter frequency (W-30122)	×
		Shaft res.supp.filter notch depth (W-30123)	×
403	One-touch tuning screen comment	One-touch tuning (B-30200)	×
		One-touch tuning progress (W-30200)	×
404	Test operation screen comment	Test operation menu (B-30300)	×
		JOG operation (B-30310)	×
		Positioning operation (B-30320)	×
		Output signal(DO) forced output (B-30330)	×
		Test Operation Status 1 to 4 (W-30300 to W-30303)	×
405	Parameter setting screen comment	Parameter setting menu (B-30400)	×
		Basic Settings Parameters1 to 3 (B-30410 to B-30412)	×
		Gain/Filter Parameters1 to 6 (B-30420 to B-30425)	×
		Ext.settings1 parameters1 to 3 (B-30430 to B-30432)	×
		I/O Settings Parameters1 to 2 (B-30440 to B-30441)	×
		Ext.settings2 parameters1 to 2 (B-30450 to B-30451)	×
		Ext.settings3 parameters1 to 2 (B-30460 to B-30461)	×
		Linear/DD Motor Parameters1 to 2 (B-30470 to B-30471)	×
		Parameter setting help (W-30400)	×
406	Amplifier life diagnosis screen comment	Amplifier life diagnosis (B-30500)	×
407	Machine diagnosis screen comment	Machine Diagnosis1 to 2 (B-30600 to B-30601)	×
		Machine Diag .Estimation (Fric) (B-30700)	×
		Machine Diag. Estimation (Vib) (B-30710)	×
		Machine Diag. Threshold Setting (W-30600)	×
		Machine Diag. Friction Est.1 to 2 (W-30700 to W-30701)	×
		Machine Diag. Threshold (Fric)1 to 2 (W-30702 to W-30703)	×
		Machine Diag. Graph (Friction) (W-30704)	×
		Machine Diag. Graph Disp (Fric) (W-30705)	×
		Machine Diag.Standard Val.Set (W-30706)	×
		Machine Diag. Vibration Est.1 to 2 (W-30710 to W-30711)	×
		Machine Diag. Graph (Vibration) (W-30714)	×
		Machine Diag. Graph Disp (Vib) (W-30715)	×

Comment group No.	Name	Application	Setting change
409	Alarm screen comment	Alarm Display1 to 2 (B-31000 to B-31001)	×
		Alarm history (B-31100)	×
		Status at alarm occurrence 1 to 2 (W-30900 to W-30901)	×
410	Manual display screen comment	Manual display (B-31200)	×
411	Operation monitor screen comment	Operation monitor1 to 3 (B-31300 to B-31302)	×
412	Input/output monitor screen comment	I/O monitor (B-31400)	×
413	Effective load ratio screen comment	Effective load ratio (B-30900)	×
414	Axis settings screen comment	Axis No/Axis name (B-32500)	×
		Monitoring target axis selection (W-32500)	×
		Valid/Invalid axis settings (W-32501)	×
480	Mobile_comment for all screens	Mobile screen title	×
481	Mobile_home/menu screen comment	Mobile_home (M-30200)	×
		Mobile_header (M-30202)	×
		Mobile_footer (M-30204)	×
482	Mobile_machine diagnosis screen comment	Mobile_Machine diagnosis: friction estimation list (M-30000)	×
		Mobile_Machine diagnosis: graph (friction) (M-30001)	×
		Mobile_Machine diagnosis: vibration estimation list (M-30010)	×
		Mobile_Machine diagnosis: graph (vibration) (M-30011)	×
484	Mobile_alarm screen comment	Mobile_Alarm history (M-30030)	×
485	Mobile_operation monitor screen comment	Mobile_operation monitor (M-30040)	×
486	Mobile_effective load ratio screen comment	Mobile_effective load ratio (M-30050)	×
487	Mobile_axis setting screen comment	Mobile_Select target axis for monitoring (M-30210)	×
491	Alarm history alarm comment	-	×
498	Alarm display alarm comment	Alarm display1 to 2 (B-31000 to B-31001)	×
500	Comment for all screens	GOT system alarm reset (W-30000)	×
		Language settings (W-30001)	×
		Clock settings (W-30002)	×

Recipe

○: Available, ×: Unavailable

Recipe No.	Recipe name	Application	Setting change
30000	Info of valid/invalid axes	Retains the valid/invalid setting and axis name of each axis.	×
30005	Machine diag: threshold(max)	Retains the maximum threshold values for MD3 to MD6 of each axis.	×
30006	Machine diag: standard value	Retains the standard value displayed in the machine diagnosis of each axis.	×
30007	Machine diag: threshold (min)	Retains the minimum threshold values for MD3 to MD6 of each axis.	×
30010	Eff. load ratio: threshold(max)	Retains the maximum threshold value for the effective load ratio of each axis.	×
30011	Eff. load ratio: threshold(min)	Retains the minimum threshold value for the effective load ratio of each axis.	×

Recipe common setting

Device name	Label name
External control device	$Com_Label:u16_Com_RcpCmCntlDv[0]
External notification device	$Com_Label:u16_Com_RcpCmNtcDv[0]

Setting of valid/invalid axes information (recipe No. 30000)

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Recipe No.	30000		×
	Recipe name	Info of valid/invalid axes		×
	Recipe data	Recipe data save location	Data storage (recipe file)(read and write)	×
		File format	G2P (Binary)	○
		Drive name	X: Current drive	○
		Folder name	Package1\recipe	○
		File name	ARP30000	×
		Date format	yy/mm/dd	○
	Trigger device	Write trigger device 1	GB37150	×
		Read trigger device 1	Undone	×
		Record No. device	Undone	×
Device	Number of blocks	128		×
	Number of records	1		×
	Device value (Initial value)	Bit: 0 Character string: AXIS%d %d = 1 to 64		○
	Record name (Initial value)	Undone		○

Setting of machine diagnosis threshold (maximum) (recipe No. 30005)

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Recipe No.	30005		×
	Recipe name	Machine diag: threshold(max)		×
	Recipe data	Recipe data save location	Data storage (recipe file)(read and write)	×
		File format	G2P (Binary)	○
		Drive name	X: Current drive	○
		Folder name	Package1\recipe	○
		File name	ARP30005	×
		Date format	yy/mm/dd	○
	Trigger device	Write trigger device 1	GB37151	×
		Read trigger device 1	Undone	×
		Record No. device	Undone	×
Device	Number of blocks	320		×
	Number of records	1		×
	Device value (Initial value)	Numerical value: 0		○
	Record name (Initial value)	Undone		○

Setting of machine diagnosis standard value (recipe No. 30006)

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Recipe No.	30006		×
	Recipe name	Machine diag: standard value		×
	Recipe data	Recipe data save location	Data storage (recipe file)(read and write)	×
		File format	G2P (Binary)	○
		Drive name	X: Current drive	○
		Folder name	Package1\recipe	○
		File name	ARP30006	×
		Date format	yy/mm/dd	○
	Trigger device	Write trigger device 1	GB37152	×
		Read trigger device 1	Undone	×
		Record No. device	Undone	×
Device	Number of blocks	320		×
	Number of records	1		×
	Device value (Initial value)	Numerical value: 0		○
	Record name (Initial value)	Undone		○

Setting of machine diagnosis threshold (minimum) (recipe No. 30007)

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Recipe No.	30007		×
	Recipe name	Machine diag: threshold (min)		×
	Recipe data	Recipe data save location	Data storage (recipe file)(read and write)	×
		File format	G2P (Binary)	○
		Drive name	X: Current drive	○
		Folder name	Package1\recipe	○
		File name	ARP30007	×
		Date format	yy/mm/dd	○
	Trigger device	Write trigger device 1	GB37153	×
		Read trigger device 1	Undone	×
		Record No. device	Undone	×
Device	Number of blocks	320		×
	Number of records	1		×
	Device value (Initial value)	Numerical value: 0		○
	Record name (Initial value)	Undone		○

Setting of effective load ratio threshold (maximum) (recipe No. 30010)

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Recipe No.	30010		×
	Recipe name	Eff. load ratio: threshold(max)		×
	Recipe data	Recipe data save location	Data storage (recipe file)(read and write)	×
		File format	G2P (Binary)	○
		Drive name	X: Current drive	○
		Folder name	Package1\recipe	○
		File name	ARP30010	×
		Date format	yy/mm/dd	○
	Trigger device	Write trigger device 1	GB37154	×
		Read trigger device 1	Undone	×
		Record No. device	Undone	×
Device	Number of blocks	1		×
	Number of records	1		×
	Device value (Initial value)	Numerical value: 0		○
	Record name (Initial value)	Undone		○

Setting of effective load ratio threshold (minimum) (recipe No. 30011)

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Recipe No.	30011		×
	Recipe name	Eff. load ratio: threshold(min)		×
	Recipe data	Recipe data save location	Data storage (recipe file)(read and write)	×
		File format	G2P (Binary)	○
		Drive name	X: Current drive	○
		Folder name	Package1\recipe	○
		File name	ARP30011	×
		Date format	yy/mm/dd	○
	Trigger device	Write trigger device 1	GB37155	×
		Read trigger device 1	Undone	×
		Record No. device	Undone	×
Device	Number of blocks	1		×
	Number of records	1		×
	Device value (Initial value)	Numerical value: 0		○
	Record name (Initial value)	Undone		○

Device data transfer

○: Available, ×: Unavailable

Device data transfer ID	Device data transfer name	Application	Setting change
220	Machine diagnosis information	Acquires the machine diagnosis information when the screen of the machine diagnosis is displayed.	×
221	Alarm information	Acquires the alarm information of the servo amplifier periodically.	×
222	Effective load ratio information	Acquires the effective load ratio information when the screen of the effective load ratio is displayed.	×
223	Mobile OP monitor info: client1	Acquires the operation monitor information according to the selected axis when the operation monitor is displayed in client 1.	×
224	Mobile OP monitor info: client2	Acquires the operation monitor information according to the selected axis when the operation monitor is displayed in client 2.	×
225	Mobile OP monitor info: client3	Acquires the operation monitor information according to the selected axis when the operation monitor is displayed in client 3.	×
226	Mobile OP monitor info: client4	Acquires the operation monitor information according to the selected axis when the operation monitor is displayed in client 4.	×
227	Mobile OP monitor info: client5	Acquires the operation monitor information according to the selected axis when the operation monitor is displayed in client 5.	×

Setting of machine diagnosis information

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	220		×
	Device data transfer name	Machine diagnosis information		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD36664	×
		Trigger device	GD36664.b0	×
		Transfer inverting flag device	GD36664.b1	×
	External notification information	External notification device	GD36665	×
		Device data transfer notification signal	GD36665.b0	×
		BCD conversion error notification signal	GD36665.b14	×
		Device data transfer error notification signal	GD36665.b15	×
Device	Number of blocks	9		×

Setting of alarm information

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	221		×
	Device data transfer name	Alarm information		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD37216	×
		Trigger device	GD37216.b0	×
		Transfer inverting flag device	GD37216.b1	×
	External notification information	External notification device	GD37217	×
		Device data transfer notification signal	GD37217.b0	×
		BCD conversion error notification signal	GD37217.b14	×
		Device data transfer error notification signal	GD37217.b15	×
Device	Number of blocks	2		×

Setting of effective load ratio information

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	222		×
	Device data transfer name	Effective load ratio information		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD37992	×
		Trigger device	GD37992.b0	×
		Transfer inverting flag device	GD37992.b1	×
	External notification information	External notification device	GD37993	×
		Device data transfer notification signal	GD37993.b0	×
		BCD conversion error notification signal	GD37993.b14	×
		Device data transfer error notification signal	GD37993.b15	×
Device	Number of blocks	1		×

Setting of mobile OP monitor information client1

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	223		×
	Device data transfer name	Mobile OP monitor info: client1		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD38000	×
		Trigger device	GD38000.b0	×
		Transfer inverting flag device	GD38000.b1	×
	External notification information	External notification device	GD38001	×
		Device data transfer notification signal	GD38001.b0	×
		BCD conversion error notification signal	GD38001.b14	×
		Device data transfer error notification signal	GD38001.b15	×
Device	Number of blocks	23		×

Setting of mobile OP monitor information client2

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	224		×
	Device data transfer name	Mobile OP monitor info: client2		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD38002	×
		Trigger device	GD38002.b0	×
		Transfer inverting flag device	GD38002.b1	×
	External notification information	External notification device	GD38003	×
		Device data transfer notification signal	GD38003.b0	×
		BCD conversion error notification signal	GD38003.b14	×
		Device data transfer error notification signal	GD38003.b15	×
Device	Number of blocks	23		×

Setting of mobile OP monitor infomation client3

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	225		×
	Device data transfer name	Mobile OP monitor info: client3		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD38004	×
		Trigger device	GD38004.b0	×
		Transfer inverting flag device	GD38004.b1	×
	External notification information	External notification device	GD38005	×
		Device data transfer notification signal	GD38005.b0	×
		BCD conversion error notification signal	GD38005.b14	×
		Device data transfer error notification signal	GD38005.b15	×
Device	Number of blocks	23		×

Setting of mobile OP monitor infomaiton client4

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	226		×
	Device data transfer name	Mobile OP monitor info: client4		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD38006	×
		Trigger device	GD38006.b0	×
		Transfer inverting flag device	GD38006.b1	×
	External notification information	External notification device	GD38007	×
		Device data transfer notification signal	GD38007.b0	×
		BCD conversion error notification signal	GD38007.b14	×
		Device data transfer error notification signal	GD38007.b15	×
Device	Number of blocks	23		×

Setting of mobile OP monitor infomaiton client5

○: Available, ×: Unavailable

Setting item		Setting		Setting change
Basic	Device data transfer ID	227		×
	Device data transfer name	Mobile OP monitor info: client5		○
	Device data transfer trigger	Trigger type	Rising	×
		External control device	GD38008	×
		Trigger device	GD38008.b0	×
		Transfer inverting flag device	GD38008.b1	×
	External notification information	External notification device	GD38009	×
		Device data transfer notification signal	GD38009.b0	×
		BCD conversion error notification signal	GD38009.b14	×
		Device data transfer error notification signal	GD38009.b15	×
Device	Number of blocks	23		×

Script

Project script

○: Available, ×: Unavailable

No.	Script name	Setting change
30010	AP_initialization (Project common_Initialization)	×
30011	AP_recipe writing handshake (Project common_Recipe writing handshake)	×
30012	VIAS_recipe check (Valid/Invalid axis setting_Recipe check)	×
30013	VIAS_obtain axis number (Valid/Invalid axis setting_Axis number acquisition)	×
30014	VIAS_select axis for monitoring (Valid/Invalid axis setting_Monitor axis selection)	×
30015	AP_recipe reading handshake (Project common_Recipe reading handshake)	×
30016	AP_monitor displayed screen (Project common_Display screen monitoring)	×
30017	AP_write recipe at startup (Project common_Initial automatic recipe writing)	×
30018	VIAS_change valid axes (Valid/Invalid axis setting_Valid axis change processing)	×
30019	MID_CSV file read (Manual display_CSV file reading)	×
30020	MD_initialization (Machine diagnosis_Initialization)	×
30021	MD_judge estimation completion (Machine diagnosis_Estimation completion judgment)	×
30022	MD_check estimation value (Machine diagnosis_Estimation value/Threshold value comparison)	×
30023	AP_Judge DD transfer start (Project common_Device data transfer start judgment)	×
30027	MD_execute DD transfer cycle (Machine diagnosis_Device data transfer cycle execution)	×
30028	MD_start device data transfer (Machine diagnosis_Device data transfer start)	×
30029	MD_handshake for device data tra (Machine diagnosis_Device data transfer handshake)	×
30035	ELR_execute DD transfer 3s cycle (Effective load ratio_Device data transfer 3s cycle execution)	×
30036	ELR_start device data transfer (Effective load ratio_Device data transfer start)	×
30037	ELR_handshake for DD transfer (Effective load ratio_Device data transfer handshake)	×
30040	ELR_compare estimation value (Effective load ratio_Current value/Threshold value comparison)	×
30041	MD_refresh display (Machine diagnosis_Display update)	×
30044	A_start device data transfer (Alarm_Device data transfer start)	×
30045	A_handshake for DD transfer (Alarm_Device data transfer handshake)	×
30046	A_create info for UA observation (Alarm_Creation of information for user alarm observation)	×
30072	MMD_reset C5 graph (Mobile machine diagnosis_Graph line reset for client 5)	×

No.	Script name	Setting change
30073	MMD_reset C4 graph (Mobile machine diagnosis_Graph line reset for client 4)	×
30074	MMD_reset C3 graph (Mobile machine diagnosis_Graph line reset for client 3)	×
30075	MMD_reset C2 graph (Mobile machine diagnosis_Graph line reset for client 2)	×
30076	MMD_reset C1 graph (Mobile machine diagnosis_Graph line reset for client 1)	×
30077	MMD_initial C5 graph display (Mobile machine diagnosis_Graph initial display for client 5)	×
30078	MMD_initial C4 graph display (Mobile machine diagnosis_Graph initial display for client 4)	×
30079	MMD_initial C3 graph display (Mobile machine diagnosis_Graph initial display for client 3)	×
30080	MMD_initial C2 graph display (Mobile machine diagnosis_Graph initial display for client 2)	×
30081	MMD_initial C1 graph display (Mobile machine diagnosis_Graph initial display for client 1)	×
30082	MMD_display setting for C5 (Mobile machine diagnosis_Graph screen display setting for client 5)	×
30083	MMD_display setting for C4 (Mobile machine diagnosis_Graph screen display setting for client 4)	×
30084	MMD_display setting for C3 (Mobile machine diagnosis_Graph screen display setting for client 3)	×
30085	MMD_display setting for C2 (Mobile machine diagnosis_Graph screen display setting for client 2)	×
30086	MMD_display setting for C1 (Mobile machine diagnosis_Graph screen display setting for client 1)	×
30087	MAP_monitor C5 displayed screen (mobile common_Display screen monitoring for client 5)	×
30088	MAP_monitor C4 displayed screen (mobile common_Display screen monitoring for client 4)	×
30089	MAP_monitor C3 displayed screen (mobile common_Display screen monitoring for client 3)	×
30090	MAP_monitor C2 displayed screen (mobile common_Display screen monitoring for client 2)	×
30091	MAP_monitor C1 displayed screen (mobile common_Display screen monitoring for client 1)	×
30092	MOM_transfer parameter for C5 (Mobile operation monitor_Parameter transfer for client 5)	×
30093	MOM_transfer parameter for C4 (Mobile operation monitor_Parameter transfer for client 4)	×
30094	MOM_transfer parameter for C3 (Mobile operation monitor_Parameter transfer for client 3)	×
30095	MOM_transfer parameter for C2 (Mobile operation monitor_Parameter transfer for client 2)	×
30096	MOM_transfer parameter for C1 (Mobile operation monitor_Parameter transfer for client 1)	×
30097	MOM_check DD state for C1 (Mobile operation monitor_DD completion check_Client 1)	×
30098	MOM_check DD state for C2 (Mobile operation monitor_DD completion check_Client 2)	×
30099	MOM_check DD state for C3 (Mobile operation monitor_DD completion check_Client 3)	×
30100	MOM_check DD state for C4 (Mobile operation monitor_DD completion check_Client 4)	×
30101	MOM_check DD state for C5 (Mobile operation monitor_DD completion check_Client 5)	×
30102	MMD_graph max_min (FR) for C1 (Mobile machine diagnosis_Graph upper/lower limit value setting (friction) for client 1)	×

No.	Script name	Setting change
30103	MMD_graph max_min (FR) for C2 (Mobile machine diagnosis_Graph upper/lower limit value setting (friction) for client 2)	×
30104	MMD_graph max_min (FR) for C3 (Mobile machine diagnosis_Graph upper/lower limit value setting (friction) for client 3)	×
30105	MMD_graph max_min (FR) for C4 (Mobile machine diagnosis_Graph upper/lower limit value setting (friction) for client 4)	×
30106	MMD_graph max_min (FR) for C5 (Mobile machine diagnosis_Graph upper/lower limit value setting (friction) for client 5)	×
30107	MMD_graph max_min (VB) for C1 (Mobile machine diagnosis_Graph upper/lower limit value setting (vibration) for client 1)	×
30108	MMD_graph max_min (VB) for C2 (Mobile machine diagnosis_Graph upper/lower limit value setting (vibration) for client 2)	×
30109	MMD_graph max_min (VB) for C3 (Mobile machine diagnosis_Graph upper/lower limit value setting (vibration) for client 3)	×
30110	MMD_graph max_min (VB) for C4 (Mobile machine diagnosis_Graph upper/lower limit value setting (vibration) for client 4)	×
30111	MMD_graph max_min (VB) for C5 (Mobile machine diagnosis_Graph upper/lower limit value setting (vibration) for client 5)	×

Screen script

○: Available, ×: Unavailable

No.	Script name	Application	Setting change
30002	CS_display (Clock setting_Display processing)	Sets the value to be displayed in the clock setting.	×
30003	CS_reflection (Clock setting_Reflection setting)	Reflects the changed value when the clock setting is changed.	×
30150	TN_Gain adjustment mode setting (Tuning_Gain adjustment setting)	Controls the parameter that can be set according to the gain adjustment mode.	×
30200	FS_Monitor1 (Filter setting_Monitor 1)	Expands the parameter of the servo amplifier related to the machine resonance suppression filter.	×
30201	FS_fillter1_setting (Filter setting_Filter 1_Setting)	Reflects the value changed in the filter tuning mode selection of filter 1 to the parameter of the servo amplifier.	×
30202	FS_fillter2_setting (Filter setting_Filter 2_Setting)	Reflects the value changed in the filter 2 selection to the parameter of the servo amplifier.	×
30203	FS_fillter3_setting (Filter setting_Filter 3_Setting)	Reflects the value changed in the filter 3 selection to the parameter of the servo amplifier.	×
30204	FS_fillter4_setting (Filter setting_Filter 4_Setting)	Reflects the value changed in the filter 4 selection to the parameter of the servo amplifier.	×
30205	FS_fillter5_setting (Filter setting_Filter 5_Setting)	Reflects the value changed in the filter 5 selection to the parameter of the servo amplifier.	×
30206	FS_Monitor 2 (Filter setting_Monitor 2)	Expands the parameter of the servo amplifier related to other filters.	×
30207	FS_Robust fillter_setting (Filter setting_Robust filter_Setting)	Reflects the value changed in the robust filter to the parameter of the servo amplifier.	×
30208	FS_fillter1_Notch width (Filter setting_Filter 1_Notch width)	Reflects the value changed in the filter 1 notch width to the parameter of the servo amplifier.	×
30209	FS_fillter2_Notch width (Filter setting_Filter 2_Notch width)	Reflects the value changed in the filter 2 notch width to the parameter of the servo amplifier.	×
30210	FS_fillter3_Notch width (Filter setting_Filter 3_Notch width)	Reflects the value changed in the filter 3 notch width to the parameter of the servo amplifier.	×
30211	FS_fillter4_Notch width (Filter setting_Filter 4_Notch width)	Reflects the value changed in the filter 4 notch width to the parameter of the servo amplifier.	×
30212	FS_fillter5_Notch width (Filter setting_Filter 5_Notch width)	Reflects the value changed in the filter 5 notch width to the parameter of the servo amplifier.	×
30213	FS_fillter1_Notch depth (Filter setting_Filter 1_Notch depth)	Reflects the value changed in the filter 1 notch depth to the parameter of the servo amplifier.	×
30214	FS_fillter2_Notch depth (Filter setting_Filter 2_Notch depth)	Reflects the value changed in the filter 2 notch depth to the parameter of servo the amplifier.	×

No.	Script name	Application	Setting change
30215	FS_fillter3_Notch depth (Filter setting_Filter 3_Notch depth)	Reflects the value changed in the filter 3 notch depth to the parameter of servo the amplifier.	×
30216	FS_fillter4_Notch depth (Filter setting_Filter 4_Notch depth)	Reflects the value changed in the filter 4 notch depth to the parameter of the servo amplifier.	×
30217	FS_fillter5_Notch depth (Filter setting_Filter 5_Notch depth)	Reflects the value changed in the filter 5 notch depth to the parameter of the servo amplifier.	×
30218	FS_Low-pass fillter_setting (Filter setting_Low-pass filter_Setting)	Reflects the value changed in the low-pass filter selection to the parameter of the servo amplifier.	×
30219	FS_shaft res. supp._setting (Filter setting_Shaft resonance suppression filter_Setting)	Reflects the value changed in the shaft resonance suppression filter selection to the parameter of the servo amplifier.	×
30220	FS_shaft res. supp._frequency (Filter setting_Shaft resonance suppression filter_Frequency)	Reflects the value changed in the shaft resonance suppression filter frequency to the parameter of the servo amplifier.	×
30221	FS_shaft res. supp._Notch depth (Filter setting_Shaft resonance suppression filter_Notch depth)	Reflects the value changed in the shaft resonance suppression filter notch depth to the parameter of the servo amplifier.	×
30250	VSC_Monitor (Vibration suppression control setting_Monitor)	Expands the parameter of the servo amplifier related to the vibration suppression control setting.	×
30251	VSC_Vib.Supp.Ctrl. mode select (Vibration suppression control setting_Vibration suppression control mode selection)	Reflects the value changed in the vibration suppression mode selection to the parameter of the servo amplifier.	×
30252	VSC_Control setting 1 (Vibration suppression control setting_Control setting 1)	Reflects the value changed in the vibration suppression control 1 to the parameter of the servo amplifier.	×
30253	VSC_Control setting 2 (Vibration suppression control setting_Control setting 2)	Reflects the value changed in the vibration suppression control 2 to the parameter of the servo amplifier.	×
30300	OT_Response mode select (One-touch tuning_Response mode selection)	Executes the one-touch tuning in the selected response mode.	×
30350	TO_Superimpose window display (Test operation_Superimpose window display)	Displays the superimpose window when the [JOG Operation] screen (B-30310) and [Positioning Operation] screen (B-30320) are displayed.	×
30360	TO_JOG operation mode (Test operation_JOG operation mode)	Controls the start/end of the JOG operation mode.	×
30361	TO_Positioning Operation mode (Test operation_Positioning operation mode)	Controls the start/end of the positioning operation mode.	×
30370	TO_Moter speed (Test operation_Motor speed transfer)	Reflects the motor speed transfer setting used in the test operation.	×
30371	TO_Accel. Decel. time constant (Test operation_Acceleration/Deceleration time constant transfer)	Reflects the acceleration/deceleration time constant setting used in the test operation.	×
30372	TO_Move distance (Test operation_Move distance transfer)	Reflects the move distance setting used in the test operation.	×
30380	TO_JOG operation_Fwd rot. (Test operation_JOG operation_Forward rotation)	Executes the forward rotation in the JOG operation mode.	×
30381	TO_JOG operation_Rev rot. (Test operation_JOG operation_Reverse rotation)	Executes the reverse rotation in the JOG operation mode.	×
30450	TO_Output signal forced output (Test operation_Output signal (DO) forced output)	Controls start/end of the output signal (DO) forced output.	×
30451	TO_Output signal select (Test operation_Output signal selection)	Reflects the selection status of the signal to be output forcibly.	×
30550	P_Superimpose window display (Parameter_Superimpose window display)	Switches the superimpose window to be displayed depending on the displayed parameter screen.	×
30600	MD_estimation list (FR) INT (Machine diagnosis_Estimation value list (friction) initial setting)	Displays the superimpose window when the screen is displayed.	×
30601	MD_estimation list (VB) INT (Machine diagnosis_Estimation value list (vibration) initial setting)	Displays the superimpose window when the screen is displayed.	×
30602	MD_display setting (Machine diagnosis_Display setting)	Calculates the estimation value and threshold value of the axis to be monitored.	×
30603	MD_initial graph display (Machine diagnosis_Initial graph display)	Performs the initial display processing on the graph screen and sets the upper and lower limit values of the graph according to the friction estimation value and vibration estimation value.	×

No.	Script name	Application	Setting change
30604	MD_reset graph (Machine diagnosis_Graph line reset)	Deletes the threshold value line and reference line when the graph line of the estimation value is deleted.	×
30605	MD_transfer estimation for CP (Machine diagnosis_Transfer of estimation value for reference value)	Saves the reference value to the recipe when it is acquired and deleted.	×
30606	MD_display estimation (Machine diagnosis_Estimation value display)	Acquires the estimated status of the machine diagnosis and displays the estimation value.	×
30608	MD_process(Max) for recipe RD (Machine diagnosis_Threshold value (upper limit) recipe reading pre-processing)	Initializes the recipe to save the threshold value (upper limit) of the machine diagnosis.	×
30609	MD_process(Min) for recipe RD (Machine diagnosis_Threshold value (lower limit) recipe reading pre-processing)	Initializes the recipe to save the threshold value (lower limit) of the machine diagnosis.	×
30610	MD obtain all,delete all for std (Machine diagnosis_Reference value batch acquisition/deletion processing)	Saves the reference values to the recipe when they are acquired and deleted in a batch.	×
30611	MD recipe writing of obt,del std (Machine diagnosis_Recipe writing processing of the acquired/deleted reference value)	Expands the information of the reference value.	×
30612	MD initial display of std screen (Machine diagnosis_Reference value setting screen initial display processing)	When the [Machine Diag.Graph (Friction)] window (W-30704) or [Machine Diag.Graph (Vibration)] window (W-30714) appears for the first time, the [Machine Diag.Standard Val.Set] window (W-30706) is displayed.	×
30613	MD initial display of thr screen (Machine diagnosis_Threshold value setting screen initial display processing)	When the [Machine Diagnosis] screen (B-30600) appears for the first time, the [Machine Diag. Threshold Setting] window (W-30600) is displayed.	×
30614	MD int display of thr list (FR) (Machine diagnosis_Threshold value list (friction) setting screen initial display processing)	When the [Machine Diag. Estimation (Fric)] screen (B-30700) appears for the first time, the [Machine Diag. Threshold (Fric)1] window (W-30702) is displayed.	×
30615	MD_closing window screen (Machine diagnosis_Window screen closing processing)	When the displayed base screen is switched, the window screen is closed.	×
30750	DM_process the last page (Manual display_Last page processing)	Controls the pages so that the last page is not exceeded.	×
30751	Document ID set (Document ID set)	Switches the document to be displayed according to the language switching device.	×
30800	IO_Input Output Device monitor (I/O monitor_I/O device monitor)	Expands the I/O device status to the display device.	×
30850	ELR_process(Max) for recipe RD (Effective load ratio_Threshold value (upper limit) recipe reading pre-processing)	Initializes the recipe to save the threshold value (upper limit) of the effective load ratio.	×
30851	ELR_process(Min) for recipe RD (Effective load ratio_Threshold value (lower limit) recipe reading pre-processing)	Initializes the recipe to save the threshold value (lower limit) of the effective load ratio.	×
30900	VIAS_cancellation (Valid/Invalid axis setting_Cancel processing)	Resets the changed setting status.	×
30902	VIAS_control display axis range (Valid/Invalid axis setting_Display axis range control)	Controls the display range depending on the number of axes of the device.	×
30903	VIAS_limit number of valid axes (Valid/Invalid axis setting_Limitation on the number of valid axes)	Limits the number of valid axes.	×
30951	AS_processing offset for names (Axis selection_Name offset processing)	Extracts the name of the valid axis.	×
30953	AS_control display (Axis selection_Display control)	Controls the display contents depending on the number of valid axes.	×
30042	MID_select page (Manual display_Select page)	Sets the page to be displayed according to the alarm information.	×

Object script

Screen used	Object	Application	Setting change
W-30704	Word comment display	Draws lines of the estimation value, reference value, and threshold value on the graph.	×
	Numerical input (Friction torque threshold value at rated speed)	Executes redraw_screen() when the threshold value is input.	×
	Numerical input (Coulomb friction threshold value)	Executes redraw_screen() when the threshold value is input.	×
W-30714	Word comment display	Draws lines of the estimation value and reference value on the graph.	×
B-31200	Switch (Page switching →)	Controls the display target pages so that they do not exceed the total number of pages.	×

Script symbol

○: Available, ×: Unavailable

No.	Symbol name	Device and constant	Setting	Setting change
9000	GTSV_AXIS_NUMBER	Default: 16 Setting range: 16, 32, or 64	Set the total number of axes that can be controlled by the module (simple motion or motion CPU) used. If a value other than 16, 32, or 64 is set, it operates as 16 is set.	○
9001	GTSV_EFCTLDRT_OFFSET	Default of GTSV_J4-B_SMT_*****: 100 Default of GTSV_J4-B_MT_*****: 20 Setting range: 20 or 100	Set the value according to the module (simple motion or motion CPU) used. Simple motion: 100 Motion CPU: 20 If a value other than 20 or 100 is set, it does not operate properly.	○
9003	GTSV_MOBILE_OFFSET	1024	Specify the number of GOT Mobile devices to be assigned. If the setting is changed, it does not operate properly.	×
9004	GTSV_AX1_FWD_EST_CANCEL	OFF Setting range: ON or OFF	Set whether to execute the estimation completion processing of the axis 1 forward rotation. ON: Estimation completion processing not executed OFF: Estimation completion processing executed If a value other than ON or OFF is set, it does not operate properly.	○
9005	GTSV_AX1_RVS_EST_CANCEL	OFF Setting range: ON or OFF	Set whether to execute the estimation completion processing of the axis 1 reverse rotation. ON: Estimation completion processing not executed OFF: Estimation completion processing executed If a value other than ON or OFF is set, it does not operate properly.	○
9006	GTSV_AX1_VB_EST_CANCEL	OFF Setting range: ON or OFF	Set whether to execute the estimation completion processing of the axis 1 vibration. ON: Estimation completion processing not executed OFF: Estimation completion processing executed If a value other than ON or OFF is set, it does not operate properly.	○
:	:	:	:	:
9193	GTSV_AX64_FWD_EST_CANCEL	OFF Setting range: ON or OFF	Set whether to execute the estimation completion processing of the axis 64 forward rotation. ON: Estimation completion processing not executed OFF: Estimation completion processing executed If a value other than ON or OFF is set, it does not operate properly.	○
9194	GTSV_AX64_RVS_EST_CANCEL	OFF Setting range: ON or OFF	Set whether to execute the estimation completion processing of the axis 64 reverse rotation. ON: Estimation completion processing not executed OFF: Estimation completion processing executed If a value other than ON or OFF is set, it does not operate properly.	○
9195	GTSV_AX64_VB_EST_CANCEL	OFF Setting range: ON or OFF	Set whether to execute the estimation completion processing of the axis 64 vibration. ON: Estimation completion processing not executed OFF: Estimation completion processing executed If a value other than ON or OFF is set, it does not operate properly.	○
9196	GTSV_WINDOW_SCR_NUM_TO_HIDE	0	Set the number to [Screen No. of the window screen to be hidden]. Setting change disables proper operation.	×

Object script symbol

A object script symbol is not set.

Logging

○: Available, ×: Unavailable

Logging ID	Logging name	Detail	Setting change
30010	Machine diagnosis: estimation1	This setting is for displaying the machine diagnosis estimation of the smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30011	Machine diagnosis: estimation2	This setting is for displaying the machine diagnosis estimation of the 2nd smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30012	Machine diagnosis: estimation3	This setting is for displaying the machine diagnosis estimation of the 3rd smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30013	Machine diagnosis: estimation4	This setting is for displaying the machine diagnosis estimation of the 4th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30014	Machine diagnosis: estimation5	This setting is for displaying the machine diagnosis estimation of the 5th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30015	Machine diagnosis: estimation6	This setting is for displaying the machine diagnosis estimation of the 6th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30016	Machine diagnosis: estimation7	This setting is for displaying the machine diagnosis estimation of the 7th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30017	Machine diagnosis: estimation8	This setting is for displaying the machine diagnosis estimation of the 8th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30018	Machine diagnosis: estimation9	This setting is for displaying the machine diagnosis estimation of the 9th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30019	Machine diagnosis: estimation10	This setting is for displaying the machine diagnosis estimation of the 10th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30020	Machine diagnosis: estimation11	This setting is for displaying the machine diagnosis estimation of the 11th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30021	Machine diagnosis: estimation12	This setting is for displaying the machine diagnosis estimation of the 12th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30022	Machine diagnosis: estimation13	This setting is for displaying the machine diagnosis estimation of the 13th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30023	Machine diagnosis: estimation14	This setting is for displaying the machine diagnosis estimation of the 14th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30024	Machine diagnosis: estimation15	This setting is for displaying the machine diagnosis estimation of the 15th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×
30025	Machine diagnosis: estimation16	This setting is for displaying the machine diagnosis estimation of the 16th smallest valid axis number in the machine diagnosis (graph) screen in a graph.	×

Alarm

○: Available, ×: Unavailable

Alarm ID	Alarm name	Detail	Power-failure backup setting in the built-in memory of the GOT	Setting change
30000	Servo amplifier error info	Collects information of alarms occurring in the servo amplifier.	Power-failure backup is not performed.	×

System alarm observation

○: Available, ×: Unavailable

Setting item			Setting	Setting change
Use system alarm			Use	×
Target	CPU error		Use	×
	GOT error		Use	×
	Network error		Use	×
	Detail	Include errors occurred in clients connected to the server of GOT Mobile function	Use	○
Get detailed alarm information			Use	○
Record label/tag name at the time of alarm generation			No	○
Collection mode			Historical mode	○
Buffering	Retain data in the embedded memory in GOT even when the power goes off (The battery will be required)		Use	○
	Stored number		512	○
	Action when buffer is full		Delete old data	○
	Full notification signal device		No	○
	Buffering data clear trigger device		No	○

Alarm popup display

○: Available, ×: Unavailable

Setting item	Setting	Setting change
Use alarm popup display	Use	×
Display alarm	System alarm	×
Display number	Multiple	○
Display type	Flow	○
Flow rate	Low	○
Close up the space between alarm comments	No	○
Display position switching	Yes	○
Contents	Refer to the following. ☞ Page 181 Date/time setting	○
Display order	Occurrence date, comment	○
Display detailed system alarm information	Use	○
Touch mode	Screen switching	×
Destination screen No.	Overlap window 1	×
	W-30000 GOT system alarm reset	×

Date/time setting

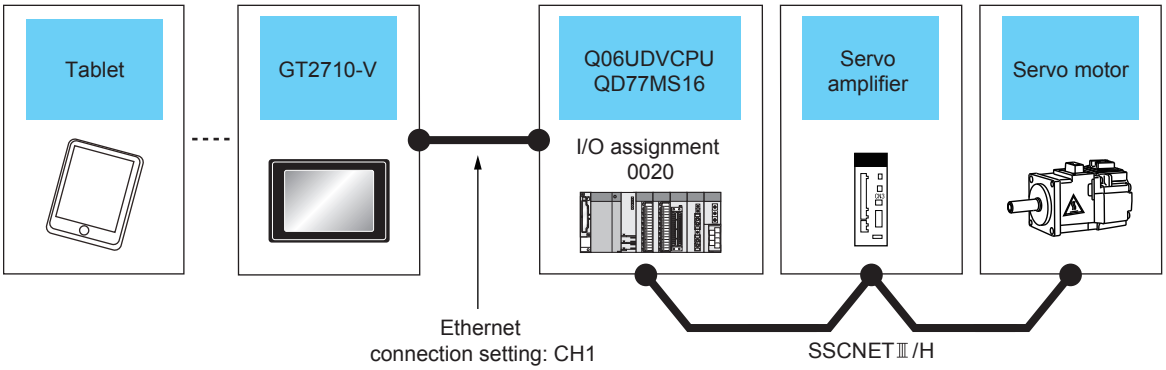
○: Available, ×: Unavailable

Setting item		Setting	Setting change
Description		Date/Time	○
Date setting	Date type	yy/mm/dd	○
	Delimiter	/	○
	Fill with 0	Use	○
	Change the sort setting along with language switching	Use	○
Time setting	Time type	hh:mm	○
	Fill with 0	Use	○

MEMO

4 UTILIZATION PROCEDURE

This chapter explains how to utilize the add-on project for a servo amplifier for the existing project data in which the GOT is used as the following system configuration example.



4.1 Preparation for Utilizing Data

Before utilizing data, changing settings of the existing project data is required.

Backup

■Backup of the existing project data

Utilizing the add-on project for a servo amplifier changes settings of the existing project data.
Make sure to back up the existing project data.

■GOT Mobile setting

When the GOT Mobile setting is used in the existing project data, the existing GOT Mobile setting is overwritten with the GOT Mobile setting of the add-on project for a servo amplifier.
Before utilizing the add-on project for a servo amplifier, always keep a copy of the existing project data settings.
After utilizing data, correct the GOT Mobile setting according to the existing system configuration.
For the details of the GOT Mobile setting of the add-on project for a servo amplifier, refer to the following.
☞ Page 161 GOT Mobile setting

■Recipe common setting

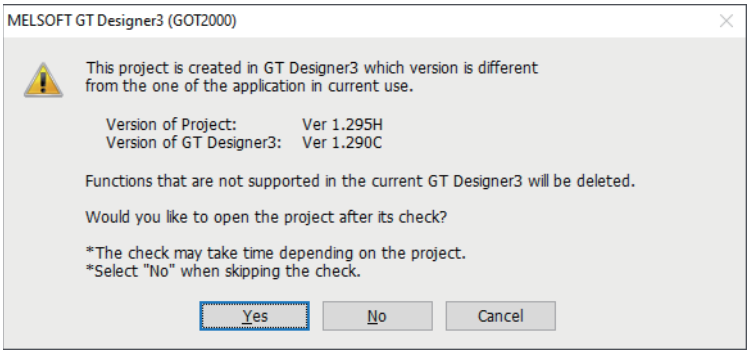
When the recipe common setting is used in the existing project data, the existing recipe common setting is overwritten with the recipe common setting of the add-on project for a servo amplifier.
Before utilizing the add-on project for a servo amplifier, always keep a copy of the existing project data settings.

Version of the software used

Use the software with the following version.

Software	Version
GT Designer3	1.205P or later*1
MT Developer2	1.137T or later

*1 If the following dialog appears, install the latest version of GT Designer3.



Controller channel setting of the existing project data

When the add-on project for a servo amplifier is utilized, one of the channels in [Controller Setting] is occupied.

When all the channels 1 to 4 are used in [Controller Setting] of the existing project data, the add-on project for a servo amplifier cannot be utilized.

Clear one channel in [Controller Setting].

Screens required to be utilized

The following screens are required when the add-on project for a servo amplifier is utilized.

Make sure to utilize them.

Do not delete these screens even when the data size (ROM, RAM size) exceeds the maximum memory capacity.

Screen type	Screen No.	Title
Base screen	30000	Menu
Window screen	30000	GOT System Alarm Reset
Window screen	32501	Valid/Invalid Axis settings

Changing the folder name of the resource data storage location

Change the folder name of the resource data storage location in the existing project data to "Package1".

Deleting sample screen data

If the Mitsubishi Electric Corporation servo amplifier MELSERVO-J4 series MR-J4-B sample screen data of the following versions is used in the existing project data, the add-on project for a servo amplifier does not operate properly.
Delete the screens and settings of the sample screen data.

Item	Version
Sample version given in the FA Global Website	4 or earlier
GT Works3 installer version of the sample included with GT Works3	1.200J or earlier

Changing GOT internal devices and GOT Mobile devices

GOT internal devices and GOT Mobile devices are used in the add-on project for a servo amplifier.
If GOT internal devices and GOT Mobile devices used in the existing project data overlap with the use prohibited areas of the add-on project for a servo amplifier setting range, change the range to be used in the existing project data.
For the setting range of the GOT internal device and GOT Mobile device of the add-on project for a servo amplifier, refer to the following.
☞ Page 162 Device

Changing screen numbers

The base screen, window screen, and mobile screen are used in the add-on project for a servo amplifier.
If the screen numbers of the base screen, window screen, and mobile screen used in the existing project data overlap with the setting range in the following table, change the range to be used of the existing project data.

Item	Setting range of add-on project for a servo amplifier
Base screen	Screen No.: 30000 to 32767
Window screen	Screen No.: 30000 to 32767
Mobile screen	Screen No.: 30000 to 32767

Changing IDs and numbers of the functions running in the background on the GOT and parts numbers

Functions running in the background on the GOT and parts are used in the add-on project for a servo amplifier.
If the IDs, numbers, and parts number of the functions running in the background on the GOT used in the existing project data overlap with the setting range in the following table, change the range to be used of the existing project data.

Item	Setting range of add-on project for a servo amplifier
Alarm	Alarm ID: 30000
Logging	Logging ID: 30000 to 32767
Recipe	Recipe No.: 30000 to 32767
Device data transfer	Device Data Transfer ID: 220 to 239
Script	Script No.: 30000 to 32767
Comment	Comment group No.: 400 to 500
Part	Parts No.: 30000 to 32767
Document display	Document display ID: 30000 to 32767

Changing script symbols

Script symbols are used in the add-on project for a servo amplifier.
If the numbers or symbol names of the script symbols used in the existing project data overlap with the following, change the number or symbol name of the script symbol of the existing project data.

No.	Symbol name
9000	GTSV_AXIS_NUMBER
9001	GTSV_EFCTLDRT_OFFSET
9003	GTSV_MOBILE_OFFSET
9004	GTSV_AX1_FWD_EST_CANCEL
9005	GTSV_AX1_RVS_EST_CANCEL
9006	GTSV_AX1_VB_EST_CANCEL
9007	GTSV_AX2_FWD_EST_CANCEL
9008	GTSV_AX2_RVS_EST_CANCEL
9009	GTSV_AX2_VB_EST_CANCEL
:	:
9193	GTSV_AX64_FWD_EST_CANCEL
9194	GTSV_AX64_RVS_EST_CANCEL
9195	GTSV_AX64_VB_EST_CANCEL
9196	GTSV_WINDOW_SCR_NUM_TO_HIDE

Changing labels (GT Designer3)

Labels (GT Designer3) are used in the add-on project for a servo amplifier.
If the label group numbers or label group names of the labels (GT Designer3) used in the existing project data overlap with the following, change the label group No. or label group name of the existing project data.

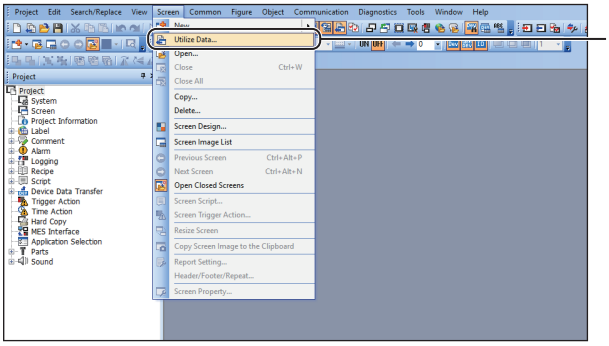
Label group number	Label group name
100	Com_Label
101	SV_Label

4.2 Utilizing Data

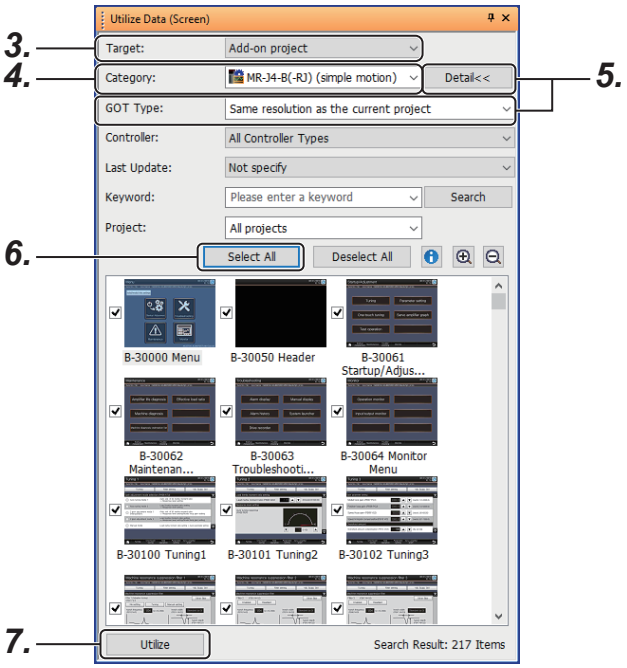
How to utilize screens of the add-on project for a servo amplifier for the existing project data

This section explains how to utilize the screens of the add-on project for a servo amplifier for the existing project data.

1. Open an existing project data on GT Designer3.
2. Select [Screen] → [Utilize Data] from the menu.



3. Select [Add-on project] from [Target] in the [Utilize Data (Screen)] window.



4. Select [Category] according to the existing system configuration.

In this example, [MR-J4-B(-RJ)(simple motion)] is selected.

5. Open the item by clicking the [Detail] button, and select the GOT type according to the existing system configuration in [GOT Type].
6. Click the displayed window, and click the [Select All] button.

All of the utilizing target screens are selected.

When the displayed window is not clicked, the [Select All] button is not enabled.

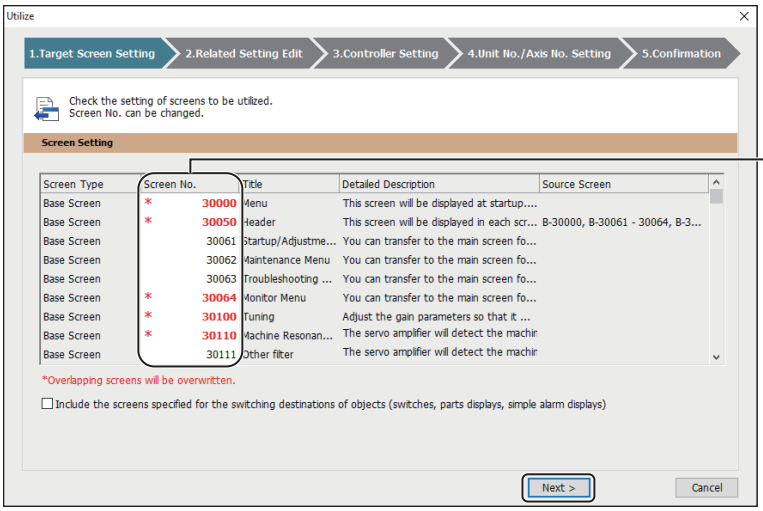
7. Click the [Utilize] button.

8. Check [Target Screen Setting] in the [Utilize] dialog.

Check that the screens used in the add-on project for a servo amplifier and existing project data do not overlap with their numbers, and click the [Next] button.

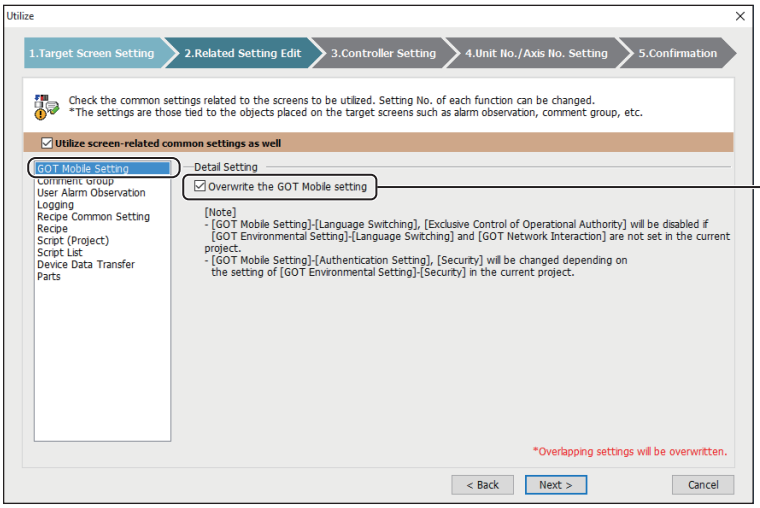
If they do, change the screen number of the existing project data referring to the following.

☞ Page 185 Preparation for Utilizing Data



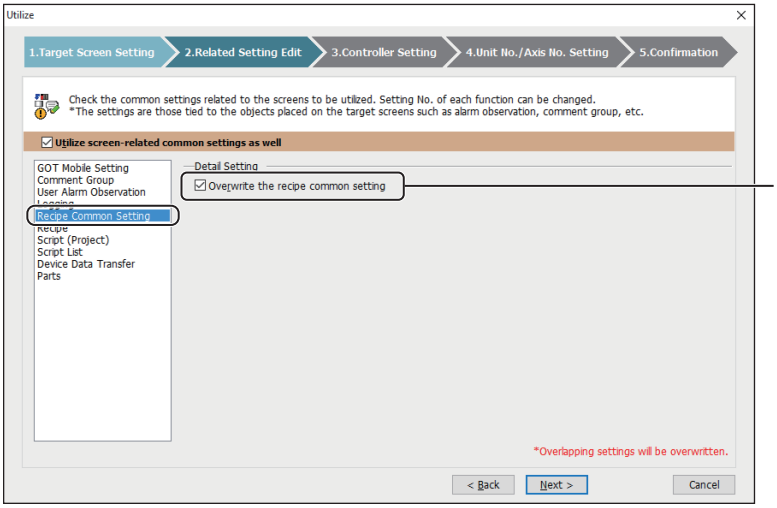
9. Check [GOT Mobile Setting] of [Related Setting Edit].

Select [Overwrite the recipe common setting] of [Detail Setting].



10. Check [Recipe Common Setting] of [Related Setting Edit].

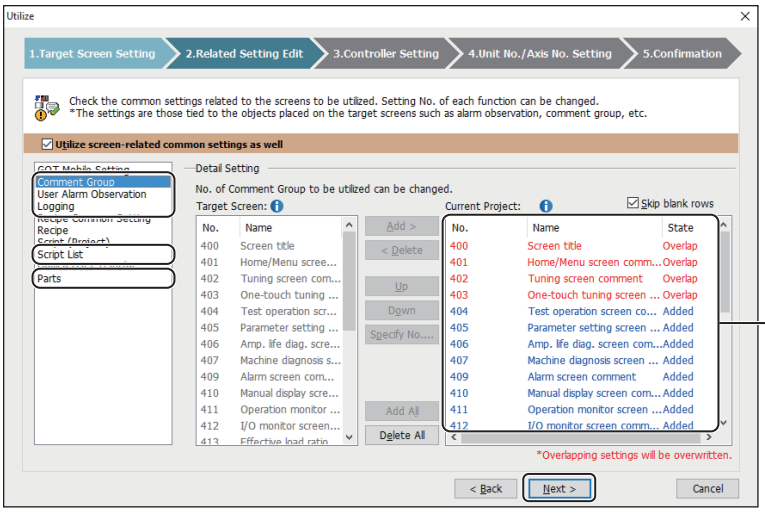
Select [Overwrite the recipe setting] of [Detail Setting].



11. For [Comment Group], [User Alarm Observation], [Logging], [Script List], and [Parts], check that the IDs, numbers, and parts numbers used in the add-on project for a servo amplifier ([Target Screen]) and existing project data ([Current Project]) do not overlap, and click the [Next] button.

If they do, change the ID, number, or part number of the existing project data referring to the following.

☞ Page 185 Changing IDs and numbers of the functions running in the background on the GOT and parts numbers

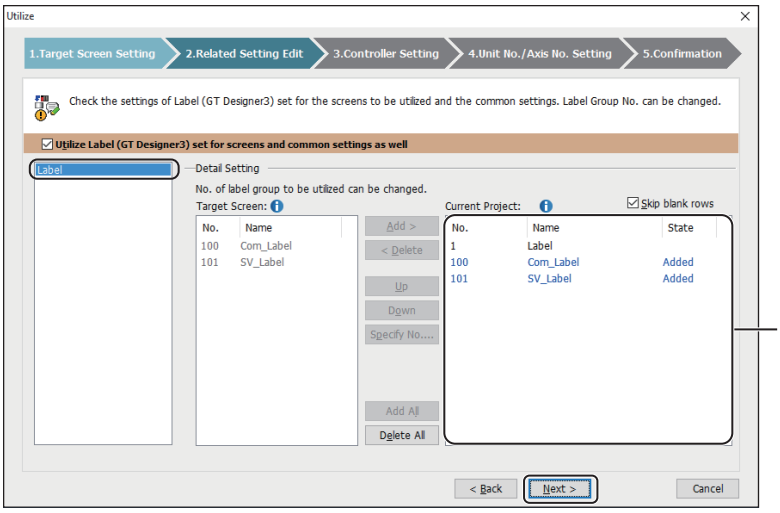


11.

12. For [Label], check that the label group numbers used in the add-on project for a servo amplifier ([Target Screen]) and existing project data ([Current Project]) do not overlap, and click the [Next] button.

If they do, change the label group number of the existing project data referring to the following.

☞ Page 186 Changing labels (GT Designer3)

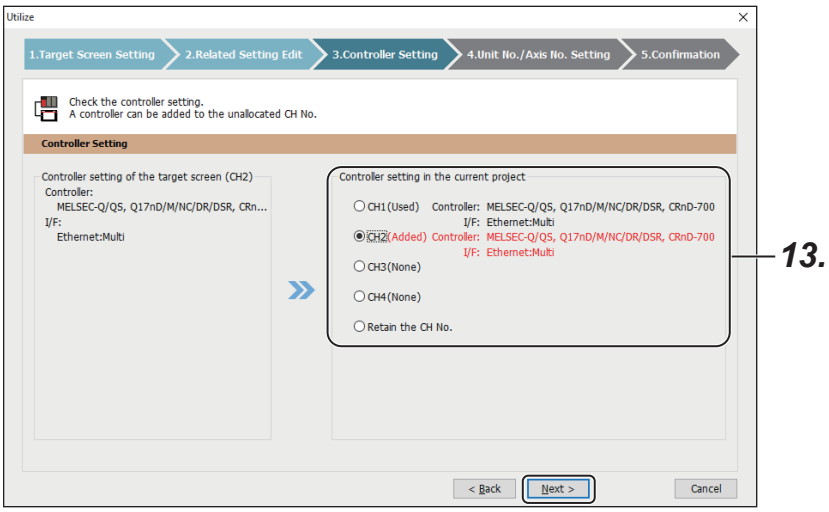


12.

13. Configure the controller setting.

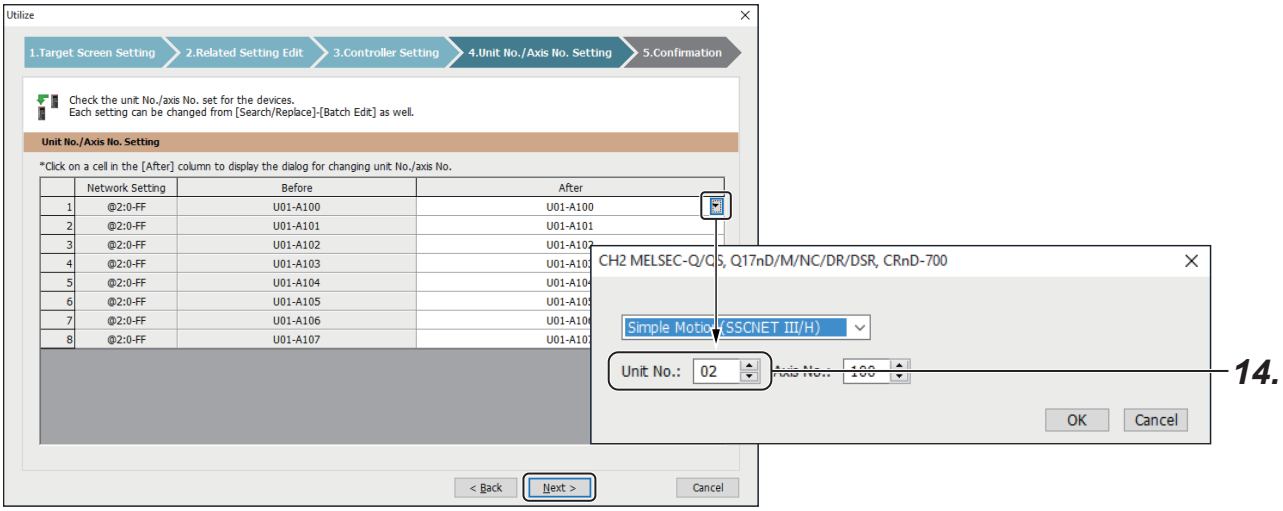
Assign the controller setting (CH2) of the add-on project for a servo amplifier ([Controller setting of the target screen]) to an available channel of the existing project data ([Controller setting in the current project]), and click the [Next] button.

If there is no available channel, clear one of the channels for the controllers used in the existing project data.

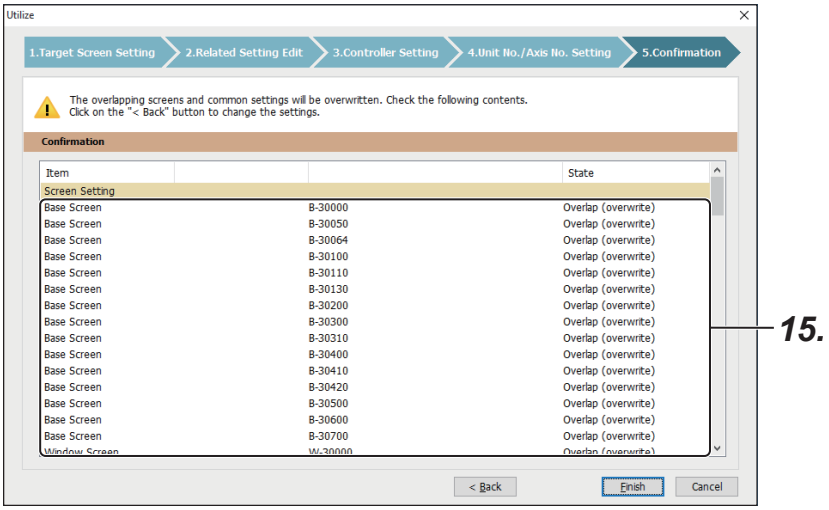


14. Set the unit No.

Change the unit No. according to the existing system configuration, and click the [Next] button.



15. Confirm the settings, and then click the [Finish] button.



16. Configure [Controller Setting].

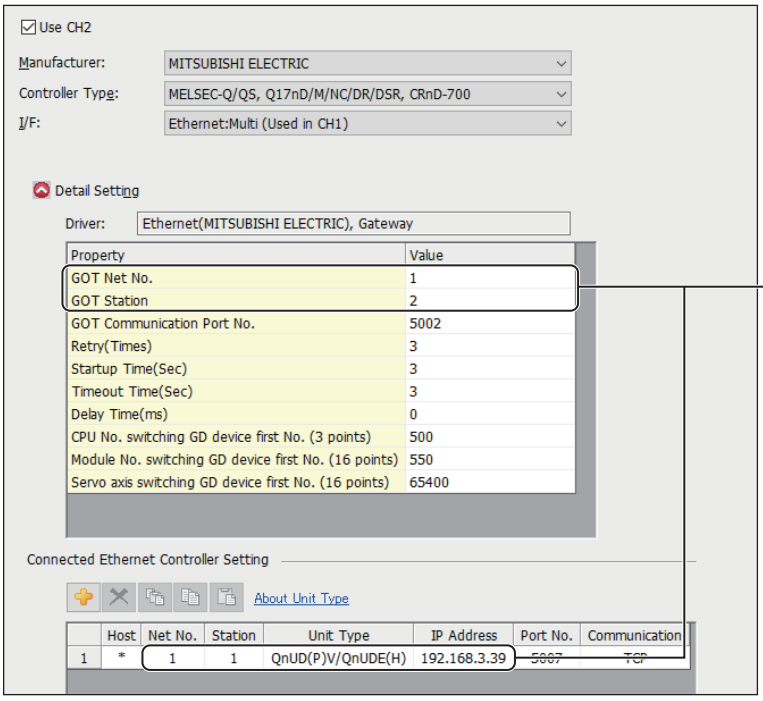
Since the setting of the add-on project for a servo amplifier is utilized for [Controller Setting] of the channel added by utilizing data, change it according to the existing system configuration.

Change [GOT Net No.] and [GOT Station] of [Detail Setting] and [Net No.], [Station], [IP Address], and [Unit Type] of [Connected Ethernet Controller Setting] according to the existing system configuration.

For [GOT Communication Port No.] of [Detail Setting], configure the number that does not overlap [GOT Communication Port No.] of the other channel that is already set.

When the PLC other than the MELSEC Q series is used in the existing system configuration, change the setting referring to the following.

☞ Page 221 Changing Controller Setting



4.3 Work after Utilizing Data

In the add-on project for a servo amplifier, devices for controlling the screen display or controlling the functions that run in the background are set for the labels (GT Designer3) by using the common setting so that the devices set in the existing project data can be used without changing them.
Therefore, change the following settings after utilizing data.

Setting item	Reference
Setting labels (GT Designer3)	☞ Page 192 Setting labels (GT Designer3)
Configuring the GOT environmental setting	☞ Page 197 Configuring the GOT environmental setting
Alarm settings	☞ Page 201 Alarm settings
Recipe common setting	☞ Page 202 Recipe common setting
Script symbol setting	☞ Page 202 Script symbol setting

Setting labels (GT Designer3)

List of labels required to be changed in the add-on project for a servo amplifier

Change [Assign (Device)] of the labels (GT Designer3) in the project data after utilizing data, according to the assignment of the devices set in the existing project data.

■Label group number 100 Com_Label

Label name	Data type	Assign (device) initial value *1	Description
u16_Com_CngBsDv	Unsigned BIN16	GD65200	Screen switching device (for base screens)
u16_Com_CngOvrRpDv1 *2	Unsigned BIN16	GD65201	Screen switching device (for overlap windows)
u16_Com_CngOvrRpDv2 *2	Unsigned BIN16	GD65204	Screen switching device (for overlap windows)
u16_Com_CngSprInpsDv1 *2	Unsigned BIN16	GD65216	Screen switching device (for superimpose windows)
s16_Com_StmInfRd	Signed BIN16 [0..2]	GD65231	System information read device
s16_Com_StmInfWt	Signed BIN16 [0..38]	GD65241	System information write device
u16_Com_RcpCmCntlDv	Unsigned BIN16 [0..2]	GD65290	Recipe common setting external control information
u16_Com_RcpCmNtcDv	Unsigned BIN16 [0..2]	GD65293	Recipe common setting external notification information
s16_Com_CngLngDv	Signed BIN16	GD65221	Language switching device
s16_Com_CngSytmLanDv	Signed BIN16	GD65222	System language switching device

*1 The item not used is not required to be changed.
*2 Two overlap windows and one superimpose window are used.
This is not required to be changed when two settings for overlap windows and one setting for superimpose windows are available in the existing project data.
When there is no available setting, assign the screen switching devices for overlap windows and superimpose windows to be used in the servo amplifier add-on project in the existing project data.

■Label group number 101 SV_Label

Label name	Data type	Assign (device) initial value *1	Description
s16_EfctLdRt *2*3	Signed BIN16	@2 U01-G2479	Device data transfer effective load ratio

*1 Do not change the default settings of the items not used.
*2 For devices to be set, refer to the following.
☞ Page 193 Changing the label (GT Designer3) s16_EfctLdRt
*3 Change the settings of the unit No. and CPU No. according to the system configuration.

Changing the label (GT Designer3) s16_EfctLdRt

When the [Effective load ratio] screen (B-30900) is used, change the devices assigned to the following labels (GT Designer3) according to the existing system configuration to monitor the effective load ratio.

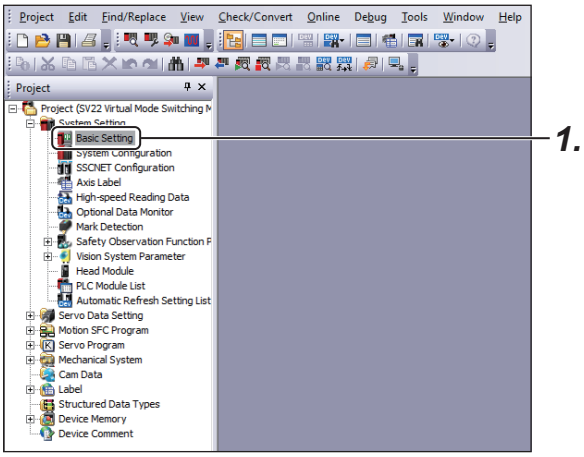
■Buffer memory address of the effective load ratio set in each system configuration

System configuration	Model name	Value to be set for the assign (device) of s16_EfctLdRt	Remarks
Simple motion	QD77MS2 QD77MS4 LD77MS2 LD77MS4	G879	Buffer memory address of the simple motion
	QD77MS16 LD77MS16 RD77MS2 RD77MS4 RD77MS16 FX5-40SSC-S FX5-80SSC-S	G2479	Buffer memory address of the simple motion
Motion controller *1	R16MTCPU R32MTCPU R64MTCPU Q173DSCPU Q172DSCPU	G11000	Buffer memory address of the motion controller

*1 When the motion controller is used, changing the setting of [Optional Data Monitor] in MT Developer2 is required in addition to the above setting.
For how to change the setting in MT Developer2, refer to the following.
☞ Page 193 Setting method of MT Developer2

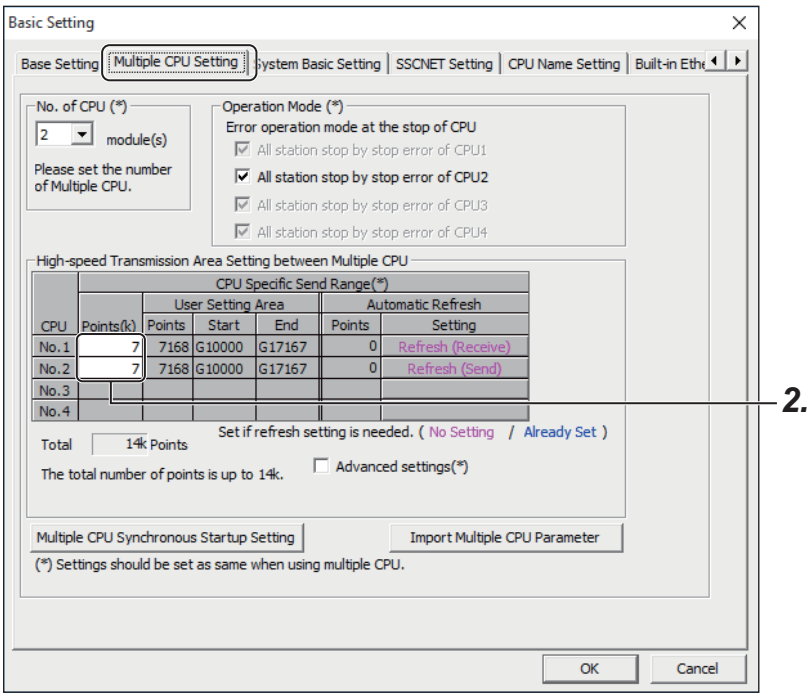
■Setting method of MT Developer2

1. Open the existing project, and open [Basic Setting] under [System Setting] in the project window.

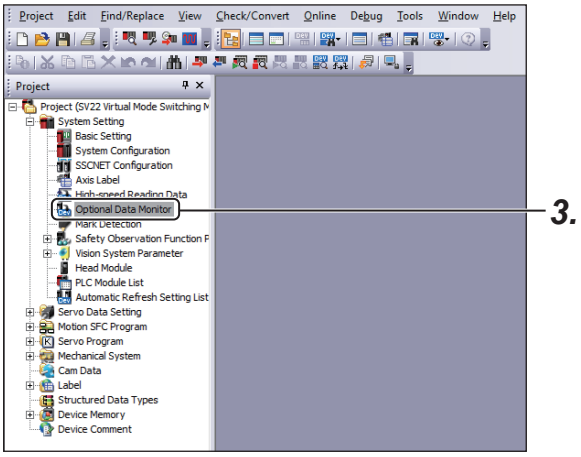


2. In the Multiple CPU High Speed Transmission Area Setting in the [Multiple CPU Setting] tab, check that the Points of CPU Specific Send Range is set to 2K or more (default: 7K).

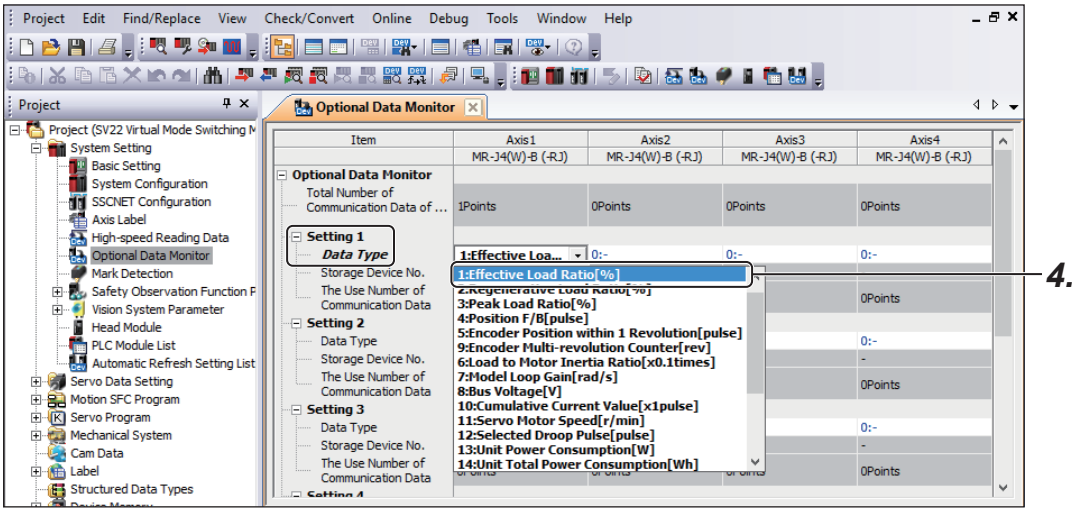
When it is not set or when changing its setting, set it to 2K or more, and change the multiple CPU settings of the other modules as well.



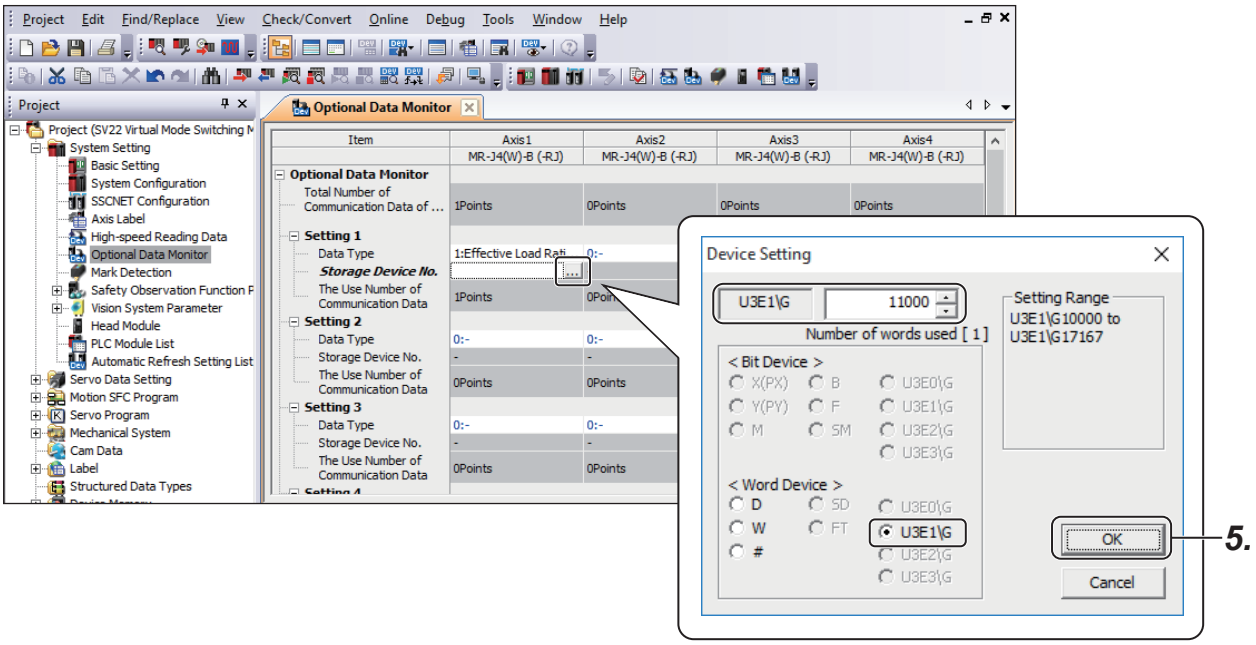
3. Open [Optional Data Monitor] under [System Setting] in the project window.



4. Select [1: Effective Load Ratio] from [Data Type] of [Setting 1].



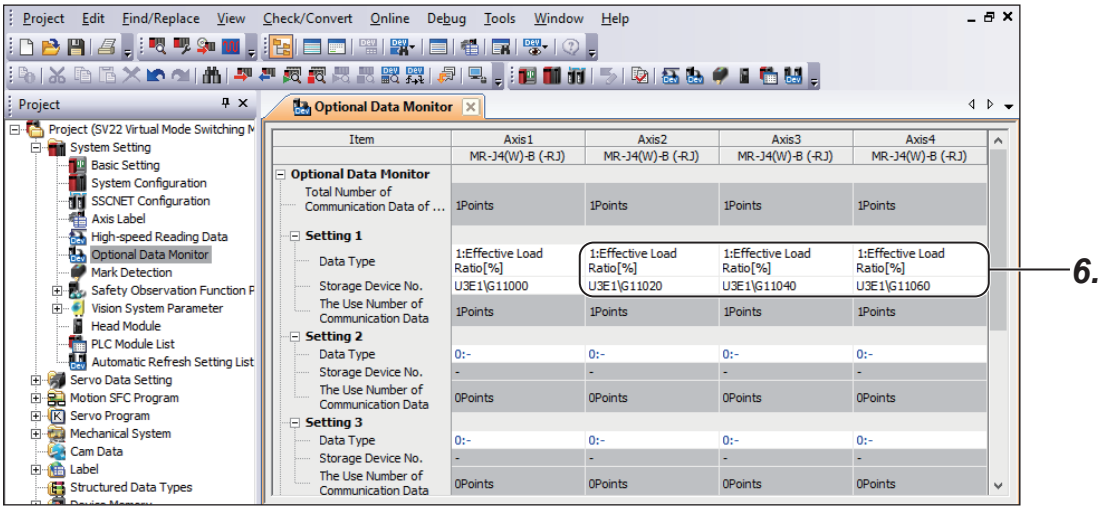
5. Click the [...] button for the item of Storage Device No. to open the following window, set the device to U3E1\G11000, and click the [OK] button.



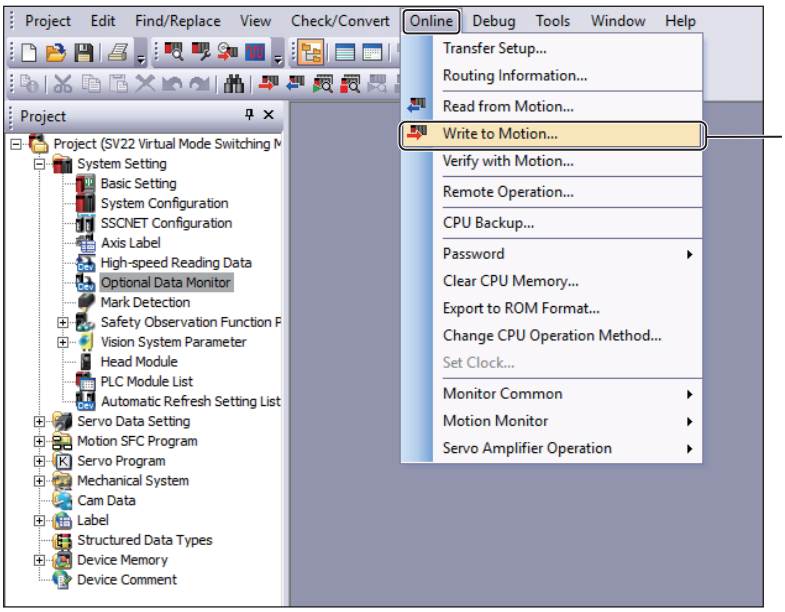
6. Configure the same setting for each axis.

Set devices changing Storage Device No. of each axis by 20 points per axis.

Expression: 20 [points] × (□ [axis No.] - 1)



7. For the set data, execute [Write to CPU] of [Online].

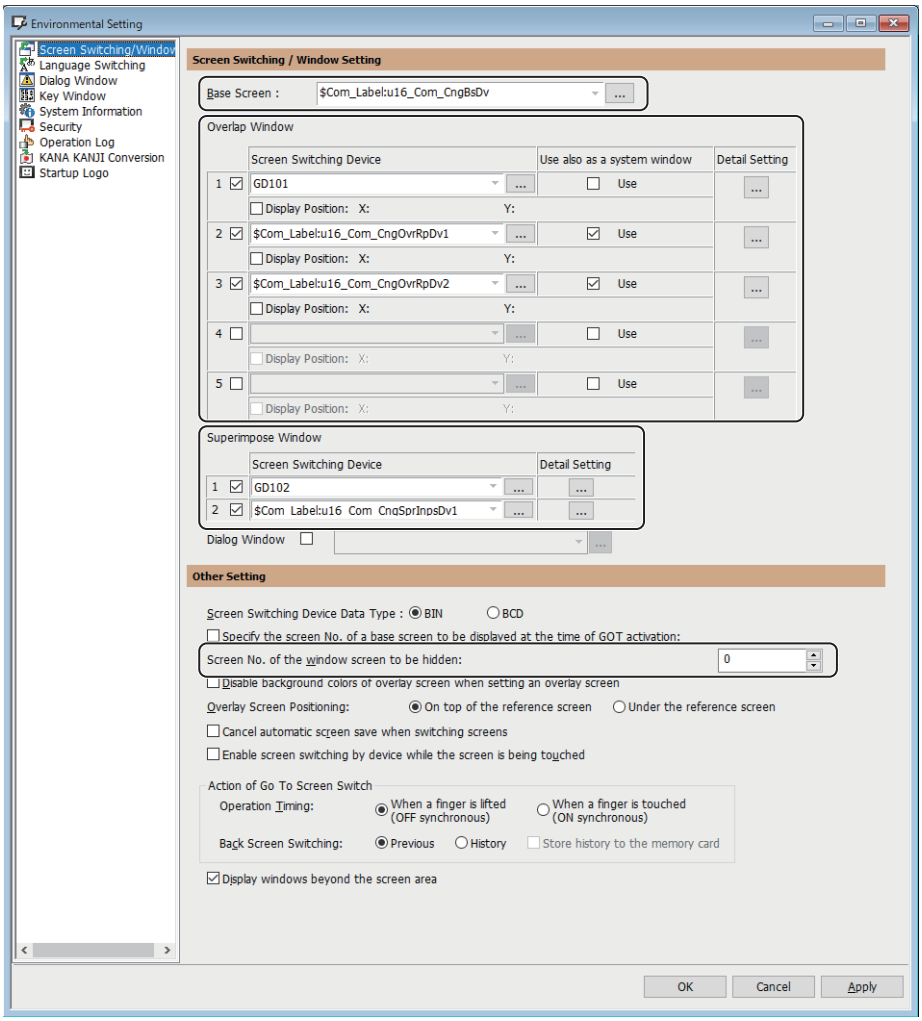


Configuring the GOT environmental setting

Change or add the following in [GOT Environmental Setting] of the project data after utilizing data.

[Screen Switching/Windows]

Select [Common] → [GOT Environmental Setting] → [Screen Switching/Windows] from the menu to open [Screen Switching/Window], and set the following items.



Item		Reference
[Screen Switching / Window Setting]	[Base Screen]	☞ Page 198 Base screen
	[Overlap Window]	☞ Page 198 Overlap window
	[Superimpose Window]	☞ Page 199 Superimpose window
[Other Setting]	[Screen No. of the window screen to be hidden]	☞ Page 199 [Screen No. of the window screen to be hidden]

The examples describes when the following items are used in the overlap window and superimpose window.

- Overlap window (No. 1): Overlap window 2
- Overlap window (No. 2): Overlap window 3
- Superimpose window: Superimpose window 2

■Base screen

Change the screen switching device of [Base Screen] as follows.

○: Available, ×: Unavailable

Item	Setting	Setting change
[Screen Switching Device]	$Com_Label:u16_Com_CngBsDv	×

■Overlap window

Select the checkbox for the overlap window to be used, and set the overlap window.

Two settings are used in the overlap window.

Point

The [GOT System Alarm Reset] window (W-30000), which is displayed when the alarm popup is touched, is set to overlap window 1.

When using the [GOT System Alarm Reset] window (W-30000), set one of the following devices for the screen switching device of overlap window 1.

- $Com_Label:u16_Com_CngOvrRpDv1
- $Com_Label:u16_Com_CngOvrRpDv2
- Device set by the user

• Overlap window (No. 1)

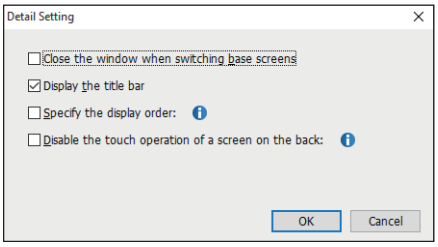
Set the following items.

○: Available, ×: Unavailable

Item	Setting	Setting change
[Screen Switching Device]	$Com_Label:u16_Com_CngOvrRpDv1	×
[Use also as a system window]	Selected	×
[Display Position]	Cleared	○

Click the [...] button of [Detail Setting] to display the [Detail Setting] dialog.

Set the following items.



○: Available, ×: Unavailable

Item	Setting	Setting change
[Close the window when switching base screens]	Cleared	×
[Display the title bar]	Selected	×
[Specify the display order]	Cleared	○
[Disable the touch operation of a screen on the back]	Cleared	○

• Overlap window (No. 2)

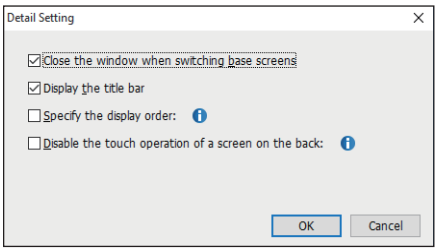
Set the following items.

○: Available, ×: Unavailable

Item	Setting	Setting change
[Screen Switching Device]	$Com_Label:u16_Com_CngOvrRpDv2	×
[Use also as a system window]	Selected	×
[Display Position]	Cleared	○

Click the [...] button of [Detail Setting] to display the [Detail Setting] dialog.

Set the following items.



○: Available, ×: Unavailable

Item	Setting	Setting change
[Close the window when switching base screens]	Selected	×
[Display the title bar]	Selected	×
[Specify the display order]	Cleared	○
[Disable the touch operation of a screen on the back]	Cleared	○

■Superimpose window

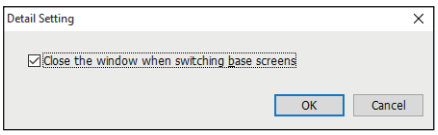
Select the checkbox for the superimpose window to be used, and add the following device to [Screen Switching Device].

○: Available, ×: Unavailable

Item	Setting	Setting change
[Screen Switching Device]	$Com_Label:u16_Com_CngSprInpsDv1	×

Click the [...] button of [Detail Setting] to display the [Detail Setting] dialog.

Set the following items.



○: Available, ×: Unavailable

Item	Setting	Setting change
[Close the window when switching base screens]	Selected	×

■[Screen No. of the window screen to be hidden]

Change the value of [Screen No. of the window screen to be hidden] to the following value.

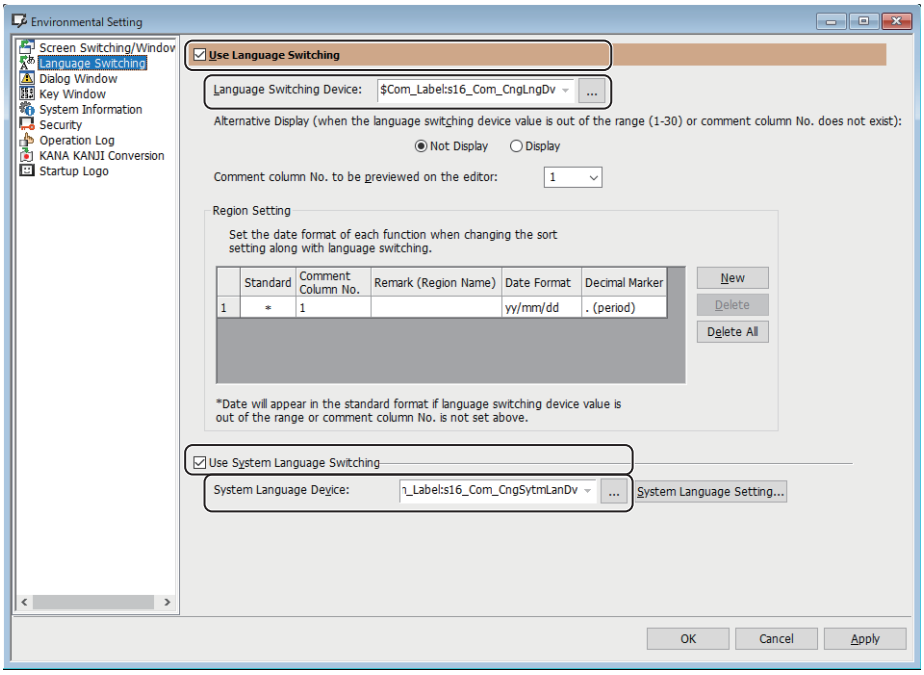
○: Available, ×: Unavailable

Item	Setting	Setting change
[Screen No. of the window screen to be hidden]	0	×

[Language Switching]

Select [Common] → [GOT Environmental Setting] → [Language Switching] from the menu to open [Language Switching], and select [Use Language Switching].

Set the following items.



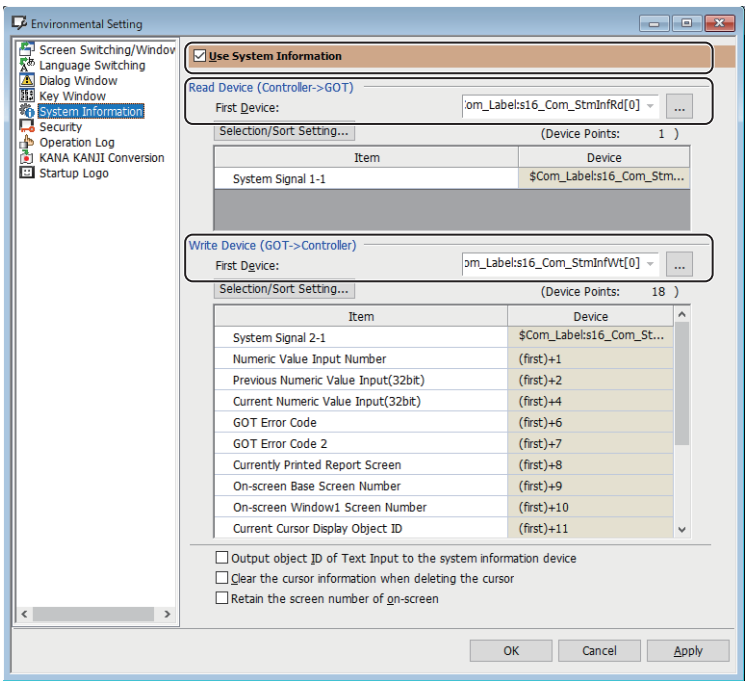
○: Available, ×: Unavailable

Item	Setting	Setting change
[Language Switching Device]	$Com_Label:s16_Com_CngLngDv	×
[Use System Language Switching]	Selected	×
[System Language Device]	$Com_Label:s16_Com_CngSytmLanDv	×

[System Information]

Select [Common] → [GOT Environmental Setting] → [System Information] from the menu to open [System Information], and select [Use System Information].

Set the following items.



○: Available, ×: Unavailable

Item	Setting	Setting change
[First Device] of [Read Device (Controller->GOT)]	$Com_Label:s16_Com_StmInfRd[0]	×
[First Device] of [Write Device (GOT->Controller)]	$Com_Label:s16_Com_StmInfWt[0]	×

Alarm settings

To reset the system alarm by using the [GOT system alarm reset] window (W-30000), the following settings are required. Change the settings of the project data after utilizing data.

[Alarm Popup Display]

○: Available, ×: Unavailable

Item	Setting	Setting change
[Use alarm popup display]	Use	×
[Display Alarm]	System Alarm	×
[Display Number]	Multiple	○
[Display Type]	Flow	○
[Flow Rate]	Low	○
[Close up the space between alarm comments]	Cleared	○
[Display Position Switching]	Yes	○
[Contents]	Refer to the following. ☞ Page 202 Date/Time Setting	○
[Display Order]	Date of Occurrence, Comment	○
[Display detailed system alarm information]	Cleared	○
[Initial Display Hierarchy]	-	○
[Touch Mode]	Screen Switching	×
[Destination Screen]	Overlap window 1	×
	Overlap window 1 (30000 GOT System Alarm Reset)	×

■Date/Time Setting

○: Available, ×: Unavailable

Item		Setting	Setting change
[Contents]		Date/Time	○
[Date Setting]	[Sort]	-	○
	[Date Type]	yy/mm/dd	○
	[Delimiter]	/	○
	[Fill with 0]	Select	○
	[Change the sort setting along with language switching]	Select	○
[Time Setting]	[Time Type]	hh:mm	○
	[Fill with 0]	Select	○

[System Alarm Observation]

○: Available, ×: Unavailable

Item			Setting	Setting change
[Use System Alarm]			Select	×
[Target]	[CPU Error]		Select	×
	[GOT Error]		Select	×
	[Network Error]		Select	×
	[Detail]	[Include errors occurred in clients connected to the server of GOT Mobile function]	Select	○
[Get detailed alarm information]			Select	○
[Record label/tag name at the time of alarm generation]			Cleared	○
[Collection Mode]			Historical mode	○
[Buffering]	[Retain data in the embedded memory in GOT even when the power goes off (The battery will be required)]		Select	○
	[Stored Number]		512	○
	[Action When Buffer is Full]		Delete old data	○
	[Full Notification Signal Device]		Cleared	○
	[Buffering Data Clear Trigger Device]		Cleared	○

Recipe common setting

Review the settings according to the system configuration with the label (GT Designer3) of the recipe common setting.
For the details of the recipe common setting of the add-on project for a servo amplifier, refer to the following.
☞ Page 165 Recipe

Script symbol setting

To operate the add-on project for a servo amplifier, change the script symbols of the project data after utilizing data according to the existing system configuration.

System setting

No. *1	Symbol name	Initial value	Description
9000	GTSV_AXIS_NUMBER	16	Set the total number of axes that can be controlled by the module (simple motion or motion CPU) used. If a value other than 16, 32, or 64 is set, it operates as 16 is set.
9001	GTSV_EFCTLDRT_OFFSET	100	Set "100" when using the simple motion module. Set "20" when using the motion controller.

*1 The same number is used as the one set in the project before utilization.
After utilizing the functions (screens) of GT Designer3, assign them to the empty numbers in the destination project from the smallest number.

Machine diagnosis function

To acquire or display the value of the friction estimation and vibration estimation with the machine diagnosis screen (B-30600 to B-30710), setting the script symbols is required.

Set estimation acquisition or estimation cancellation of the friction estimation (forward rotation and reverse rotation) and vibration estimation according to the operation of existing devices.

If the operation of devices and script symbol setting do not match, the friction estimation and vibration estimation may not be displayed.

For axes set as invalid axes in [Valid/Invalid Axis Settings], the setting is disabled.

GTSV_AX*_FWD_EST_CANCEL

Axis rotation direction (FWD: Forward, RVS: Reverse, VB: Vibration)

*: Axis No.

Example)

When axis 1 uses the forward rotation direction and axis 2 uses the forward and reverse rotation directions in the existing devices

• Setting value of axis 1

GTSV_AX1_FWD_EST_CANCEL → OFF

GTSV_AX1_RVS_EST_CANCEL → ON

GTSV_AX1_VB_EST_CANCEL T → ON

• Setting value of axis 2

GTSV_AX2_FWD_EST_CANCEL → OFF

GTSV_AX2_RVS_EST_CANCEL → OFF

GTSV_AX2_VB_EST_CANCEL T → ON

No. *1	Symbol name	Initial value	Description
9004	GTSV_AX1_FWD_EST_CANCEL	OFF	Axis No. 1 friction estimation (forward rotation) cancel estimation flag (OFF: Estimation acquired, ON: Estimation canceled)
9005	GTSV_AX1_RVS_EST_CANCEL	OFF	Axis No. 1 friction estimation (reverse rotation) cancel estimation flag (OFF: Estimation acquired, ON: Estimation canceled)
9006	GTSV_AX1_VB_EST_CANCEL	OFF	Axis No. 1 friction estimation (vibration) cancel estimation flag (OFF: Estimation acquired, ON: Estimation canceled)
:	:	:	:
9193	GTSV_AX64_FWD_EST_CANCEL	OFF	Axis No. 64 friction estimation (forward rotation) cancel estimation flag (OFF: Estimation acquired, ON: Estimation canceled)
9194	GTSV_AX64_RVS_EST_CANCEL	OFF	Axis No. 64 friction estimation (reverse rotation) cancel estimation flag (OFF: Estimation acquired, ON: Estimation canceled)
9195	GTSV_AX64_VB_EST_CANCEL	OFF	Axis No. 64 friction estimation (vibration) cancel estimation flag (OFF: Estimation acquired, ON: Estimation canceled)

*1 The same number is used as the one set in the project before utilization.
After utilizing the functions (screens) of GT Designer3, assign them to the empty numbers in the destination project from the smallest number.

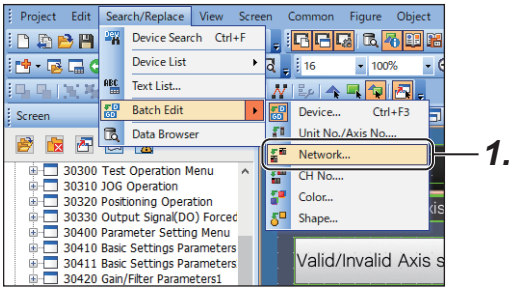
Changing the CPU No. of a motion controller CPU

In the default setting of the servo amplifier add-on projects, the servo amplifier connected to the motion controller CPU No. 2 is monitored.

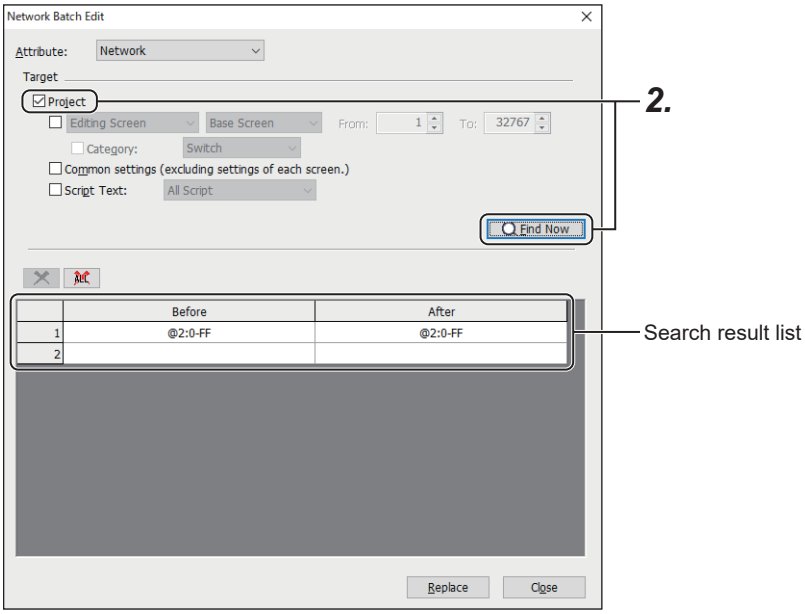
When monitoring the servo amplifier connected to the motion controller CPU other than No. 2, change the setting of completed project data.

The following shows how to change the CPU No. to be monitored from the default settings.

1. Select [Search/Replace] → [Batch Edit] → [Network] from the menu to display the [Network Batch Edit] dialog.

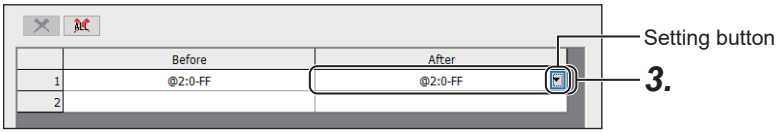


2. Select [Project] and click the [Find Now] button to display the search result in the search result list.

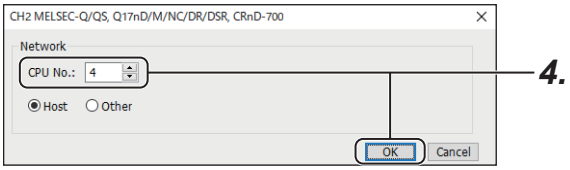


3. In the search result list, select 0-FF/2 of the controller CH set for data utilization.

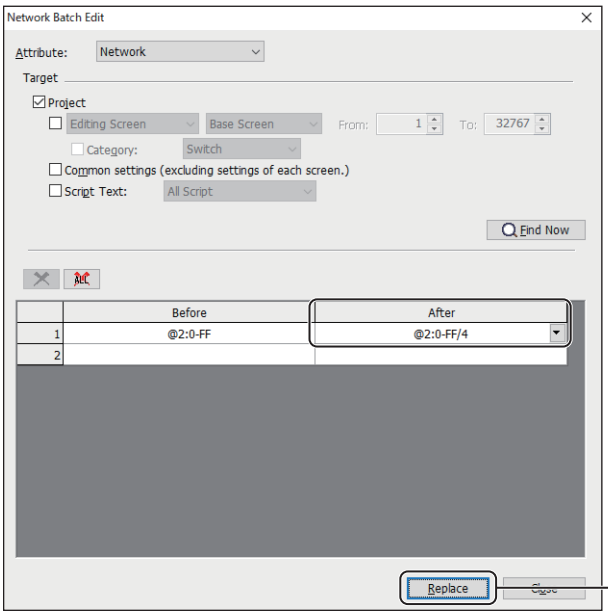
Click the setting button in the [After] field to display the network setting dialog.



4. Change [CPU No.] to the motion controller CPU No. to which the servo amplifier to be monitored is connected, and click the [OK] button.



5. Click the [Replace] button to change to the set CPU No.



4.4 Selecting screens of the add-on project for a servo amplifier

All of the screens in the add-on project for a servo amplifier are utilized (in a batch).
When there is any function not required for using, delete each function screen, related screen, related setting referring to the following.
In addition, if the data size exceeds the capacity when the screen data is transferred to the GOT, delete the data not to be used referring to the following as well.

Capacity list

The following lists the capacity of GT27-X (1024 × 768)
The screen capacity differs depending on the GOT model.

Function			System application (extended function)	Total size of system application (extended function) and screen (ROM, RAM)
Startup/adjustment	Tuning		-	137K bytes, 228K bytes
	One-touch tuning		-	26K bytes, 26K bytes
	Test operation	JOG operation	-	24K bytes, 28K bytes
		Positioning operation	-	40K bytes, 44K bytes
		Output signal (DO) forced output	-	32K bytes, 33K bytes
	Parameter setting	Basic setting parameters	-	10K bytes, 15K bytes
		Gain/Filter parameters	-	19K bytes, 32K bytes
		Extension setting 1 parameters	-	11K bytes, 17K bytes
		I/O settings parameters	-	6K bytes, 10K bytes
		Extension setting 2 parameters	-	10K bytes, 14K bytes
		Extension setting 3 parameters	-	6K bytes, 8K bytes
		Linear servo motor/DD motor setting parameters	-	6K bytes, 8K bytes
	Servo amplifier graph		Servo amplifier graph	860K bytes, 11410K bytes
Maintenance	Amplifier life diagnosis		-	9K bytes, 9K bytes
	Machine diagnosis		GOT Mobile function	5296K bytes*1, 14377K bytes*1
	Effective load ratio		GOT Mobile function	4919K bytes*1, 13728K bytes*1
	Servo amplifier graph		Servo amplifier graph	860K bytes, 11410K bytes
Troubleshooting	Alarm display Alarm history		GOT Mobile function	4965K bytes*1, 13767K bytes*1
	Manual display		Document Display (PDF)	5182K bytes, 35905K bytes
	Drive recorder		Drive recorder	780K bytes, 2918K bytes
	System launcher		System launcher	1031K bytes, 3839K bytes
Monitor	Operation monitor		GOT Mobile function	4917K bytes*1, 13713K bytes*1
	Input/output monitor		-	13K bytes, 28K bytes

*1 2 Mbytes of the area is used per client.

Deleting functions

Startup/adjustment

The following shows the screens to be deleted when the function related to startup and adjustment is not used.

-: None

Target function	Screen to be deleted.		GT Designer3 settings required to be deleted
	Model other than GT2705-V, GT2505-V, and GT2507W	GT2705-V, GT2505-V, GT2507W	
Tuning	Tuning (B-30100) Machine Resonance Supp. Filter (B-30110) Other filter (B-30111) Vibration Suppression Control (B-30130) Resonance.Supp.Fltr1 Notch Width (W-30110) Resonance.Supp.Fltr2 Notch Width (W-30111) Resonance.Supp.Fltr3 Notch Width (W-30112) Resonance.Supp.Fltr4 Notch Width (W-30113) Resonance.Supp.Fltr5 Notch Width (W-30114) Resonance.Supp.Fltr1 Notch Depth (W-30115) Resonance.Supp.Fltr2 Notch Depth (W-30116) Resonance.Supp.Fltr3 Notch Depth (W-30117) Resonance.Supp.Fltr4 Notch Depth (W-30118) Resonance.Supp.Fltr5 Notch Depth (W-30119) Low-pass Filter Settings (W-30120) Shaft Res.Supp.Filter Settings (W-30121) Shaft Res.Supp.Filter Frequency (W-30122) Shaft Res.Supp.Filter Notch Depth (W-30123)	Tuning1 (B-30100) Tuning2 (B-30101) Tuning3 (B-30102) Machine Resonance Supp. Filter1 (B-30110) Machine Resonance Supp. Filter2 (B-30111) Machine Resonance Supp. Filter3 (B-30112) Machine Resonance Supp. Filter4 (B-30113) Machine Resonance Supp. Filter5 (B-30114) Other filter (B-30115) Vibration Suppression Control1 (B-30130) Vibration Suppression Control2 (B-30131) Vibration Suppression Control3 (B-30132) Resonance.Supp.Fltr1 Notch Width (W-30110) Resonance.Supp.Fltr2 Notch Width (W-30111) Resonance.Supp.Fltr3 Notch Width (W-30112) Resonance.Supp.Fltr4 Notch Width (W-30113) Resonance.Supp.Fltr5 Notch Width (W-30114) Resonance.Supp.Fltr1 Notch Depth (W-30115) Resonance.Supp.Fltr2 Notch Depth (W-30116) Resonance.Supp.Fltr3 Notch Depth (W-30117) Resonance.Supp.Fltr4 Notch Depth (W-30118) Resonance.Supp.Fltr5 Notch Depth (W-30119) Low-pass Filter Settings (W-30120) Shaft Res.Supp.Filter Settings (W-30121) Shaft Res.Supp.Filter Frequency (W-30122) Shaft Res.Supp.Filter Notch Depth (W-30123)	-
One-touch tuning	One-touch Tuning (B-30200) One-touch Tuning Progress (W-30200) Setting Change Confirmation (W-30201)	One-touch Tuning (B-30200) One-touch Tuning Progress (W-30200) Setting Change Confirmation (W-30201)	-

Target function		Screen to be deleted.		GT Designer3 settings required to be deleted
		Model other than GT2705-V, GT2505-V, and GT2507W	GT2705-V, GT2505-V, GT2507W	
Test operation	JOG operation *1	JOG Operation (B-30310) Test Operation Status 1 (W-30300) Test Operation Status 2 (W-30301)	JOG Operation (B-30310) Test Operation Status 1 (W-30300) Test Operation Status 2 (W-30301) Test Operation Status 3 (W-30302) Test Operation Status 4 (W-30303)	-
	Positioning operation *1	Positioning Operation (B-30320) Test Operation Status 1 (W-30300) Test Operation Status 2 (W-30301)	Positioning Operation (B-30320) Test Operation Status 1 (W-30300) Test Operation Status 2 (W-30301) Test Operation Status 3 (W-30302) Test Operation Status 4 (W-30303)	-
	Output signal (DO) forced output	Output Signal(DO) Forced Output (B-30330)	Output Signal(DO) Forced Output (B-30330)	-
Parameter setting	Basic setting parameters	Basic Settings Parameters1 (B-30410) Basic Settings Parameters2 (B-30411)	Basic Settings Parameters1 (B-30410) Basic Settings Parameters2 (B-30411) Basic Settings Parameters2 (B-30412)	-
	Gain/Filter parameters	Gain/Filter Parameters1 (B-30420) Gain/Filter Parameters2 (B-30421) Gain/Filter Parameters3 (B-30422)	Gain/Filter Parameters1 (B-30420) Gain/Filter Parameters2 (B-30421) Gain/Filter Parameters3 (B-30422) Gain/Filter Parameters4 (B-30423) Gain/Filter Parameters5 (B-30424) Gain/Filter Parameters6 (B-30425)	-
	Extension setting 1 parameters	Ext.Settings1 Parameters1 (B-30430) Ext.Settings1 Parameters2 (B-30431)	Ext.Settings1 Parameters1 (B-30430) Ext.Settings1 Parameters2 (B-30431) Ext.Settings1 Parameters3 (B-30432)	-
	I/O settings parameters	I/O Settings Parameters (B-30440)	I/O Settings Parameters1 (B-30440) I/O Settings Parameters2 (B-30441)	-
	Extension setting 2 parameters 1	Ext.Settings2 Parameters1 (B-30450) Ext.Settings2 Parameters2 (B-30451)	Ext.Settings2 Parameters1 (B-30450) Ext.Settings2 Parameters2 (B-30451)	-
	Extension setting 3 parameters	Ext.Settings3 Parameters (B-30460)	Ext.Settings3 Parameters1 (B-30460) Ext.Settings3 Parameters2 (B-30461)	-
	Linear servo motor/DD motor setting parameters	Linear/DD Motor Parameters (B-30470)	Linear/DD Motor Parameters1 (B-30470) Linear/DD Motor Parameters2 (B-30471)	-
Servo amplifier graph		The servo amplifier graph is a system application of the GOT. When deleting it, delete the switches for the servo amplifier graph in B-30061 and W-30061.		

*1 W-30300 and W-30301 are required for both of the JOG operation and positioning operation functions. Delete them only when neither of the functions are used.

Maintenance

The following shows the screens to be deleted when the function related to maintenance is not used.

-: None

Target function	Screen to be deleted.		GT Designer3 settings required to be deleted
	Model other than GT2705-V, GT2505-V, and GT2507W	GT2705-V, GT2505-V, GT2507W	
Amplifier life diagnosis	Amplifier Life Diagnosis (B-30500)	Amplifier Life Diagnosis (B-30500)	-
Machine diagnosis Machine diagnosis: estimation list *1	Machine Diagnosis (B-30600) Machine Diag .Estimation (Fric) (B-30700) Machine Diag. Estimation (Vib) (B-30710) Machine Diag. Threshold Setting (W-30600) Machine Diag. Friction Est.1 (W-30700) Machine Diag. Friction Est.2 (W-30701) Machine Diag. Threshold (Fric)1 (W-30702) Machine Diag. Threshold (Fric)2 (W-30703) Machine Diag. Graph (Friction) (W-30704) Machine Diag. Graph Disp (Fric) (W-30705) Machine Diag.Standard Val.Set (W-30706) Machine Diag. Vibration Est.1 (W-30710) Machine Diag. Vibration Est.2 (W-30711) Machine Diag. Graph (Vibration) (W-30714) Machine Diag. Graph Disp (Vib) (W-30715) Mobile_Machine Diag. Fric Est. (M-30000) Mobile_Machine Diag.Graph (Fric) (M-30001) Mobile_Machine Diag. Vib Est. (M-30010) Mobile_Machine Diag.Graph (Vib) (M-30011)	Machine Diagnosis1 (B-30600) Machine Diagnosis2 (B-30601) Machine Diag .Estimation (Fric) (B-30700) Machine Diag. Estimation (Vib) (B-30710) Machine Diag. Threshold Setting (W-30600) Machine Diag. Friction Est.1 (W-30700) Machine Diag. Friction Est.2 (W-30701) Machine Diag. Threshold (Fric)1 (W-30702) Machine Diag. Threshold (Fric)2 (W-30703) Machine Diag. Graph (Friction) (W-30704) Machine Diag. Graph Disp (Fric) (W-30705) Machine Diag.Standard Val.Set (W-30706) Machine Diag. Vibration Est.1 (W-30710) Machine Diag. Vibration Est.2 (W-30711) Machine Diag. Graph (Vibration) (W-30714) Machine Diag. Graph Disp (Vib) (W-30715) Mobile_Machine Diag. Fric Est. (M-30000) Mobile_Machine Diag.Graph (Fric) (M-30001) Mobile_Machine Diag. Vib Est. (M-30010) Mobile_Machine Diag.Graph (Vib) (M-30011)	[Logging] ID 30010 to 30025 [Device Data Transfer] ID 220 [Project script] No. 30020 to 30022 No. 30027 to 30029 No. 30041 No. 30072 to 30086 No. 30102 to 30111
Effective load ratio *2	Effective Load Ratio (B-30900) Mobile_Effective Load Ratio (M-30050)	Effective Load Ratio (B-30900) Mobile_Effective Load Ratio (M-30050)	[Device Data Transfer] ID 222 [Project script] No. 30035 to 30037 No. 30040
Servo amplifier graph	The servo amplifier graph function is a system application of the GOT. When deleting it, delete the switches for the servo amplifier graph in B-30061 and W-30061.		

*1 When the GOT Mobile function of the machine diagnosis or machine diagnosis list is not used, delete only the mobile screen.

*2 When the GOT mobile function of the effective load ratio is not used, delete only the mobile screen.

Troubleshooting

The following shows the screens to be deleted when the function related to troubleshooting is not used.

Target function	Screen to be deleted.		GT Designer3 settings required to be deleted
	Model other than GT2705-V, GT2505-V	GT2705-V, GT2505-V	
Alarm display Alarm history *1	Alarm Display (B-31000) Alarm History (B-31100) Status at Alarm Occurrence 1 (W-30900) Status at Alarm Occurrence 2 (W-30901) Mobile_Alarm History (M-30030)	Alarm Display1 (B-31000) Alarm Display2 (B-31001) Alarm History (B-31100) Status at Alarm Occurrence 1 (W-30900) Status at Alarm Occurrence 2 (W-30901) Mobile_Alarm History (M-30030)	[Alarm] ID 30000 [Device Data Transfer] ID 221 [Project script] No. 30044 to 30046
Manual display	Manual Display (B-31200)	Manual Display (B-31200)	[Project script] No. 30019
Drive recorder	The drive recorder function is a system application of the GOT. When deleting it, delete the switches for the drive recorder in B-30063 and W-30063.		
System launcher	The system launcher function is a system application of the GOT. When deleting it, delete the switches for the system launcher in B-30063 and W-30063.		

*1 When the GOT Mobile function of the alarm history is not used, delete only the mobile screen.

Monitor

The following shows the screens to be deleted when the function related to monitor is not used.

-: None

Target function	Screen to be deleted.		GT Designer3 settings required to be deleted
	Model other than GT2705-V, GT2505-V	GT2705-V, GT2505-V	
Operation monitor	Operation Monitor 1 (B-31300) Operation Monitor 2 (B-31301) Mobile_Operation Monitor (M-30040)	Operation Monitor 1 (B-31300) Operation Monitor 2 (B-31301) Operation Monitor 3 (B-31302) Mobile_Operation Monitor (M-30040)	[Device Data Transfer] ID 223 to 227
Input/output monitor	I/O Monitor (B-31400)	I/O Monitor (B-31400)	-

4.5 How to Upgrade Servo Amplifier Add-on Projects

For upgrading, utilize the existing project data to the latest servo amplifier add-on projects.

Preparation for upgrade

Backing up the existing project data

When the servo amplifier add-on project is upgraded, the setting of the existing project data is overwritten.
Therefore, back up the existing project data.

Deleting the project script

1. Select [Common] → [Script] → [Script] from the menu to display the [Script] dialog.
2. From the script setting list in the [Project] tab, select the project script to be deleted, and click the [Delete] button.

For the project script to be deleted, refer to the following.
☞ Page 172 Project script

3. When it is deleted, click the [OK] button to close the [Script] dialog.

Upgrading procedure

1. Install the latest servo amplifier add-on project.

Obtain the installer of the latest servo amplifier add-on project by either of the following methods.

- Disk2 folder in GT Works3 DVD
- Consult your local sales office.

2. Select [Screen] → [Utilize Data] from the menu of GT Designer3, and utilize the latest servo amplifier add-on project to the existing project.

For the utilization method, refer to the following.
☞ Page 187 How to utilize screens of the add-on project for a servo amplifier for the existing project data

Point

- For the utilization method settings that overlap with the existing project data, overwrite all and execute.
- For the controller settings, set the same channel as the one assigned in the existing project data.

3. The following settings are overwritten to the setting of the latest servo amplifier add-on project.

Review the settings according to the settings of the existing project data.

- Base screen
- Window screen
- Mobile screen
- Script symbol
- Recipe
- Label (GT Designer3)

For the details on how to change the settings, refer to the following.
☞ Page 192 Work after Utilizing Data

4.6 Precautions for utilizing the add-on project for a servo amplifier

Utilization in object units

Functions running in the background are used in the add-on project for a servo amplifier.
Do not utilize the add-on project for a servo amplifier in object units.
If it is utilized in object units, functions running in the background are not utilized and thus it may not operate as its operator expects.

Channel setting of controller when sample screen data is used

If the Mitsubishi Electric Corporation servo amplifier MELSERVO-J4 series MR-J4-B sample screen data version 4a or later is used in the existing project data, match the controller channel of the add-on project for a servo amplifier with the controller channel of the existing sample screen data.
The monitoring speed decreases when the number of channels communicating with the servo amplifier increases.

Combination with iQ Monozukuri application package

Utilize the servo amplifier add-on project to a project data that does not contain the iQ Monozukuri application package.
Since the system area setting differs between the servo amplifier add-on project and the iQ Monozukuri application package, the project does not operate correctly.

Recipe settings of existing project data

When the recipe function is used in the existing project data, set the writing trigger device and reading trigger device of the recipe to always turn off after the operation of recipe.
If not, the recipe setting of the servo amplifier add-on project does not operate correctly.

Displaying the [GOT System Alarm Reset] window (W-30000)

When using the [GOT System Alarm Reset] window (W-30000), set the screen switching device for overlap window 1 in [Screen Switching/Window].
When the screen switching device is not set for overlap window 1, the [GOT System Alarm Reset] window (W-30000) is not displayed.
For the details, refer to the following.
☞ Page 198 Overlap window

Screen transitioning between user-created screen and servo amplifier add-on project screen

When transferring from the user-created screen to servo amplifier add-on project screen, configure the setting to transfer to the [Menu] screen (B-30000).
When the screen is transferred directly to the screen other than the [Menu] screen (B-30000), the project does not operate correctly.
When transferring from the servo amplifier add-on project screen to user-created screen, configure the setting to transfer to the [Menu] screen (B-30000) and the user-created screen in this order.
When the screen is transferred directly to the user-created screen from the screen other than the [Menu] screen (B-30000), the project does not operate correctly.

5 CUSTOMIZATION

This chapter explains the operation, setting procedures, and precautions for using the add-on project for a servo amplifier.

5.1 Updating Servo Manual

The manual displayed by touching the [Manual Display] switch in the [Manual Display] screen (B-31200) or [Mobile_Alarm History] screen (M-30030) has the same contents as CHAPTER 1 of the MELSERVO-J4 Servo Amplifier Instruction Manual (Troubleshooting) (SH-030109ENG).

When the above manual is updated, the data used in the manual display of the add-on project for a servo amplifier needs to be updated.

The following shows the procedure for updating the manual data used in the add-on project for a servo amplifier.

1. For the latest data for document display, consult your local sales office.

2. Unpack the files of the data used for the document display in a folder.

3. Overwrite folders in the SD card with all the unpacked folders by using the explorer of the personal computer.

The following shows the hierarchical structure of the folders.

```
Drive A (SD card)
├─ <Package1>
│   ├─ GTSV_Alarm_PageInfo.csv   : Manual page search file for alarm display
│   └─ <userdata>
│       ├─ 30000_j.pdf           : Manual for alarm display (GOT Mobile function) in Japanese
│       ├─ 30001_e.pdf           : Manual for alarm display (GOT Mobile function) in English
│       └─ 30002_c.pdf           : Manual for alarm display (GOT Mobile function) in Chinese
└─ <PDFDAT>
    ├─ 30000_j.pdf               : Manual for alarm display (document display) in Japanese
    ├─ 30001_e.pdf               : Manual for alarm display (document display) in English
    └─ 30002_c.pdf               : Manual for alarm display (document display) in Chinese
```

4. Insert the SD card into the GOT and restart the GOT.

5.2 Setting the Axis Name

Axis names displayed on screens such as the [Vibration Suppression Control] screen (B-30130) and the [Valid/Invalid Axis Settings] window (W-32501) can be changed to user-defined axis names.
The same axis name as the one set in MT Developer2 can be used.
In the add-on project for a servo amplifier, settings to manage character strings is configured in the recipe function.
Therefore, change the recipe function settings to change axis names.
The following shows the procedure for setting axis names.

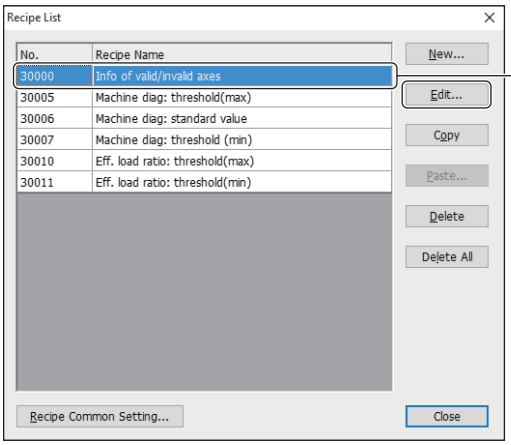
Point

When Hiragana or Katakana is used for the axis name, the text gets garbled when the language is switched to English.

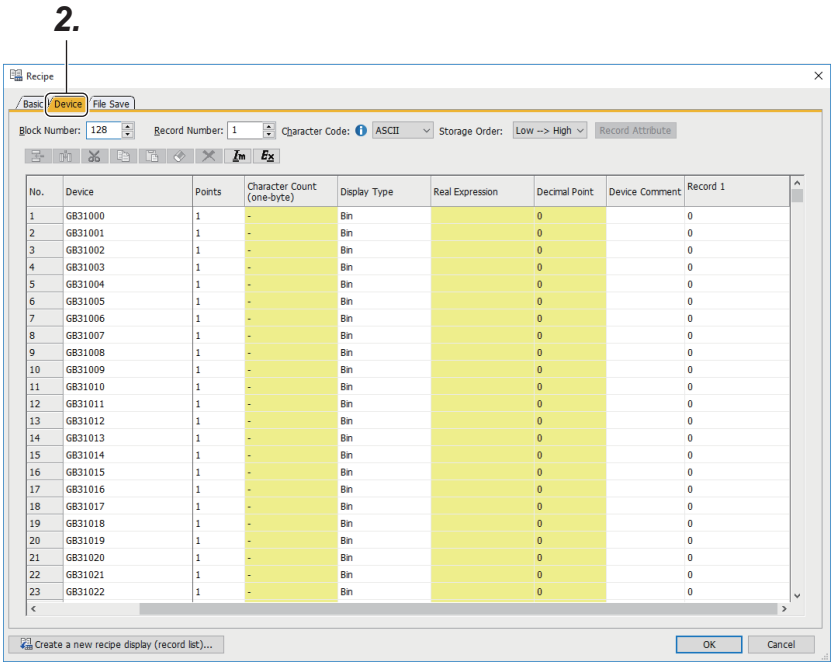
Utilizing axis label from MT Developer2

The axis label set in MT Developer2 can be copied and utilized to the add-on project for a servo amplifier.

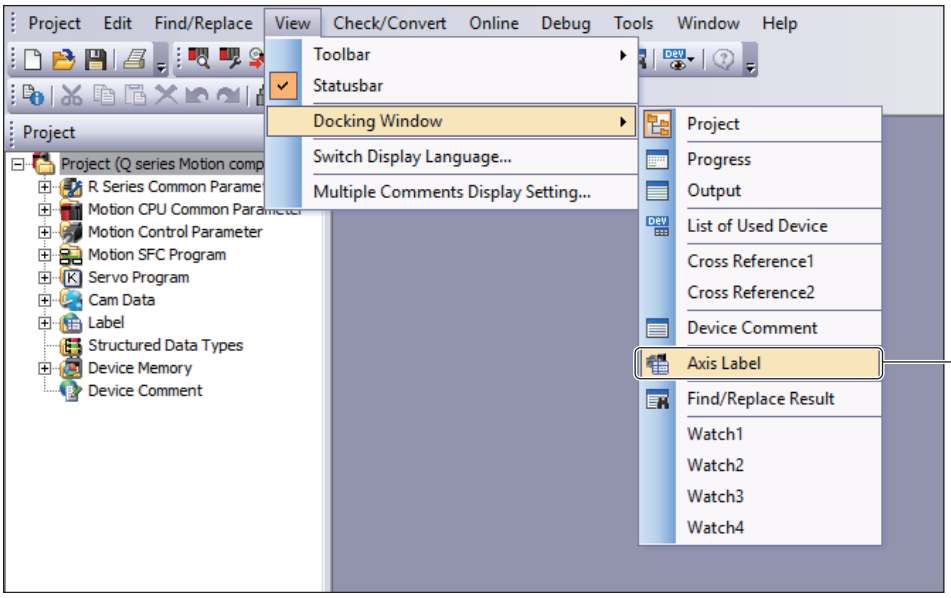
1. Select [Common] → [Recipe] → [Recipe] from the menu of GT Designer3 to display the recipe file list.
Select [30000 Info of valid/invalid axes] of the recipe setting and click the [Edit] button.



2. Display the device tab.

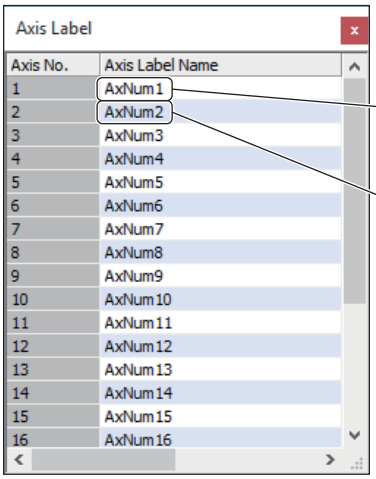


3. Open the project file of the motion controller in MT Developer2, and select [View] → [Docking Window] → [Axis Label] from the menu.

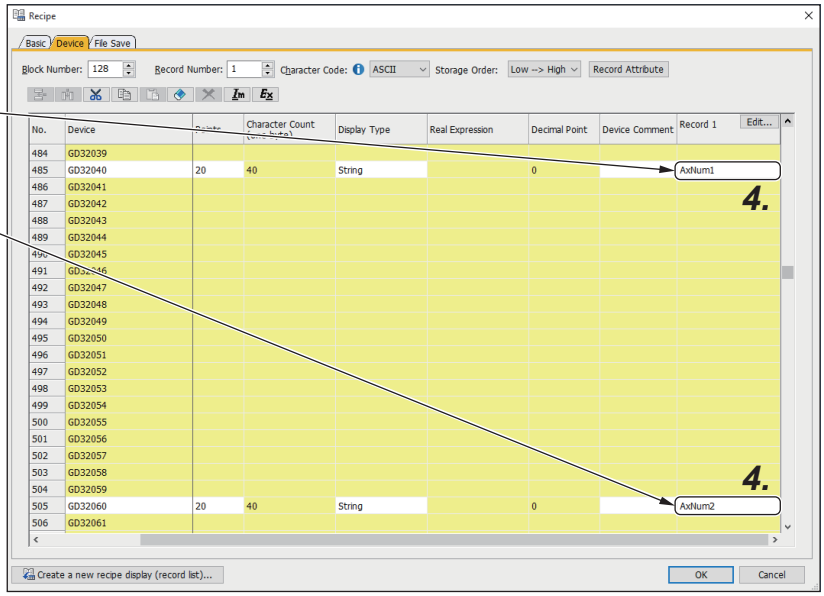


4. Copy the displayed axis labels to the recipe setting [30000 Info of valid/invalid axes] one by one.

[Axis Label] window
(MT Developer2)



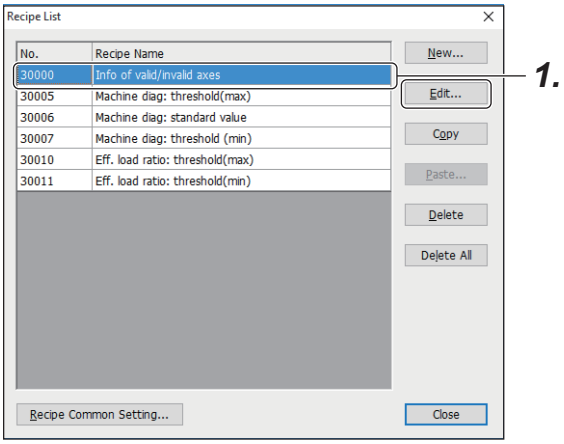
[Recipe] dialog (GT Designer3)



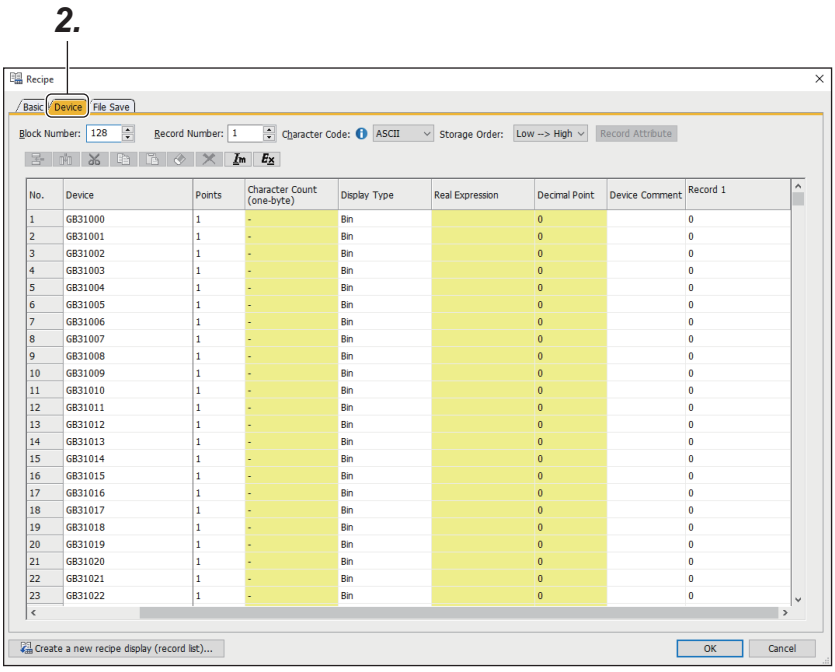
Changing to user-defined axis name

The axis name of the add-on project for a servo amplifier can be changed to user-defined character strings.

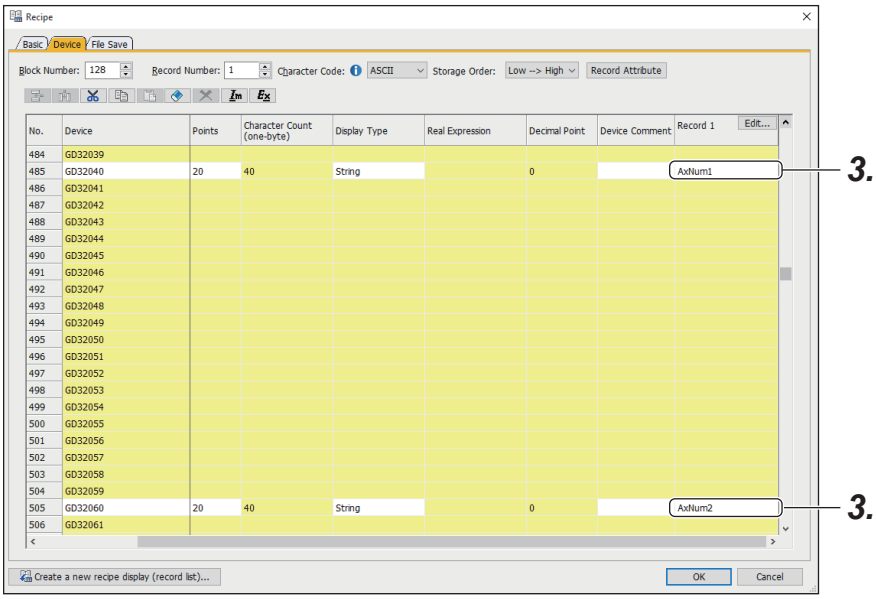
1. Select [Common] → [Recipe] → [Recipe] from the menu of GT Designer3 to display the recipe file list.
Select [30000 Info of valid/invalid axes] of the recipe setting and click the [Edit] button.



2. Display the device tab.



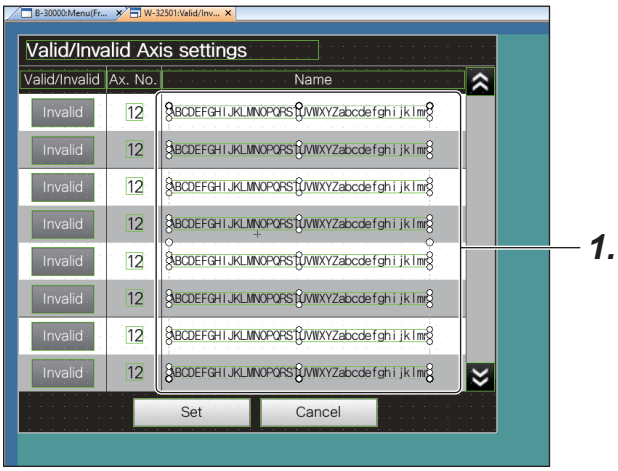
3. Enter user-defined character strings in [Record] whose device type is [String].
Up to 40 one-byte characters can be entered.



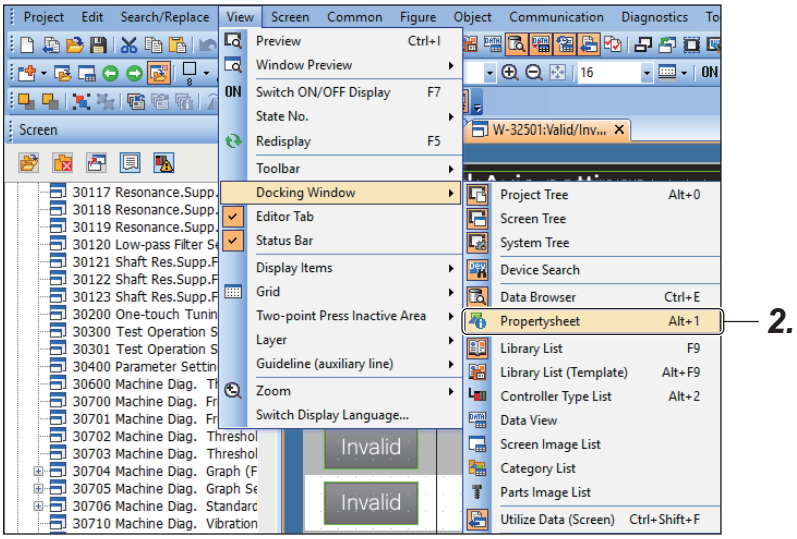
Changing axis name on the GOT

By changing the text display object settings in GT Designer3, the axis name can be changed from the GOT.

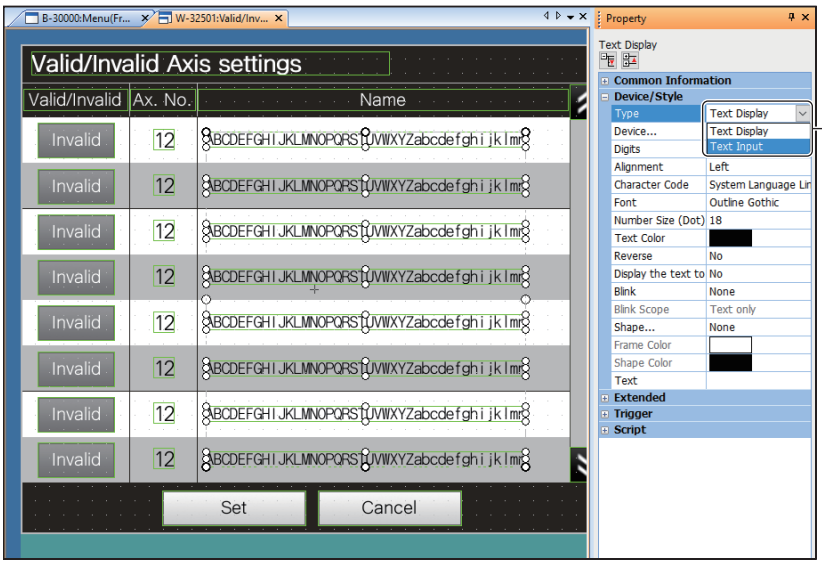
1. Open the [Valid/Invalid Axis Settings] window (W-32501) and select all the text display objects placed on the window.



2. Select [View] → [Docking Window] → [Propertysheet] from the menu to open the property sheet.



3. Change [Type] under [Device/Style] in the property sheet from [Text Display] to [Text Input].



4. Write the project data to the GOT.

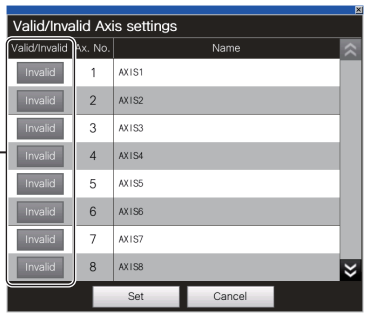
5. Entering axis names with the GOT is enabled.

5.3 When Changing the Number of Axes and Axis Number to be Used

Up to 16 axes can be selected for monitoring target from 64 axes in the add-on project for a servo amplifier.
The GOT logs the machine diagnosis information of the selected axis.
When the number of axes and axis number of the monitoring target are changed, the logging ID of the collecting destination switches.
Delete the logging file before the change so that the logging file before and after the change do not exist in the same folder.
The following shows the procedure for deleting a logging file.

1. Change the settings in [Valid/Invalid Axis settings].

1.



2. Delete the logging file from [Logging information] of the utility.

Select [Data mng.] → [Logging Information] from the utility main menu, and delete all the logging files (G2L file) stored in the following folder.

SD card
- Package1
  - LOG00010
    - LOG30010.G2L
    - LOG30010_****.G2L
  - LOG00011
  - :
  - :
  - LOG00024
    - LOG30024.G2L
    - LOG30024_****.G2L
  - LOG00025
    - LOG30025.G2L
    - LOG30025_****.G2L

2. Delete

5.4 Changing Controller Setting

The controller setting of the add-on project for a servo amplifier is set as the MELSEC Q series.

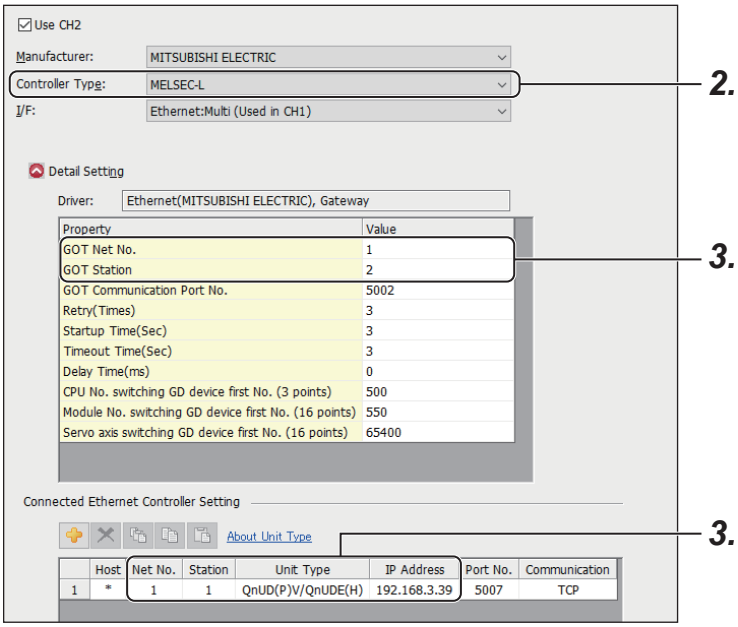
When changing it to the PLC other than the MELSEC Q series, refer to the following.

1. Select [Common] → [Controller Setting] from the menu.

2. The [Controller Setting] window appears.

Change [Controller Type] to the series of the PLC to be used.

Series name	[Controller Type]
MELSEC iQ-R series	[MELSEC iQ-R, RnMT/NC/RT, CR800-D]
MELSEC iQ-F series	[MELSEC iQ-F]
MELSEC-L series	[MELSEC-L]



3. Change the following items according to the system configuration.

Setting item	Item
[Detail Setting]	• [GOT Net No.] • [GOT Station]
[Connected Ethernet Controller Setting]	• [Net No.] • [Station] • [Unit Type] • [IP Address]

5.5 Setting the Threshold Value with GT Designer3

If you already know the estimated value of the machine diagnosis and the threshold value of the effective load ratio, you can set them in a batch not with the GOT but with GT Designer3.

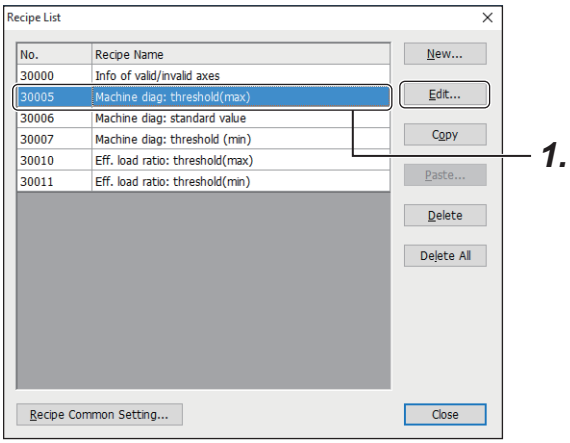
In the add-on project for a servo amplifier, the following recipe settings are for setting the threshold values.

Recipe No.	Recipe name
30005	Machine diag: threshold(max)
30007	Machine diag: threshold (min)
30010	Eff. load ratio: threshold(max)
30011	Eff. load ratio: threshold(min)

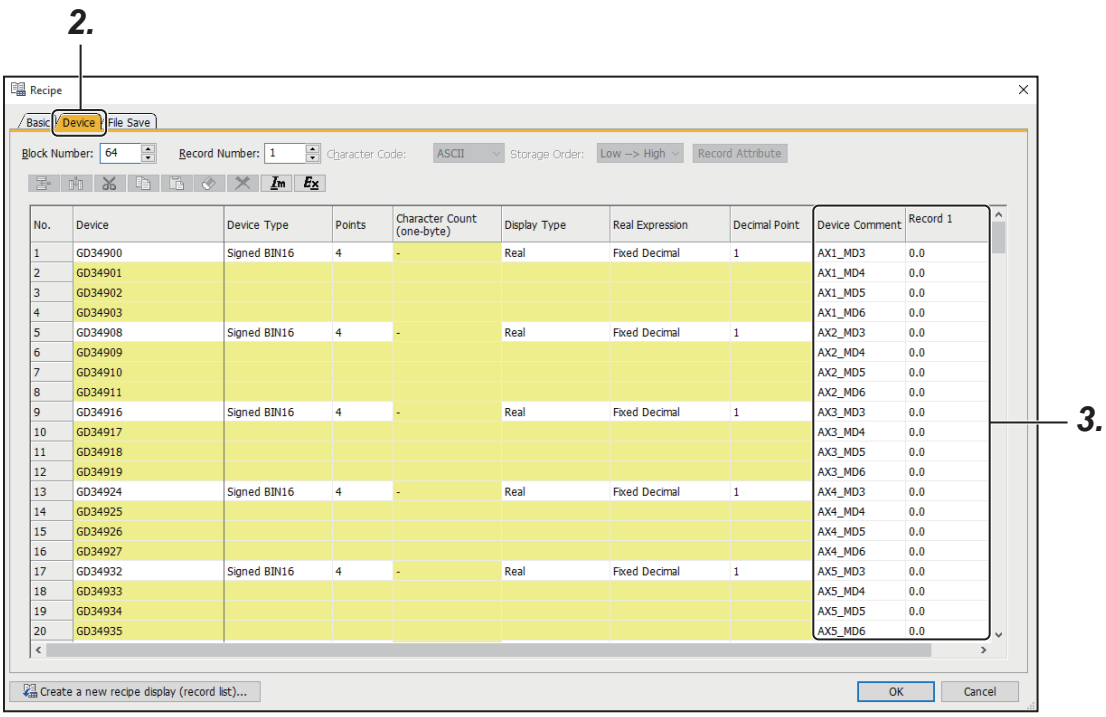
Setting the maximum threshold value of the machine diagnosis function

1. Select [Common] → [Recipe] → the [Recipe] menu to display the recipe file list.

Select [30005 Machine diag: threshold(max)] of the recipe setting and click the [Edit] button.



2. Display the [Device] tab.



3. Referring to the device comment, set the threshold value for [Record] corresponds to each item.

For the machine diagnosis data items correspond to device comments, refer to the following.

Axis number	Device comment	Item
1	AX1_MD3	Forward rotation torque static friction read
	AX1_MD4	Forward rotation torque dynamic friction (at rated speed) read
	AX1_MD5	Reverse rotation torque static friction read
	AX1_MD6	Reverse rotation torque dynamic friction (at rated speed) read
:	:	:
64	AX64_MD3	Forward rotation torque static friction read
	AX64_MD4	Forward rotation torque dynamic friction (at rated speed) read
	AX64_MD5	Reverse rotation torque static friction read
	AX64_MD6	Reverse rotation torque dynamic friction (at rated speed) read

5.6 Screen Customization

The following shows the availability of screen customization for the servo amplifier add-on projects.

○: Available, ×: Unavailable

Description	Availability
Changing the object design	○
Changing the object operation	× *1
Placing a new object on the screen	○
Deleting the object on the screen	○
Adding a script	○
Editing and deleting the script	×
Changing the screen number	×
Changing the setting of [Overlay Screen Positioning] from [On top of the reference screen] to [Under the reference screen]	×
Switching the user-created screen to a screen other than the [Menu] screen (B-30000)	× *2

*1 The axis name and security setting can be changed.
For the details, refer to the following.
☞ Page 214 Setting the Axis Name
☞ Page 225 Adding Security

*2 For the details, refer to the following.
☞ Page 212 Screen transitioning between user-created screen and servo amplifier add-on project screen

6 PRACTICAL USAGE

This chapter explains the practical usage for utilizing the add-on project for a servo amplifier.

6.1 Adding Security

Setting the security for the screens or objects of the add-on project for a servo amplifier restricts the display and operation.
The following two security authentication methods are available: level authentication and operator authentication.

- Level authentication: Effective when the authentication is performed for each security level.
- Operator authentication: Effective when the authentication is performed for each operator.

For the details of the level authentication and operator authentication, refer to the following.

GT Designer3 (GOT2000) Screen Design Manual

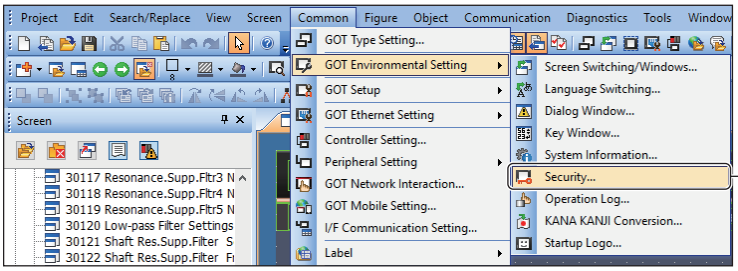
Level authentication

As an example, the following shows how to restrict inputting the threshold values for the estimated value of the machine diagnosis by using the level authentication.

Project setting

Set the security to the project.

1. Start GT Designer3, and select [Common] → [GOT Environmental Setting] → [Security] from the menu.

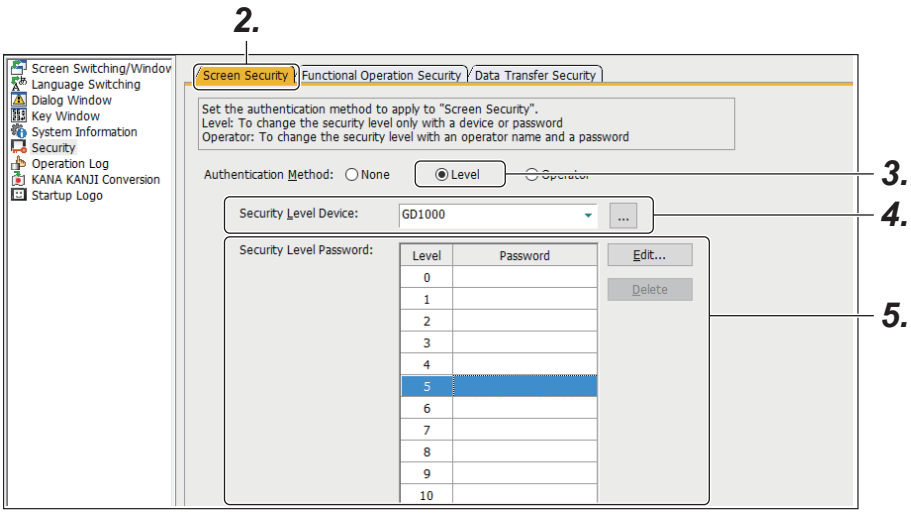


2. Display the [Screen Security] tab.

3. Select [Level] for [Authentication Method].

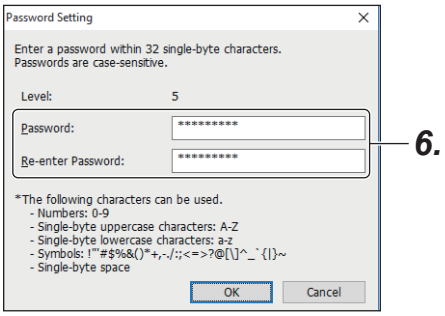
4. Set a device for [Security Level Device].

5. Select the security level from [Security Level Password], and click the [Edit] button.



6. The [Password Setting] window appears.

Set a password.

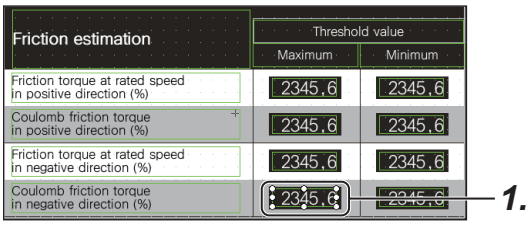


Security level setting

Sets the security level of the numerical input object for inputting the threshold values.

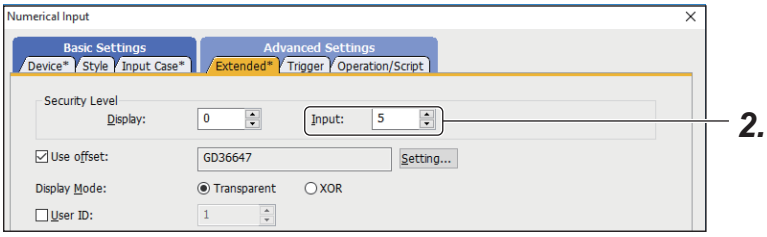
As an example, the following shows how to restrict the numerical input for the upper threshold value of [Coulomb friction torque in negative direction (%)] of the [Machine Diag. Threshold Setting] window (W-30600).

1. Double-click the numerical input for the upper limit threshold value of [Negative direction Coulom friction torque (%)] to display the setting dialog.



2. Set the security level to [Input] of [Security Level] in the [Extended] tab.

Logging in with the security level equal to or higher than the set security level enables inputting the threshold value.



Screens related to the threshold value settings

The following table lists the screens where the settings related to [Threshold value] are placed.

Configure the same setting for the part where the security is to be set.

Type	Screen
Window screen	W-30600, W-30702, W-30703, W-30704, W-30712, W-30713, W-30714
Mobile screen	M-30000, M-30001, M-30002, M-30003, M-30010, M-30011

Operator authentication

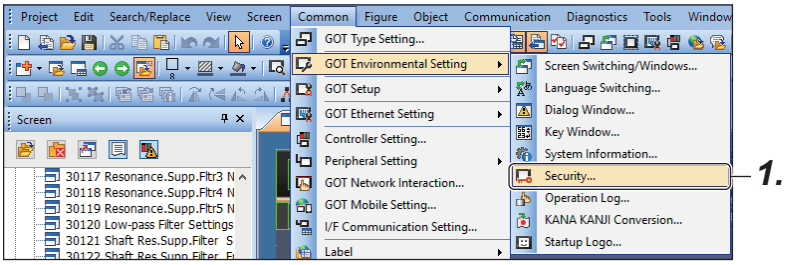
The following shows how to restrict switching the screen to the [Valid/Invalid Axis settings] window (W-32501) by using the operator authentication function.

To use the operator authentication function, configure the project setting with GT Designer3 and the utility setting with the GOT.

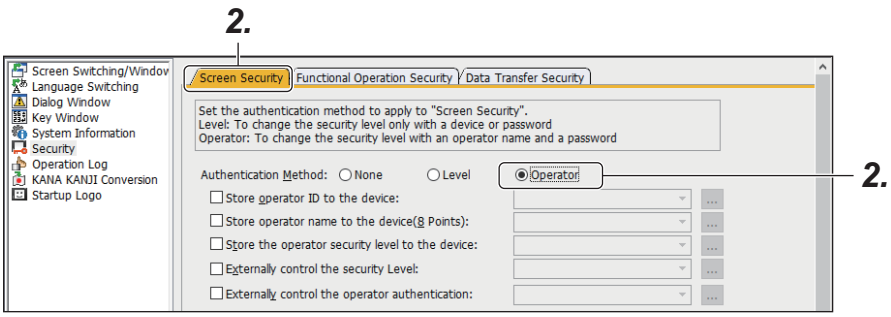
Project setting

Configure the setting in the project with GT Designer3.

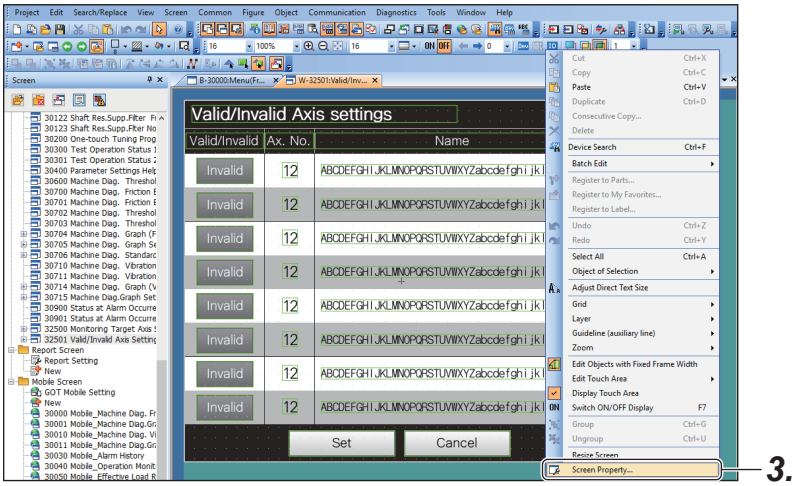
1. Select [Common] → [GOT Environmental Setting] → [Security] from the menu.



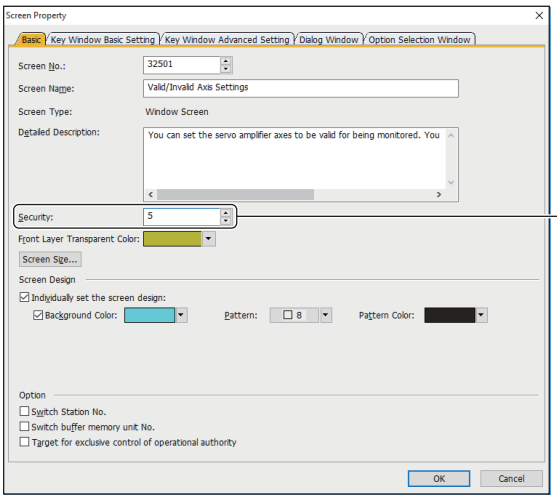
2. Select the [Screen Security] tab, and select [Operator] for [Authentication Method].



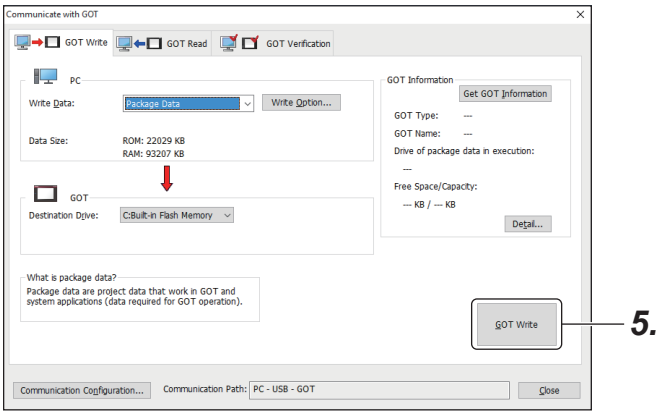
3. Open the [Valid/Invalid Axis Settings] window (W-32501), and right-click the window to select [Screen Property] from the menu.



4. Set the security level to [Security] in the [Basic] tab.



5. Write the package data to the GOT by selecting [Communication] → [Write to GOT] from the menu.



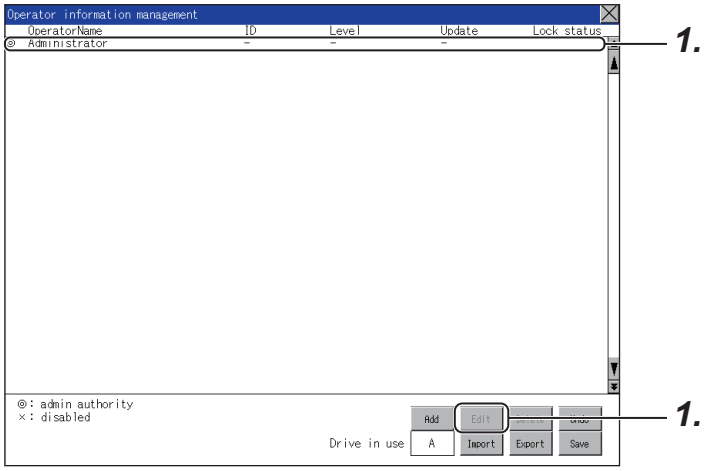
Utility setting

Set the operator setting with the GOT.

1. At the first startup, set the administrator password.

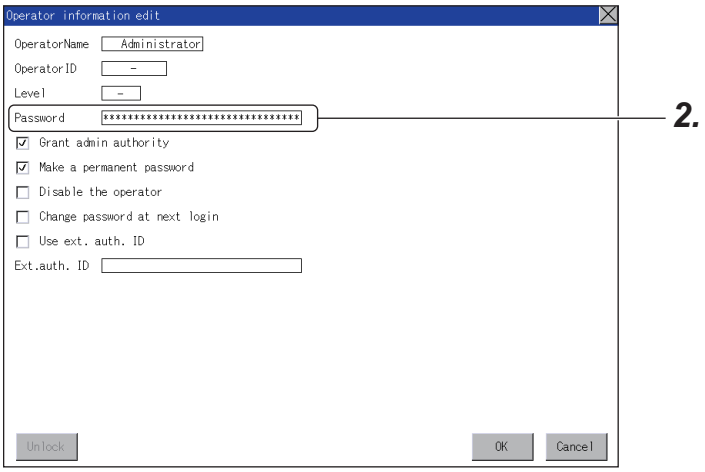
The [Operator information management] screen is displayed at the GOT startup.

Select the administrator and click the [Edit] button.



2. The [Operator information edit] screen is displayed.

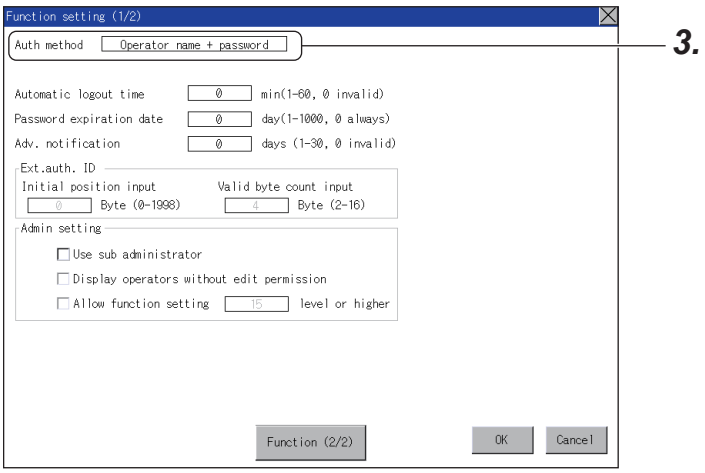
Set the administrator password.



3. Configure the function setting for the operator authentication.

Select [Operator Authentication] → [Function setting] from the utility main menu, and configure the setting in the [Function setting] screen as shown below.

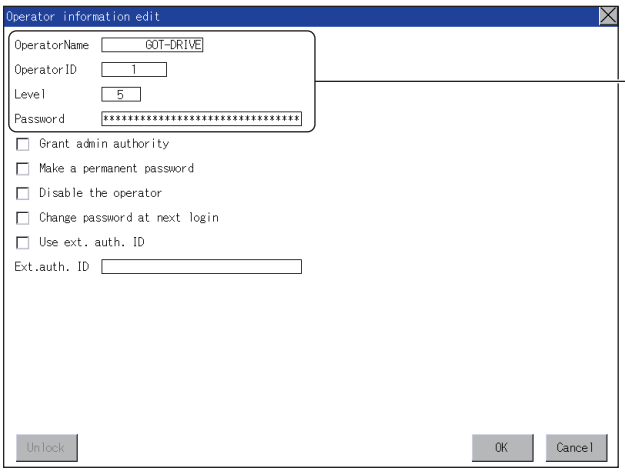
• [Auth method]: [Operator name + password]



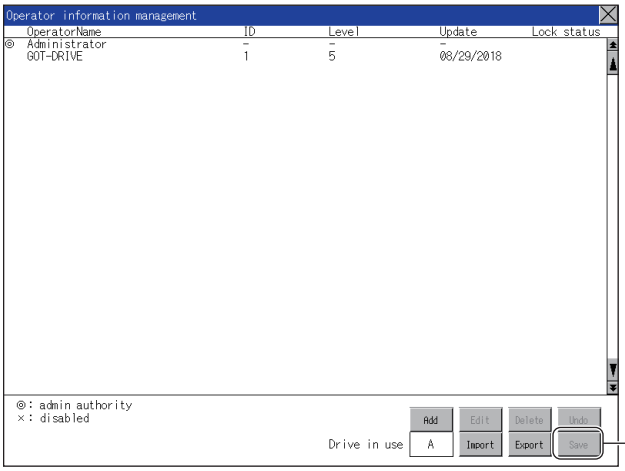
4. Display the [Operator information management] screen from the [Operator setting menu] screen, and register the operator management information.

The following shows the items to set.

- [Operator Name]
- [Operator ID]
- [Level]
- [Password]



5. Save the settings and complete registering the operator.



MEMO

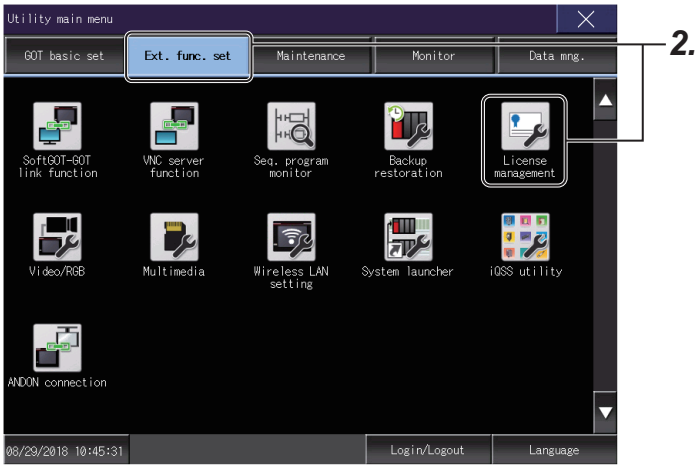
7 GOT MOBILE FUNCTION

To use the GOT Mobile function, purchasing the license number and registering it to the GOT is required.
This chapter explains the setting to register the license in the GOT.

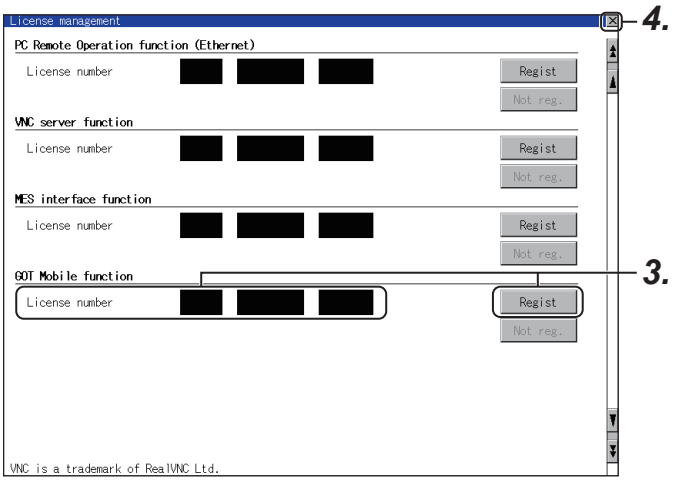
7.1 How to Register License Number in GOT

1. Hold down the upper-left corner of the screen to display the utility main menu.
The display method of the utility main menu depends on the setting.

2. Touch [License management] in the [Ext. func. set] tab.



3. Touch the area for entering the license number in [GOT Mobile function].
Enter the product ID attached to the license agreement of GOT Mobile with the keyboard that is displayed.
After entering the license number, touch the [Regist] button.



4. Touch the [×] button to close the [License management] screen.

7.2 Operation Memory (RAM) Usage of GOT Mobile Function

When the GOT Mobile function is used, the GOT reserves 2 MB space of the user area in the operation memory (RAM) for each client.
When five clients, which is the maximum, are set, the GOT reserves 10 MB space of the user area in the operation memory (RAM).

8 PRECAUTIONS

This chapter explains precautions for using the add-on project for a servo amplifier.

8.1 Controlling Test Operation of the Servo Amplifier

When the GOT monitors a servo amplifier during the test operation, if the communication between them is interrupted for 0.5 seconds or more, the servo amplifier decelerates to a stop (servo-lock status).
To avoid this, configure the setting such as placing the status display of the servo amplifier on the screen for the test operation of the servo amplifier so that always-on communications are performed.

8.2 Canceling Test Mode of the Servo Amplifier

The normal operation cannot be performed after the test operation (JOG operation or positioning operation) is performed due to the servo amplifier specifications.
Turn off the servo amplifier once, and turn it on again.

8.3 Monitoring Performance

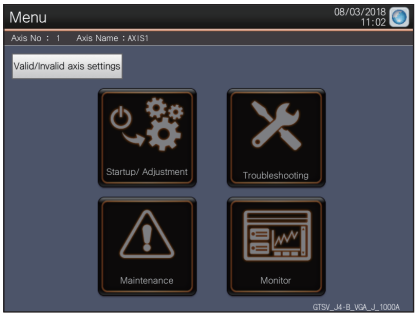
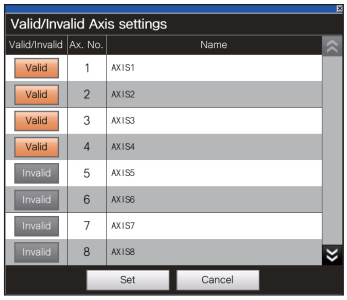
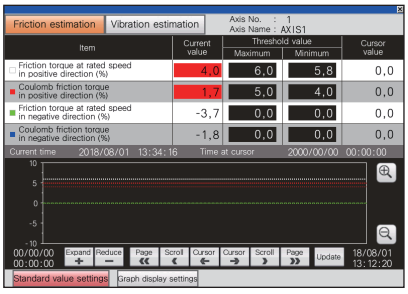
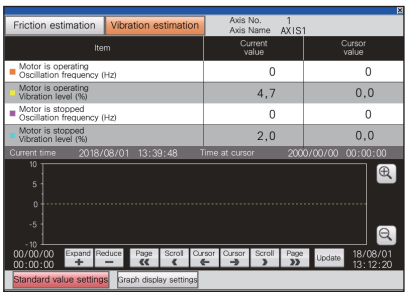
If the PLC devices and servo amplifier devices are monitored with the same communication channel, the monitoring speed decreases.
The add-on project for a servo amplifier is created to monitor the servo amplifier devices with 2 channels. Thus, add 2 channels of the add-on project for a servo amplifier to a communication channel that is not used in the existing project.
When the MELSEC iQ-F is monitored by the GOT, communications are performed with only 1 channel (built-in port 5562). Therefore, the monitoring performance decreases compared to the MELSEC-Q.

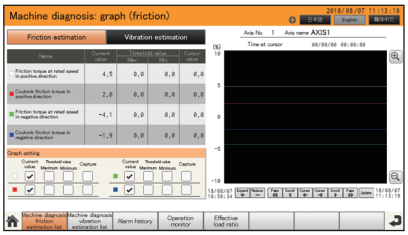
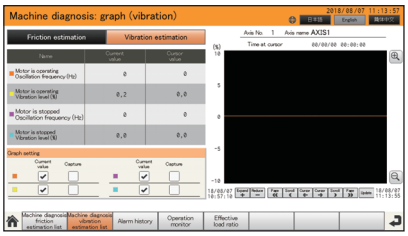
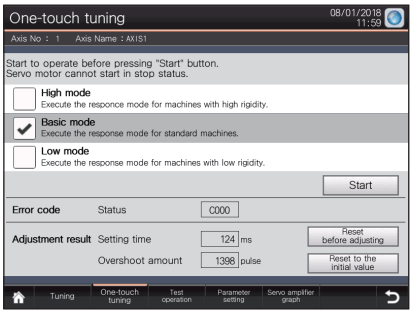
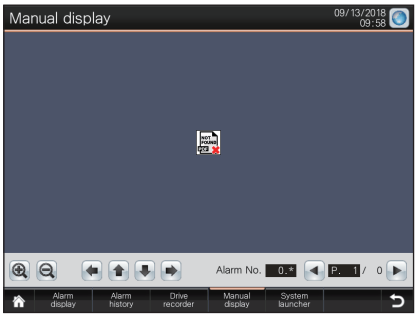
MEMO

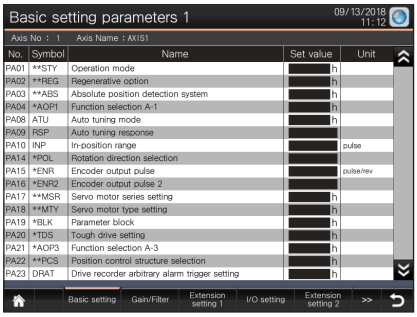
9 TROUBLESHOOTING

9.1 When the Add-on Project for a Servo Amplifier Does Not Operate

The following table lists the troubleshooting for the add-on project for a servo amplifier.

No.	Symptom	Factor	Measure
1	The screen does not switch from the [Menu] screen (B-30001). 	[Valid/Invalid Axis settings] is not set on the [Menu] screen (B-30001).	Set the axis to be used to [Valid] on the [Valid/Invalid Axis settings] window (W-32501). 
2	Machine diagnosis (graph) of the [Machine Diag. Graph (Friction)] window (W-30704) and [Machine Diag. Graph (Vibration)] window (W-30714) is not refreshed.  	No SD card is inserted.	Insert an SD card.
	The estimations for the forward rotation, reverse rotation, and vibration of the target axis have not been completed.	Check if the estimations for the forward rotation, reverse rotation, and vibration of the target axis have been completed by confirming that values are displayed in the numerical displays to display the estimated values. When [Estimating] is displayed for any parameters, the graph is not displayed.

No.	Symptom	Factor	Measure
3	Machine diagnosis (graph) of the [Mobile_Machine Diag.Graph (Fric)] screen (M-30001) and [Mobile_Machine Diag.Graph (Vib)] screen (M-30011) is not refreshed.  	No SD card is inserted.	Insert an SD card.
		The estimations for the forward rotation, reverse rotation, and vibration of the target axis have not been completed.	Check if the estimations for the forward rotation, reverse rotation, and vibration of the target axis have been completed by confirming that values are displayed in the numerical displays to display the estimated values. When [Estimating] is displayed for any parameters, the graph is not displayed.
		The test operation is performed on the base screen.	Stop the test operation. 
4	The one-touch tuning does not operate. 	The servo amplifier may be in the test mode.	Change the control axis setting switch of the servo amplifier, turn off and on the servo amplifier, and then execute the one-touch tuning again. For the details, refer to the following manuals. Manual of the servo amplifier
5	No document is displayed on the [Manual display] screen (B-31200). 	No SD card is inserted.	Insert an SD card.
		No document for display is stored in the SD card.	Store the document data in the SD card. For the details, refer to the following manuals. GT Works3 Add-on License For GOT2000 Enhanced Drive Control (Servo) Project Data Manual (Fundamentals)
		No alarm information file (CSV) is stored in the SD card.	Store the alarm information file (CSV) in the SD card. For the details, refer to the following manuals. GT Works3 Add-on License For GOT2000 Enhanced Drive Control (Servo) Project Data Manual (Fundamentals)

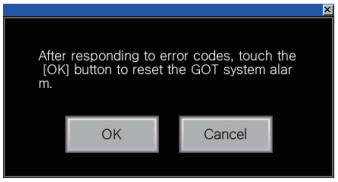
No.	Symptom	Factor	Measure
6	Parameters are not displayed on the parameter setting screen and [Tuning] screen (B-30100). Or they cannot be written.   	The write protection is enabled in [Parameter Setting] of the servo amplifier.	Release the write protection setting in MT Developer2 or GX Works3.

9.2 System Alarm

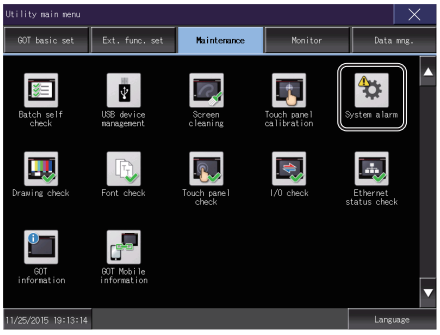
The codes and messages of errors occurring in the GOT, controller, or network are displayed in alarm popup as system alarms.

Touching the displayed system alarm displays the [GOT System Alarm Reset] window (W-30000).
Touching the [OK] button after performing corrective actions corresponding to the error code resets the alarm.

[GOT System Alarm Reset] window (W-30000)



The error code can be checked from [System alarm] in the [Maintenance] tab of the utility main menu as well.



For details of the system alarms occur in the add-on project for a servo amplifier, refer to the following.
📖GOT2000 Series User's Manual (Utility)

Point

When the screen switching device is not set for overlap window 1 on [Screen Switching/Windows], the [GOT System Alarm Reset] window (W-30000) is not displayed.
For the details, refer to the following.
☞ Page 198 Overlap window

MEMO

Revisions

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

Revision date	* Manual number	Revisions
October 2018	SH(NA)-082074ENG-A	First edition: Compatible with GT Works3 Version 1.205P
November 2018	SH(NA)-082074ENG-B	Partial corrections
April 2019	SH(NA)-082074ENG-C	The [Setting Change Confirmation] window (W-30201) has been added.
July 2019	SH(NA)-082074ENG-D	Partial corrections
October 2020	SH(NA)-082074ENG-E	Partial corrections
July 2021	SH(NA)-082074ENG-F	Changed the name of the direct CPU connection to the direct CPU connection (serial).
April 2022	SH(NA)-082074ENG-G	Partial corrections
April 2023	SH(NA)-082074ENG-H	Partial corrections
October 2023	SH(NA)-082074ENG-J	• Added the following screen script and the script symbol. MD_closing window screen GTSV_WINDOW_SCR_NUM_TO_HIDE • Added a GS25 model (GS2512-WXTBD).

WARRANTY

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

■1. Gratis Warranty Term and Gratis Warranty Range

If any faults or defects (hereinafter "Failure") found to be the responsibility of Mitsubishi occurs during use of the product within the gratis warranty term, the product shall be repaired at no cost via the sales representative or Mitsubishi Service Company.
However, if repairs are required onsite at domestic or overseas location, expenses to send an engineer will be solely at the customer's discretion.
Mitsubishi shall not be held responsible for any re-commissioning, maintenance, or testing on-site that involves replacement of the failed module.

(1) Gratis Warranty Term

The gratis warranty term of the product shall be for thirty-six (36) months after the date of purchase or delivery to a designated place.
Note that after manufacture and shipment from Mitsubishi, the maximum distribution period shall be six (6) months, and the longest gratis warranty term after manufacturing shall be forty-two (42) months.
The gratis warranty term of repair parts shall not exceed the gratis warranty term before repairs.

(2) Gratis Warranty Range

(a) The customer shall be responsible for the primary failure diagnosis unless otherwise specified.
If requested by the customer, Mitsubishi Electric Corporation or its representative firm may carry out the primary failure diagnosis at the customer's expense.
The primary failure diagnosis will, however, be free of charge should the cause of failure be attributable to Mitsubishi Electric Corporation.

(b) The range shall be limited to normal use within the usage state, usage methods, and usage environment, etc., which follow the conditions and precautions, etc., given in the instruction manual, user's manual and caution labels on the product.

(c) Even within the gratis warranty term, repairs shall be charged in the following cases.
- Failure occurring from inappropriate storage or handling, carelessness or negligence by the user. Failure caused by the user's hardware or software design.
- Failure caused by unapproved modifications, etc., to the product by the user.
- When the Mitsubishi product is assembled into a user's device, Failure that could have been avoided if functions or structures, judged as necessary in the legal safety measures the user's device is subject to or as necessary by industry standards, had been provided.
- Failure that could have been avoided if consumable parts designated in the instruction manual had been correctly serviced or replaced.
- Replacing consumable parts such as a battery, backlight, and fuse.
- Failure caused by external irresistible forces such as fires or abnormal voltages, and Failure caused by force majeure such as earthquakes, lightning, wind and water damage.
- Failure caused by reasons that could not be predicted by scientific technology standards at the time of shipment from Mitsubishi.
- Any other failure found not to be the responsibility of Mitsubishi or that admitted not to be so by the user.

■2. Onerous repair term after discontinuation of production

(1) Mitsubishi shall accept onerous product repairs for seven (7) years after production of the product is discontinued.
Discontinuation of production shall be notified with Mitsubishi Technical Bulletins, etc.

(2) Mitsubishi shall not accept a request for product supply (including spare parts) after production is discontinued.

■3. Overseas service

Overseas, repairs shall be accepted by Mitsubishi's local overseas FA Center.
Note that the repair conditions at each FA Center may differ.

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

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

(1) Damages caused by any cause found not to be the responsibility of Mitsubishi.

(2) Loss in opportunity, lost profits incurred to the user by Failures of Mitsubishi products.

(3) Special damages and secondary damages whether foreseeable or not, compensation for accidents, and compensation for damages to products other than Mitsubishi products.

(4) Replacement by the user, maintenance of on-site equipment, start-up test run and other tasks.

■5. Changes in product specifications

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

■6. Product application

(1) In using the Mitsubishi graphic operation terminal, the usage conditions shall be that the application will not lead to a major accident even if any problem or fault should occur in the graphic operation terminal device, and that backup and fail-safe functions are systematically provided outside of the device for any problem or fault.

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

Intellectual Property Rights

■Trademarks

MELDAS, MELSEC, iQ Platform, MELSOFT, GOT, CC-Link, CC-Link/LT, and CC-Link IE are trademarks or registered trademarks of Mitsubishi Electric Corporation in Japan and other countries.

Microsoft, Windows, Windows Vista, Windows NT, Windows Server, SQL Server, Visual C++, Visual C#, Visual Basic, Excel, and Access are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.

MODBUS is a registered trademark of Schneider Electric SA.

DeviceNet is a trademark of Open DeviceNet Vendor Association, Inc. (ODVA).

VNC is a registered trademark of RealVNC Ltd. in the United States and other countries.

Intel and Intel Core are trademarks or registered trademarks of Intel Corporation in the United States and other countries.

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

■Copyrights

The screens (screenshots) are used in accordance with the Microsoft Corporation guideline.

SH(NA)-082074ENG-J(2310)MEE
MODEL: GT-ADD-SV-R-SHO-E
MODEL CODE: -

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN
NAGOYA WORKS: 1-14, YADA-MINAMI 5-CHOME, HIGASHI-KU, NAGOYA 461-8670, JAPAN