Oriental motor

HM-60131-2

Data setting software

MEXE02 (Ver. 3.10 and later)

OPERATING MANUAL

Thank you for purchasing an Oriental Motor product.
This operating manual describes product handling procedures and safety precautions.

- Please read it thoroughly to ensure safe operation.
- Always keep the manual where it is readily available.

This manual describes the **MEXE02** Ver. 3.10 and later.
The screens and operation procedures in the **MEXE02** Ver. 3.10 and later differ from those in versions earlier than the **MEXE02** Ver. 3.10.
Please contact your nearest Oriental Motor branch or sales office for further information.

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License Agreement for Data Setting Software (**MEXE02**)

Please read the following terms and conditions carefully before using the Data Setting Software (**MEXE02**) ("Software"). The user of the Software ("User") shall be deemed to agree to those terms and conditions when the User makes the Software available for the use (including, but not limited to, download, installation and any similar action), and this license agreement shall be deemed to be entered into between ORIENTAL MOTOR CO., LTD. ("ORIENTAL MOTOR") and the User.

1. The ownership right, copyright and other intellectual property right, and all other rights with regard to the Software shall belong to either ORIENTAL MOTOR or its licensor, depending on the nature of each specific right.
2. ORIENTAL MOTOR shall grant to the User a non-exclusive right to use the Software only for the purpose of using an ORIENTAL MOTOR product or products supported by the Software.
3. The User may install and use one (1) copy of the Software in one (1) specific computer. If deemed necessary, one (1) backup copy of the Software maybe created following installation.
4. The User may not reproduce, distribute, lend or transfer the Software to any third party or otherwise allow any third party to use the Software in any form or by any means. Furthermore, the User may not upload the Software to an electric bulletin board or website which is accessible by public.
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6. The User shall observe the Foreign Exchange and Foreign Trade Law and other applicable laws and regulations related to export and import in Japan in using the Software. The User shall not export the Software to any country which is subject to the export control regulations by the government of Japan or USA.
7. Neither ORIENTAL MOTOR nor its licensor shall make any warranty as to whether the Software is appropriate or useful in serving a specific purpose of the User, whether the Software is free from defects, or any other condition relating to the Software.
8. Neither ORIENTAL MOTOR nor its licensor shall be held liable whatsoever for any loss or damage arising directly or indirectly in association with, or in relation to, a use of the Software, including, but not limited to, loss or damage arising from damage or corruption of hardware or software, loss of benefit, disruption of business, loss of any data.
9. Neither ORIENTAL MOTOR nor its licensor shall be held liable whatsoever for any claim or demand made by a third party regarding the Software.
10. ORIENTAL MOTOR shall reserve the right to change the specifications of the Software without prior notice for the purpose of improvement.
11. This Agreement shall be terminated immediately upon the User's violation of this Agreement. The User may not use the Software once this Agreement is terminated.
12. This Agreement shall be executed in both Japanese and English language, and in the event of any conflicting terms, the Japanese version shall prevail.
13. This Agreement shall be governed by and interpreted in accordance with the Laws of Japan.
14. If any dispute arises out of this Agreement, the Tokyo District Court shall have exclusive jurisdiction to settle such dispute for the first instance.

1 MEXE02 supported product function list

The functions, setting items, and screens vary depending on the product to be used in combination with the **MEXE02**.
See the following function list or the USER MANUAL for an applicable product to check the available functions.

Function name	**AZ** Series	**AR** Series				
		AC power input DeviceNet compatible	AC power input Pulse input type	DC power input Pulse input type	AC power input Built-in controller type	DC power input Built-in controller type
Operation data editing	○	○	−	−	○	○
Parameter setting	○	○	○	○	○	○
Teaching/remote operation	○	○	−	−	○	○
Remote operation	−	−	○	○	−	−
I/O test	○	○	○	○	○	○
Unit information monitor	○	−	−	−	−	−
Customize wizard	○*	−	−	−	−	−
Status monitor	○	−	−	−	−	−
Status, I/O monitor	−	○	○	○	○	○
D-I/O monitor, R-I/O monitor	○	−	−	−	−	−
Internal I/O monitor	○	−	−	−	○	○
Remote I/O monitor	−	−	−	−	−	−
Remote register monitor	−	−	−	−	−	−
RS-485 status monitor	−	−	−	−	−	−
Remote monitor	−	−	−	−	−	−
Waveform monitor	○	○	○	○	○	○
Gain tuning	−	−	−	−	−	−
Alarm monitor	○	○	○	○	○	○
Warning monitor	−	○	○	○	○	○
RS-485 communication monitor	○	−	−	−	○	○
Information monitor	○	−	−	−	−	−
HMI-CLR	○	−	−	−	−	−
Configuration execution	○	−	−	−	−	−
Restore function	○	−	−	−	−	−
Backup function	○	−	−	−	−	−
Mechanism information copy	○	−	−	−	−	−
Gear information copy	○	−	−	−	−	−
Coordinate information copy	○	−	−	−	−	−
Recommended macro operation copy	○	−	−	−	−	−

* It cannot be used depending on the motor types or actuator types to be connected. In this case, the recommended setting support is automatically applied.

ARL Series						
CC-Link compatible				MECHATROLINK-Ⅱ compatible	Built-in controller type	
1 station occupied ADVANCED mode	1 station occupied BASIC mode	2 station occupied ADVANCED mode	2 station occupied BASIC mode		Controller mode	Driver mode
○	○	○	○	–	○	–
○	○	○	○	○	○	○
○	○	○	○	–	○	–
–	–	–	–	–	–	○
○	○	○	○	○	○	○
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Function name	**AZ** Series	**AR** Series				
		AC power input DeviceNet compatible	AC power input Pulse input type	DC power input Pulse input type	AC power input Built-in controller type	DC power input Built-in controller type
Batch copy of ABZO sensor information (fixed value) to driver	○	–	–	–	–	–
Position preset clear	○	–	–	–	–	–
ZSG preset clear	○	–	–	–	–	–
Latch information clear	○	–	–	–	–	–

ARL Series						
CC-Link compatible				MECHATROLINK-Ⅱ compatible	Built-in controller type	
1 station occupied ADVANCED mode	1 station occupied BASIC mode	2 station occupied ADVANCED mode	2 station occupied BASIC mode		Controller mode	Driver mode
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–

The functions, setting items, and screens vary depending on the product to be used in combination with the **MEXE02**.
See the following function list or the USER MANUAL for an applicable product to check the available functions.

Function name	**NX** Series				**PKA** Series	**RK Ⅱ** Series
	Position control mode	Speed control mode	Torque control mode	Tension control mode	Built-in controller type	Built-in controller type
Operation data editing	○	○	○	○	○	○
Parameter setting	○	○	○	○	○	○
Teaching/remote operation	–	–	–	–	○	○
Remote operation	○	○	○	○	–	–
I/O test	○	○	○	○	○	○
Unit information monitor	–	–	–	–	–	–
Customize wizard	–	–	–	–	–	–
Status monitor	–	–	–	–	–	–
Status, I/O monitor	○	○	○	○	○	○
D-I/O monitor, R-I/O monitor	–	–	–	–	–	–
Internal I/O monitor	–	–	–	–	○	○
Remote I/O monitor	–	–	–	–	–	–
Remote register monitor	–	–	–	–	–	–
RS-485 status monitor	–	–	–	–	–	–
Remote monitor	–	–	–	–	–	–
Waveform monitor	○	○	○	○	○	○
Gain tuning	○	○	–	–	–	–
Alarm monitor	○	○	○	○	○	○
Warning monitor	○	○	○	○	○	○
RS-485 communication monitor	–	–	–	–	○	○
Information monitor	–	–	–	–	–	–
HMI-CLR	–	–	–	–	–	–
Configuration execution	–	–	–	–	–	–
Restore function	–	–	–	–	–	–
Backup function	–	–	–	–	–	–
Mechanism information copy	–	–	–	–	–	–
Gear information copy	–	–	–	–	–	–
Coordinate information copy	–	–	–	–	–	–
Recommended macro operation copy	–	–	–	–	–	–
Batch copy of ABZO sensor information (fixed value) to driver	–	–	–	–	–	–
Position preset clear	–	–	–	–	–	–
ZSG preset clear	–	–	–	–	–	–
Latch information clear	–	–	–	–	–	–

BLE Series			**BX**Ⅱ Series			
CC-Link compatible	Standard/ electromagnetic brake type	RS-485 communication type	Speed control mode	Position control mode	**BX** compatible mode (speed control)	**BX** compatible mode (position control)
○	○	○	○	○	○	○
○	○	○	○	○	○	○
–	–	–	–	○	–	○
○	○	○	○	–	○	–
○	○	○	○	○	○	○
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The functions, setting items, and screens vary depending on the product to be used in combination with the **MEXE02**.
See the following function list or the USER MANUAL for an applicable product to check the available functions.

Function name	**CRK** Series	**DRL**Ⅱ Series	Network converter			
	Built-in controller type	Built-in controller type	CC-Link compatible	MECHATROLINK-Ⅱ compatible	MECHATROLINK-Ⅲ compatible	EtherCAT compatible
Operation data editing	○	○	–	–	–	–
Parameter setting	○	○	○	○	○	○
Teaching/remote operation	○	○	–	–	–	–
Remote operation	–	–	–	–	–	–
I/O test	○	○	–	–	–	–
Unit information monitor	–	–	–	–	–	–
Customize wizard	–	–	–	–	–	–
Status monitor	–	–	–	–	–	–
Status, I/O monitor	○	○	–	–	–	–
D-I/O monitor, R-I/O monitor	–	–	–	–	–	–
Internal I/O monitor	–	–	–	–	–	–
Remote I/O monitor	–	–	○	○	○	○
Remote register monitor	–	–	○	○	○	○
RS-485 status monitor	–	–	○	○	○	○
Remote monitor	–	–	–	–	–	○
Waveform monitor	○	○	–	–	–	–
Gain tuning	–	–	–	–	–	–
Alarm monitor	○	○	○	○	○	○
Warning monitor	○	○	○	○	○	○
RS-485 communication monitor	○	○	–	–	–	–
Information monitor	–	–	–	–	–	–
HMI-CLR	–	–	–	–	–	–
Configuration execution	–	–	–	–	–	–
Restore function	–	–	–	–	–	–
Backup function	–	–	–	–	–	–
Mechanism information copy	–	–	–	–	–	–
Gear information copy	–	–	–	–	–	–
Coordinate information copy	–	–	–	–	–	–
Recommended macro operation copy	–	–	–	–	–	–
Batch copy of ABZO sensor information (fixed value) to driver	–	–	–	–	–	–
Position preset clear	–	–	–	–	–	–
ZSG preset clear	–	–	–	–	–	–
Latch information clear	–	–	–	–	–	–

2 Introduction

This manual describes the **MEXE02** Ver. 3.10 and later.
The screens and operation procedures in the **MEXE02** Ver. 3.10 and later differ from those in versions earlier than the **MEXE02** Ver. 3.10.
Please contact your nearest Oriental Motor branch or sales office for further information.

■ Before Use

Perform any installation, uninstallation, editing, and other operations for the data setting software **MEXE02** using an account with Administrator privileges.
Use the **MEXE02** correctly and safely after thoroughly reading the manual and understanding the basic operating procedures and other details.

■ Applicable product

The **MEXE02** can be used with Oriental Motor's stepping motor drivers, servo motor drivers, brushless motor drivers, and network converters etc.
A product that can be combined with the **MEXE02** is described as "applicable product" here.

■ Notation rules

The description of text in this manual follows the notation rules specified as shown at the right. The screens shown in this manual are those displayed in Windows 7. The screens vary according to the operating systems (OS) you will be using.

[ ]	Menus and submenus shown in/from the title bar, buttons, and other controls that can be clicked with the mouse, are enclosed in square brackets.
" "	Dialog box messages, etc., are enclosed in double quotations marks.

■ Functions of MEXE02

The **MEXE02** is a software program that lets you set data required for motor operation from a PC.
Data can be edited in various PC screens, or data set in an applicable product can be checked from a PC.
The key functions of the **MEXE02** are explained below.

- Editing and saving the data

Operation data and parameters can be created and edited.
Data edited in the **MEXE02** can be written to an applicable product, or data stored in an applicable product can be read into the **MEXE02**.
You can save data files created in the **MEXE02** in either the **MEXE02**'s dedicated file format or CSV format.

- Monitor function

You can monitor the product (motor and driver) status, motor operating status, ON/OFF status of I/O signals, and others.
The waveform monitor lets you check I/O signals, motor speeds and other settings based on measured waveforms.

- Test function

  - I/O test can be performed to monitor input signals and cause output signals to be output forcibly.
  - Test operation for the motor can be performed using the teaching/remote operation or remote operation.

■ Installation and uninstallation of MEXE02

For the installation and uninstallation of the **MEXE02**, refer to Oriental Motor Website or the separate manual "Data Setting Software **MEXE02** INSTALLATION MANUAL.

■ Communication cables

Communication cables vary depending on the applicable product. Check the USER MANUAL of the applicable product.

- When using a USB cable

Use a commercially available USB cable.

- When using the **CC05IF-USB** communication cable for data setting software

The **CC05IF-USB** supplied communication cable for data setting software consists of a pair of cables, PC interface cable and USB cable. If the **MEXE02** has been downloaded from the Oriental Motor Website, note that this cable is sold separately (as an accessory).

General specifications of **CC05IF-USB**

Interface	USB Specification 1.1 (Full Speed 12 Mbps)
Connector shapes	RS-485 (Mini DIN 8 Pin: male), USB (Type Mini B: female) USB Type A connection via included USB cable to connect to a PC
Communication system	Half duplex
Communication speed	9600 bps
Indicator	The LED is lit (green) when recognized by PC and ready to use.
Power supply	USB bus power
Current consumption	25 mA (100 mA max.)
Dimension	25×58.6×16 mm (0.98×2.31×0.63 in.) [excluding cable section]
Mass	PC interface cable: App. 0.2 kg (7.1 oz) USB cable: App. 0.03 kg (1.06 oz)
Operating environment	Ambient temperature: 0 to +40 °C (+32 to +104 °F) (non-freezing) Ambient humidity: 85% or less (non-condensing) Atmosphere: No corrosive gas, dust, water or oil
Insulation system	Non-isolated

■ System requirements

The installation of the **MEXE02** on a PC requires one of the following operating systems (OS) and a PC compatible with the OS you will be using.

- PC

Recommended CPU *1	Intel Core processor 2 GHz or higher (Your operating system must support the OS.)
Display	Video adapter or monitor of XGA (1024×768) or higher resolution
Recommended memory	32-bit (x86) version: 1 GB or more 64-bit (x64) version: 2 GB or more
Hard disk *2	Available disk space of 60 MB or more
USB port	Using USB cable: One USB2.0 port Using **CC05IF-USB**: One USB1.1 port
Disk drive	CD-ROM drive (for installation)

*1 The hardware requirements for the OS must be satisfied.

*2 Microsoft .NET Framework 4 Client Profile must be installed in your PC for the **MEXE02** to function. It will be installed automatically, if not already installed. Accordingly, additional free hard disk space shown below may be required.
32-bit (x86) version: 600 MB
64-bit (x64) version: 1.5 GB

Note The required memory and hard disk space may vary depending on your system environment.

- Operating System (OS)

Both the 32-bit (x86) and 64-bit (x64) versions are supported.

- Microsoft Windows XP Service Pack 3 [Service Pack 2 for 64-bit (x64) version]
- Microsoft Windows Vista Service Pack 2
- Microsoft Windows 7 Service Pack 1
- Microsoft Windows 8
- Microsoft Windows 8.1

■ Checking the product

Verify that the items listed below are included in the **MEXE02** that you purchased. Report any missing or damaged items to the branch or sales office from which you purchased the product.

- Data setting software **MEXE02** (CD-ROM) ..... 1 pc.
- Communication cable for the data setting software **CC05IF-USB** ..... 1 set
  (one PC interface cable and one USB cable)
- OPERATING MANUAL (CD-ROM) ..... 1 pc.
- INSTALLATION MANUAL ..... 1 copy

■ Hazardous substances

The products do not contain the substances exceeding the restriction values of RoHS Directive (2011/65/EU).

3 Safety precautions

The **MEXE02** is designed with the assumption that the user has an understanding of basic operations such as starting up and exiting applications and how to use a mouse in Windows XP, Windows Vista, Windows 7, and Windows 8. Use the product only after carefully reading and fully understanding these instructions.
Also read the "Safety precautions" section in the USER MANUAL for the product to be used in combination with the **MEXE02**.

⚠ Warning

Handling the product without observing the instructions that accompany a "Warning" symbol may result in serious injury or death.

Connection

- Turn off the power to both the PC and applicable product before connecting your PC to the applicable product. Failure to follow this instruction may cause electric shock.

⚠ Caution

Handling the product without observing the instructions that accompany a "Caution" symbol may result in injury or property damage.

Connection

- The data setter connector of the applicable product is not insulated. When grounding the positive terminal of the power supply, do not connect any equipment (PC, etc.) whose negative terminal is grounded. Doing so may cause the equipment and applicable product to short, damaging both. Do not ground the equipment if you plan to connect it.

Disposal

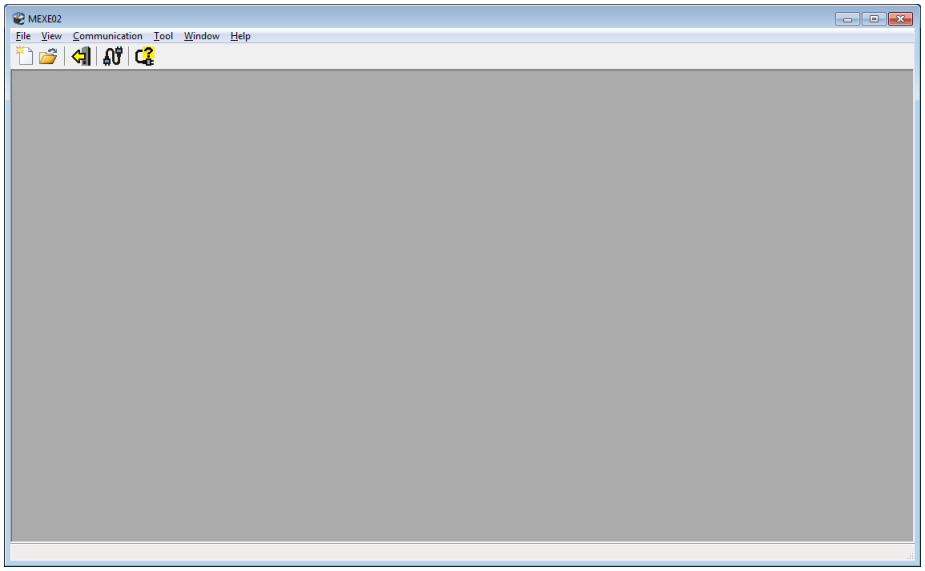
- To dispose of the **MEXE02**, disassemble it into parts and components as much as possible, and dispose of individual parts/components as industrial waste.

4 Startup and shutdown

This chapter explains how to start up and shut down the **MEXE02**.

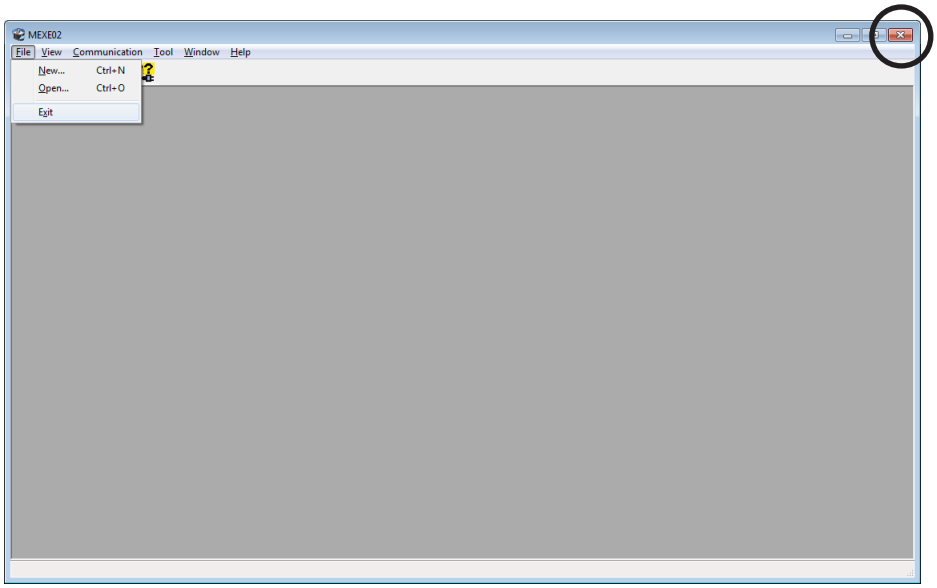
4.1 Starting the MEXE02

Double-click the **MEXE02** icon on the desktop to start the **MEXE02**.
Once the **MEXE02** has started, the following window appears.



4.2 Shutting down

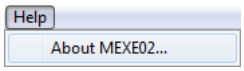
Click [Exit] from the [File] menu. Alternatively, click the button on the upper right of the screen.
The **MEXE02** shuts down.



4.3 Checking version information

You can check the version of the **MEXE02** software you are using.

1. Click [About **MEXE02**] from the [Help] menu.



2. After you have checked the software version, click [Close].

The software version is also found on the **MEXE02** CD-ROM.

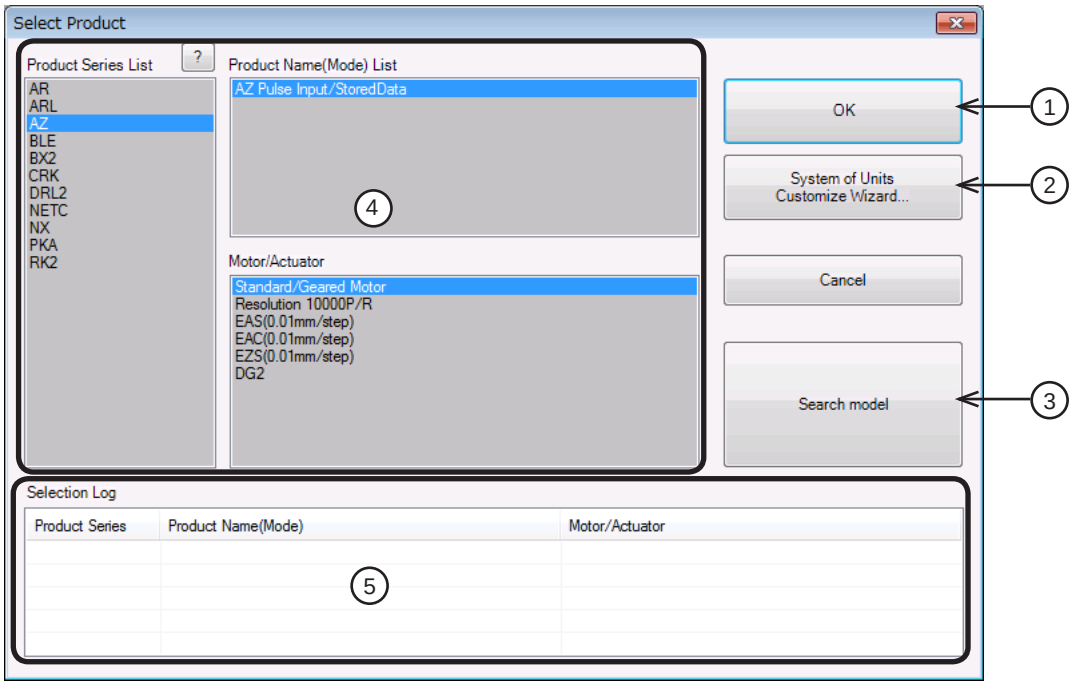
5 Data edit

This chapter explains how to create data files, edit operation data and parameters, and store edited data.

5.1 Creating new data

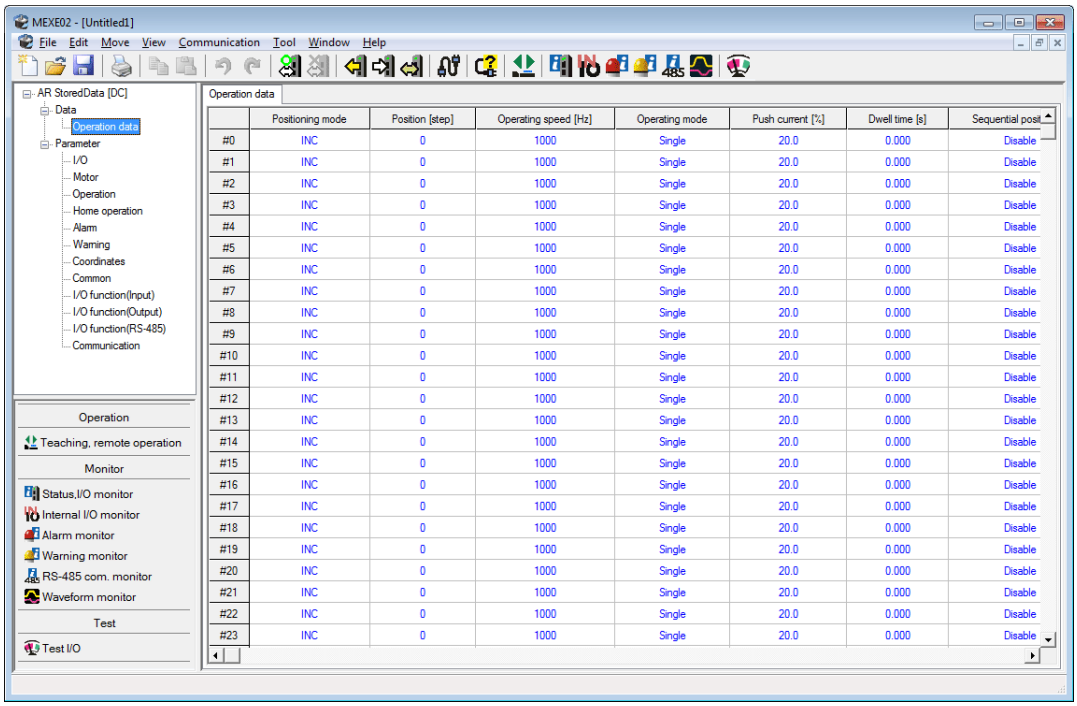
1. Click the [New] icon in the toolbar.

2. Select a model from "Product Series List" and "Product Name (Mode) List," and click [OK].
In the case of actuators, select the series name of the motor that is equipped to the actuator.



1	[OK] button	Clicking [OK] after selecting a model will show the data edit window.
2	[System of Units Customize Wizard] start button	This button starts a wizard to display or enter the travel distance or speed for the selected model by a desired unit. (Some models are not supported.) Refer to p.42 for details.
3	[Search model] button	Clicking [Search model] after connecting an applicable product and selecting the series name will automatically select the model.
4	• Product Series List • Product Name (Mode) List • Motor/Actuator	A desired model can be selected from the displayed products.
5	Selection Log	A list of previously selected models is displayed. You can also select a model from this list.

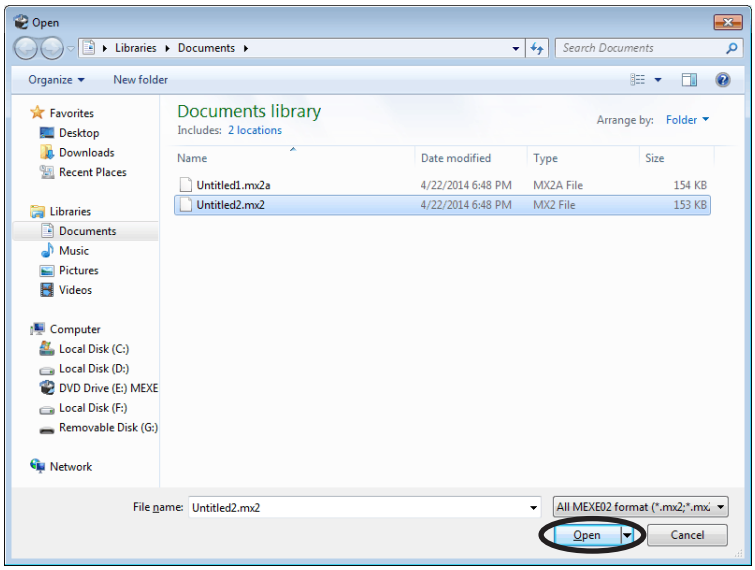
The data edit window appears.



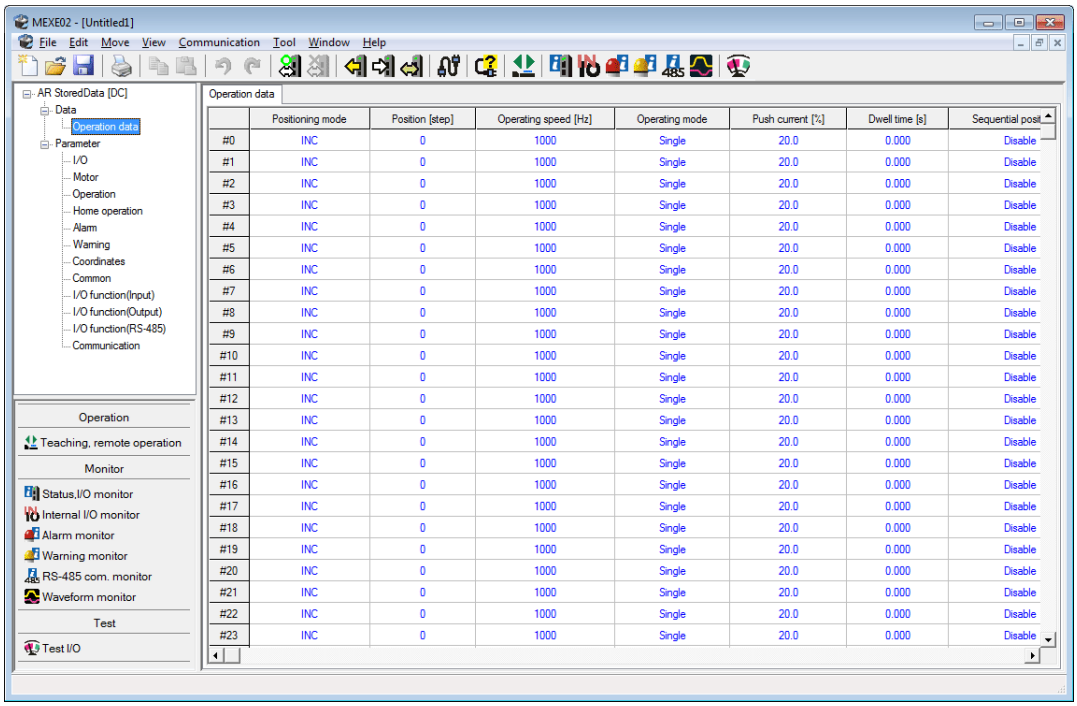
5.2 Opening an existing data file

1. Click the [Open] icon in the toolbar.

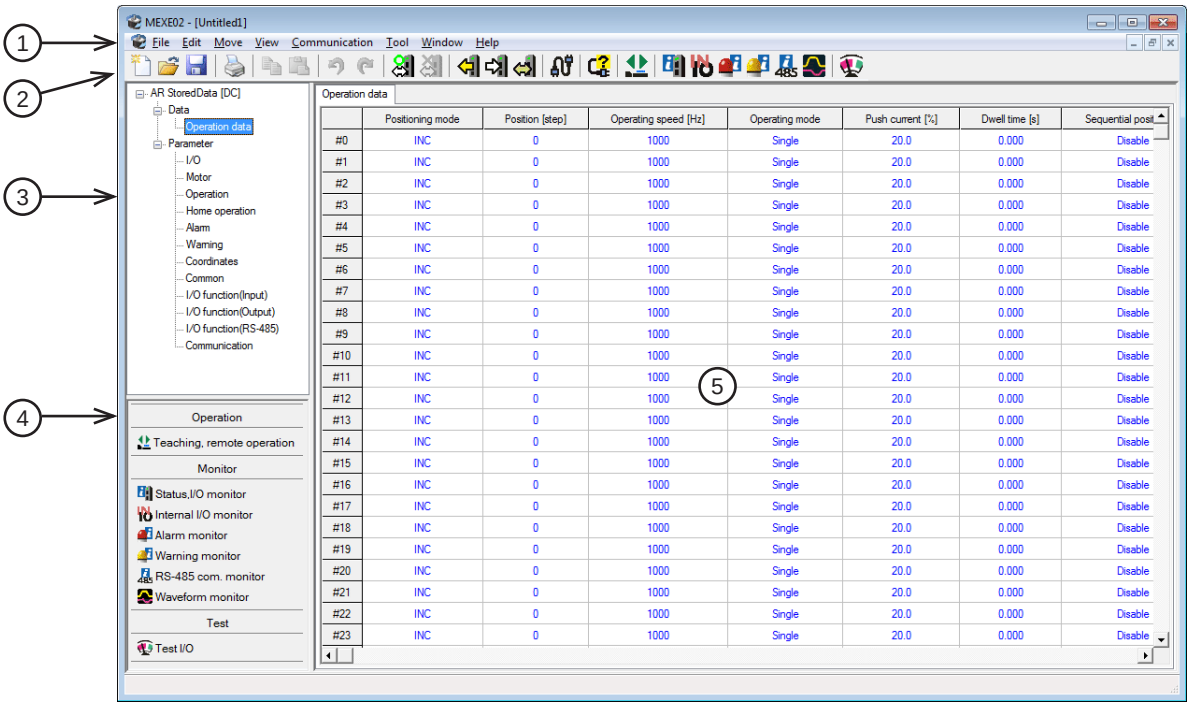
2. Select the file you want to edit, and click [Open].



The data edit window appears, just like when you are creating a new data file.



■ Description of edit window



1	Menu bar	This is used to select and execute a function.
2	Tool bar	Some of the functions available on the menu are provided as an array of icons.
3	Tree view	This is used to select a group of data for editing.
4	Short-cut buttons	Using these buttons, functions such as monitor and test can be executed. The functions in this area can also be executed from the [Tool] menu.
5	Data setting area	This is an area to edit data. The display is changed by selecting a group from the tree view.

5.3 Setting data in the data edit window

Note

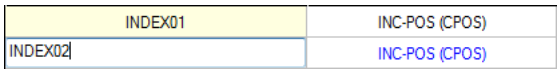
- Changing the data in the **MEXE02** will not change the data in the applicable product. Data writing is required to change the data in the applicable product. Refer to p.30 for details.
- Data cannot be edited while communicating with the applicable product using the monitor or test function. Edit data after ending the communication.

■ Data entry

The background color of a cell is initially white. When the value in the cell is changed, the color of the cell changes to yellow.
The color of characters in the cell is initially blue. When the value in the cell is changed, the color of characters changes to black.

- Entering characters

Click a cell and enter characters using the keyboard.

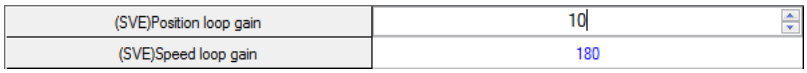


Note

Do not enter a comma (,) in the "Name" field of the operation data. Entering a comma may cause a problem in the subsequent data edit.

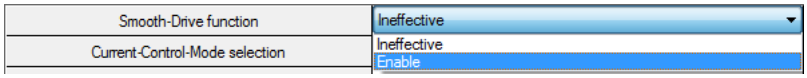
- Entering a numeric value

Click a desired cell, and enter a numeric value using the keyboard.



- Selecting a value from a pull-down menu

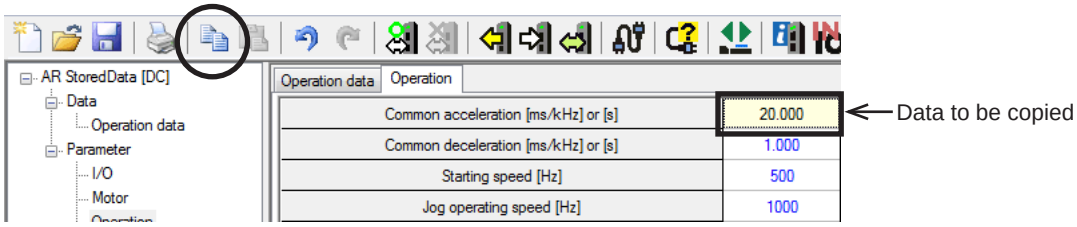
Double-clicking a desired cell displays a pull-down menu. Select a desired value from the pull-down menu.



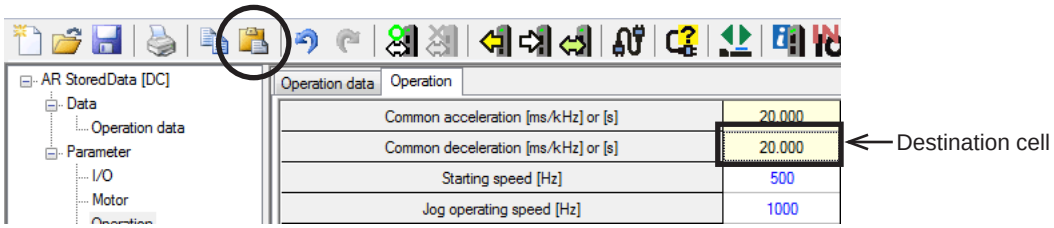
■ Copying and pasting data

You can copy an entered value and paste it into a different cell. Copying and pasting lets you quickly populate multiple cells with the same value.

1. Select the data you want to copy, and then click the [Copy] icon in the toolbar.
   You can select a single value or multiple values.

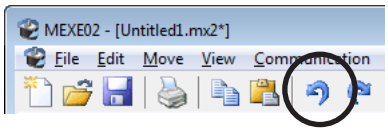


2. Click the cell you want to paste the data into, and then click the [Paste] icon in the toolbar.

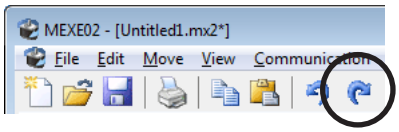


■ Undoing and redoing

1. To undo the last edit that you made, click the [Undo] icon in the toolbar.



2. To redo the last edit that was undone, click the [Redo] icon in the toolbar.



Note

- [Undo] operation cannot execute:
  - When communicating with the applicable product
  - When no edit has been done yet.
- [Redo] operation cannot execute:
  - When no [Undo] has been done yet.

5.4 Saving a data file

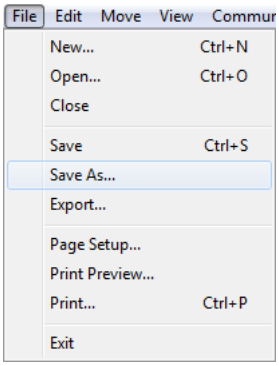
The data edited within the **MEXE02** or data read by the applicable product will be saved as a file.
Data files can be saved in the **MEXE02** format (.mx2), **MEXE02** extended format (.mx2a), or CSV format (.csv).
Data files saved in the **MEXE02** format and **MEXE02** extended format cannot be opened in other applications. Save data files in the CSV format if you want to open them in other applications.

■ Saving data by overwriting

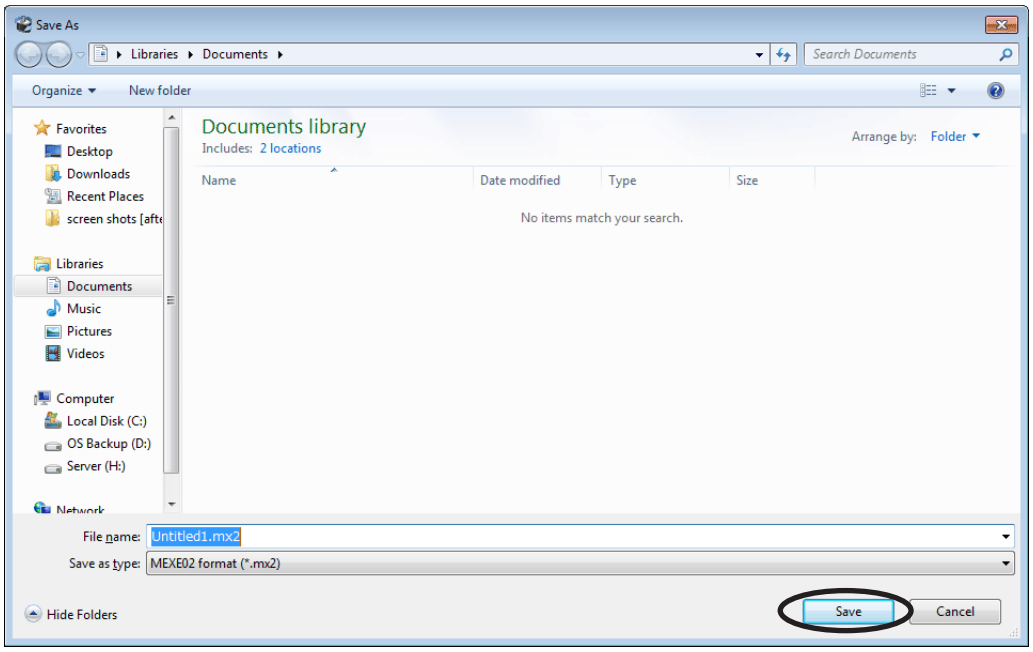
Click the [Save] icon in the toolbar.
The current data is saved over the existing data.

■ Saving data under a different name

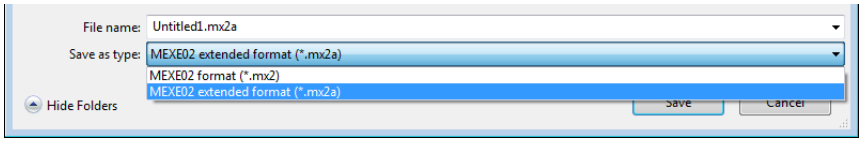
1. Click [Save As] from the [File] menu.



2. Enter a new file name, and click [Save].
   The data is saved under the specified name.



Note If the data, which has been saved in the **MEXE02** extended format (.mx2a), will be saved in the **MEXE02** format (.mx2) again, the extended information will be erased. Be sure to check the saving format (filename extension) beforehand.

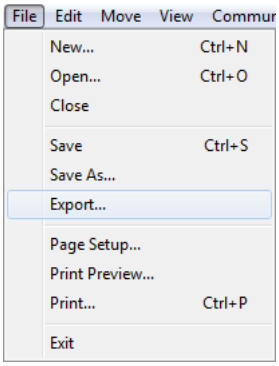


■ Saving data in CSV format

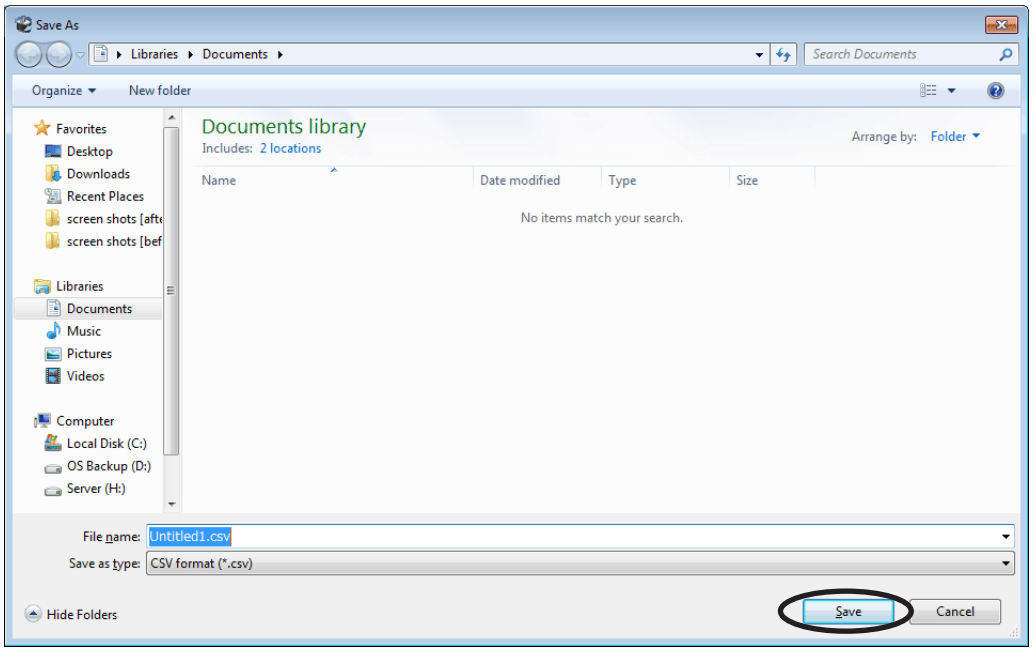
Data saved in the CSV format can be edited in applications other than the **MEXE02**.

Note Data files in the CSV format cannot be opened in the **MEXE02**. To edit in the **MEXE02**, open the file in an application other than the **MEXE02**, and paste the data to the **MEXE02**.

1. Click [Export] from the [File] menu.



2. Enter a file name, and click [Save].
   All operation data and parameters are saved in CSV format.

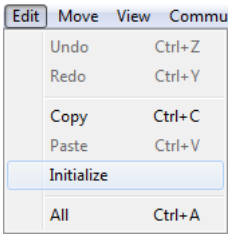


5.5 Data initialization

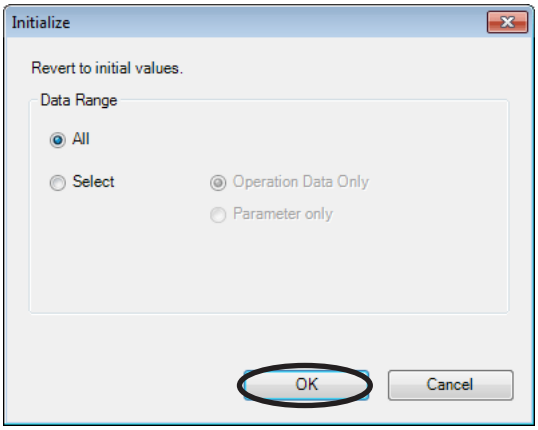
■ Initialize editing data

You can initialize the data you have edited in the data edit window.

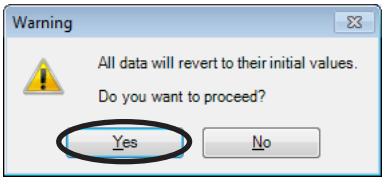
1. Click [Initialize] from the [Edit] menu.



2. Select the data you want to initialize, and click [OK].

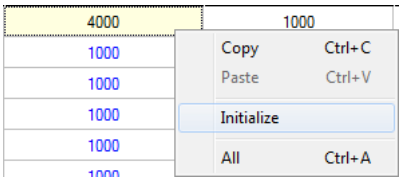


3. Click [Yes].
   The data is initialized.



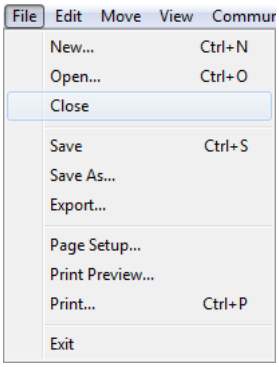
■ Initializing data in selected cells

1. In the data edit window, select the cell you want to initialize.
2. Click the right mouse button, and click [Initialize].
   The value in the selected cell returns to the default.



5.6 Ending data edit

To close the data edit window, click [Close] from the [File] menu.

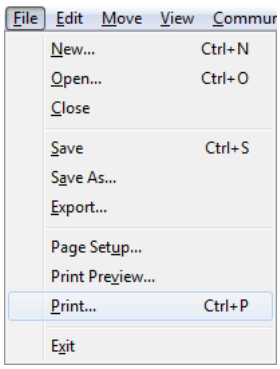


6 Printing data

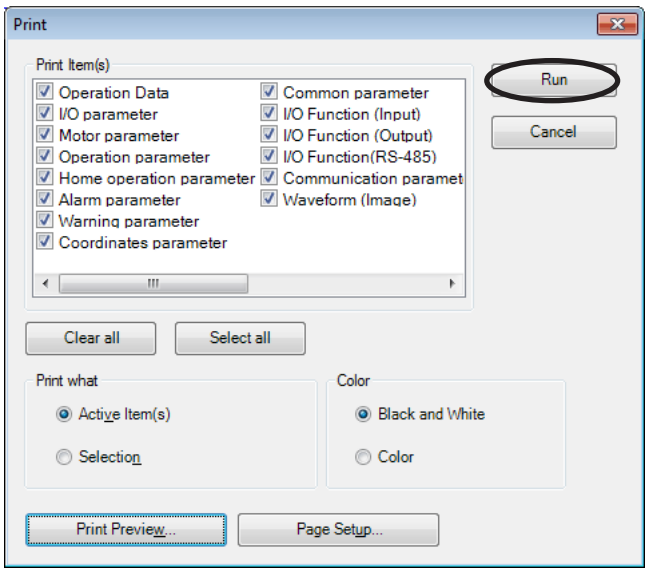
This chapter explains how to print the set data and waveform measurement results.

6.1 How to print data

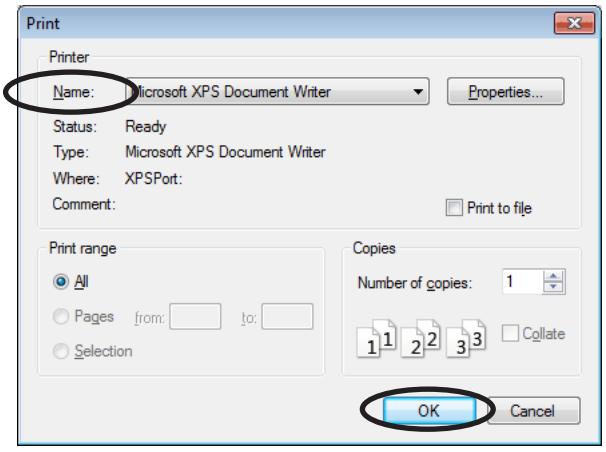
1. Click [Print] from the [File] menu.



2. Set the print item, print object and color, and click [Run].



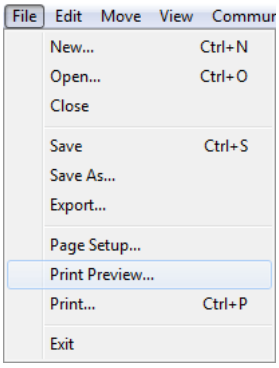
3. At "Name," select a printer that you want to use for printing and click [OK].
Data is printed.

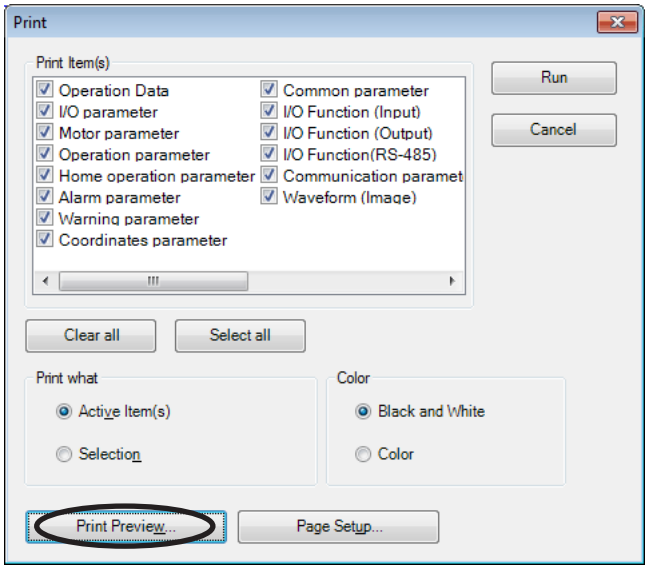


6.2 Print preview

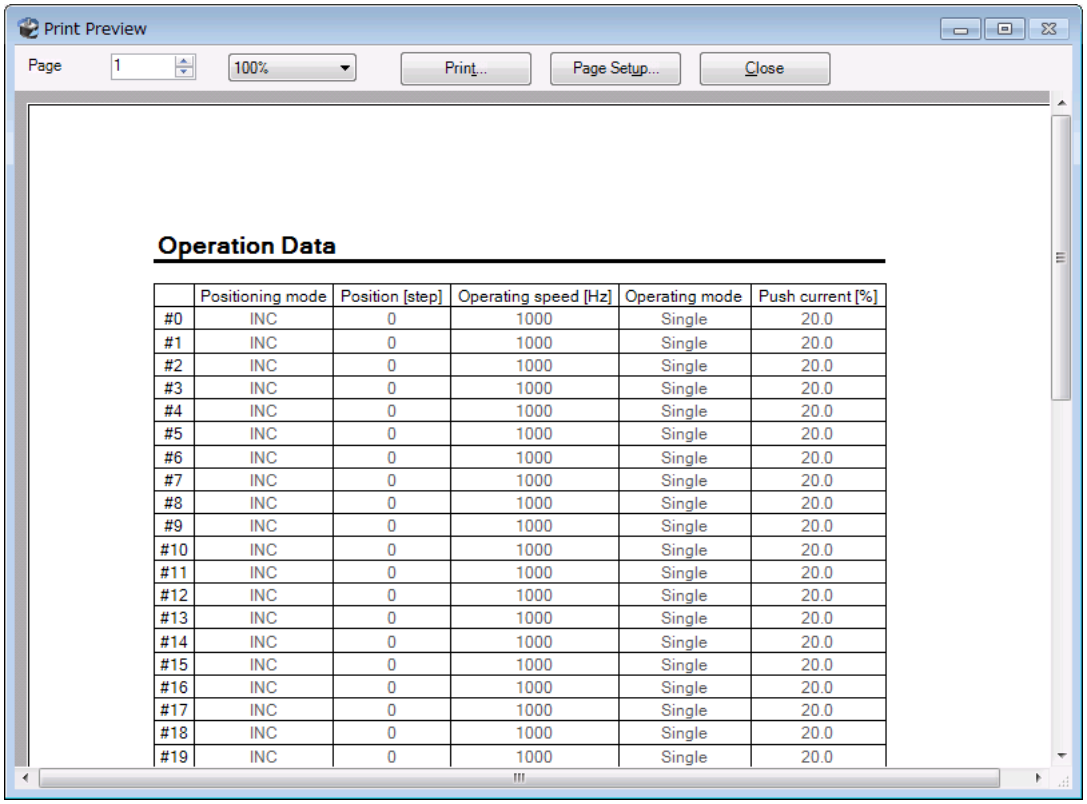
You can preview the print image on screen before printing it on the printer.

1. Click [Print Preview] from the [File] menu.
   Alternatively, click [Print] from the [File] menu and, in the window that opens, execute print preview.





The print preview window appears.

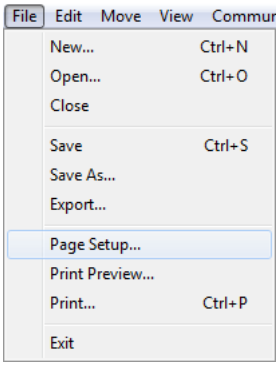


	Positioning mode	Position [step]	Operating speed [Hz]	Operating mode	Push current [%]
#0	INC	0	1000	Single	20.0
#1	INC	0	1000	Single	20.0
#2	INC	0	1000	Single	20.0
#3	INC	0	1000	Single	20.0
#4	INC	0	1000	Single	20.0
#5	INC	0	1000	Single	20.0
#6	INC	0	1000	Single	20.0
#7	INC	0	1000	Single	20.0
#8	INC	0	1000	Single	20.0
#9	INC	0	1000	Single	20.0
#10	INC	0	1000	Single	20.0
#11	INC	0	1000	Single	20.0
#12	INC	0	1000	Single	20.0
#13	INC	0	1000	Single	20.0
#14	INC	0	1000	Single	20.0
#15	INC	0	1000	Single	20.0
#16	INC	0	1000	Single	20.0
#17	INC	0	1000	Single	20.0
#18	INC	0	1000	Single	20.0
#19	INC	0	1000	Single	20.0

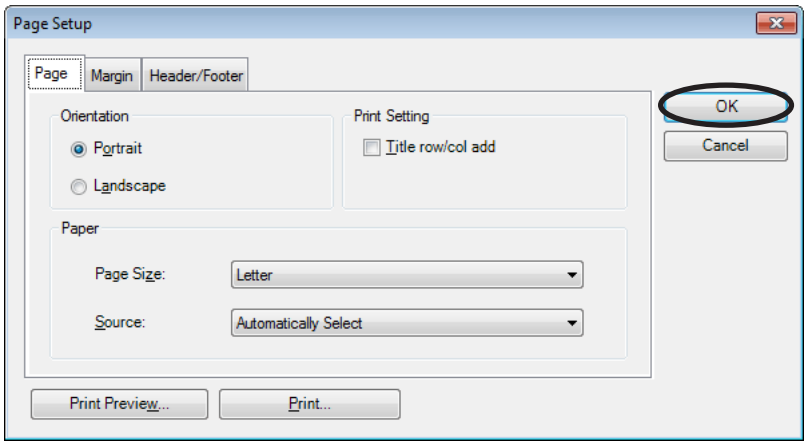
2. After checking the print image, click [Close].

6.3 Setting print options

1. Click [Page Setup] from the [File] menu.

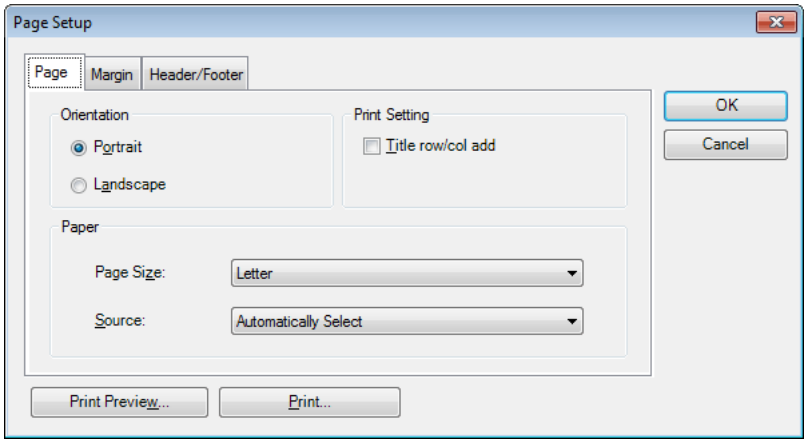


2. Click the tab of an option that you want to set.
   After the setting is completed, click [OK].



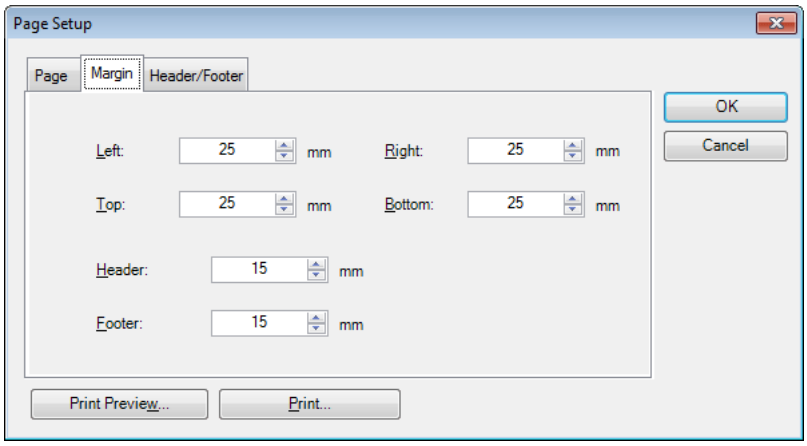
- "Page" tab

  Set the orientation, paper, etc. to be used for printing.



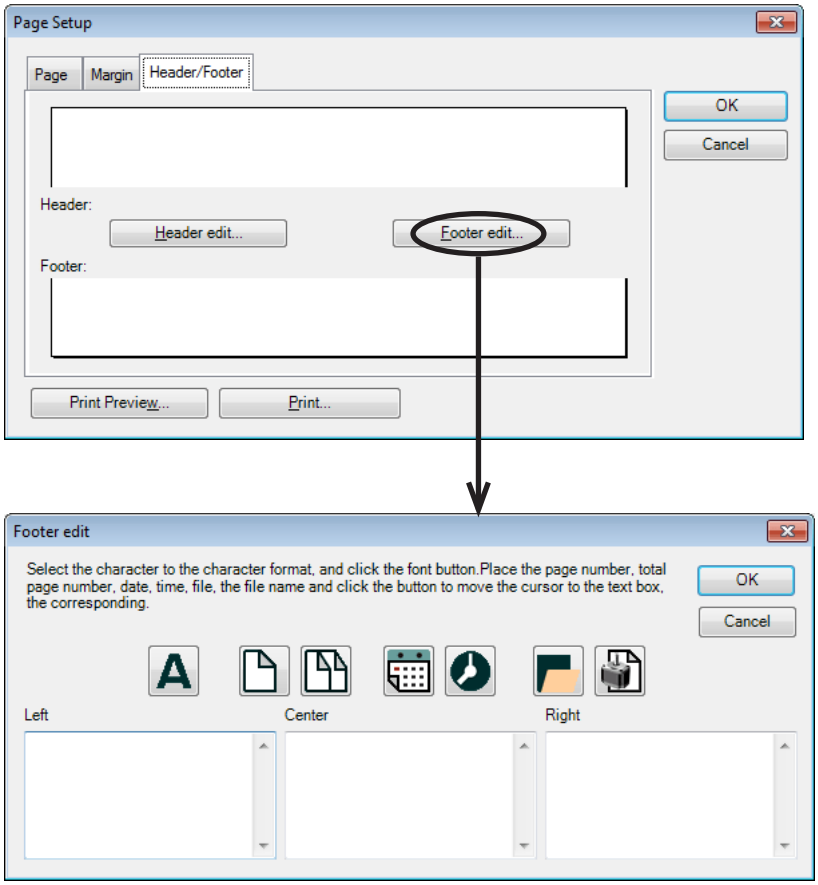
- "Margin" tab

  Set the paper margin and header/footer positions.



- "Header/Footer" tab

  Set the header/footer.



7 Communication function between MEXE02 and applicable products

This chapter explains how to hold communication between the **MEXE02** and an applicable product to write or read data.

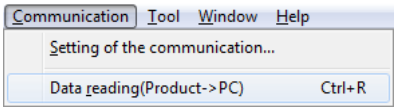
7.1 Connection with applicable product

1. Connect the PC on which the **MEXE02** has been installed and an applicable product.
   Read the USER MANUAL of the applicable product to connect it correctly.
   Refer to p.12 for the communication cable.
2. Turn on the power to the applicable product.

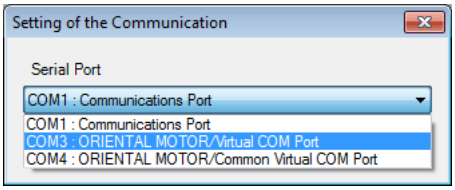
7.2 Setting of communication port

When connecting the PC and applicable product, the communication port is required to set.

1. Click [Setting of the Communication] from the [Communication] menu.



2. Select the port to which the applicable product is connected and click [OK].
   When connecting using the USB cable: "ORIENTAL MOTOR/Common Virtual COM Port" is displayed.
   When connecting using the **CC05IF-USB**: "ORIENTAL MOTOR/Virtual COM Port" is displayed.



Note Before setting the communication port, make sure to connect the PC and applicable product and turn on the power of the applicable product. Without proper connection, the connection port will not be displayed.

7.3 Online/Offline

The PC and applicable product is started connecting.

1. Click the [Online] icon in the toolbar.

   The [Online] icon is depressed and the PC and applicable product are connected (online).

2. To clear the connection, click the [Offline] icon.

Note
- When the monitor function or test function is executed, the PC and applicable product are automatically connected (online).
- Clicking the [Offline] icon stops the monitor function or test function that is conducting communication.

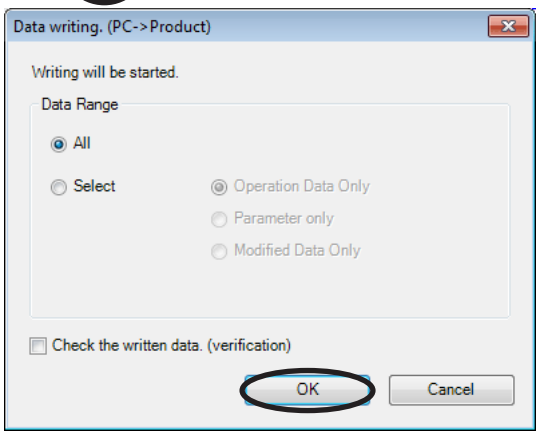
7.4 Writing data to applicable product

The data created in the **MEXE02** can be written to the applicable product.

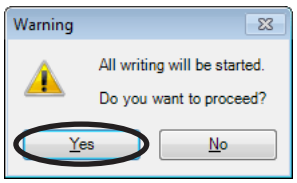
Note Do not turn off the power of the applicable product while writing data. Doing so may destroy the data.

1. Click the [Data writing] icon in the toolbar.

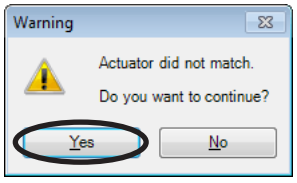
2. Select data to be written and click [OK].



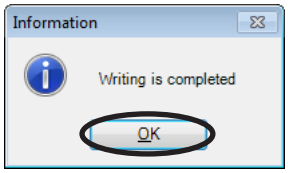
3. Click [Yes].
   Data writing starts.



4. If the following message is displayed, click either [Yes] or [No] after checking the applicable product.
   [Yes]: Writing data will be started.
   [No]: Writing data will be discontinued.

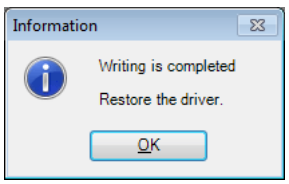


5. After it is completed, click [OK].

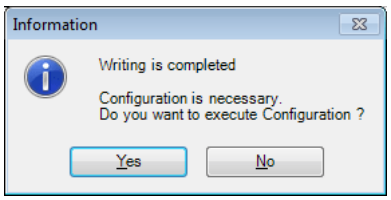


Note Depending on the data, you may need to turn off and on the power or execute Configuration. Follow the instructions in the displayed messages.

- Restarting power



- Executing Configuration
  Click [Yes] to execute Configuration.
  If you click [No], execute Configuration manually.
  Refer to p.65 for details.



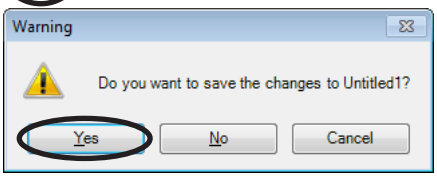
7.5 Reading data from applicable product

The data saved in an applicable product can be read to the **MEXE02**.

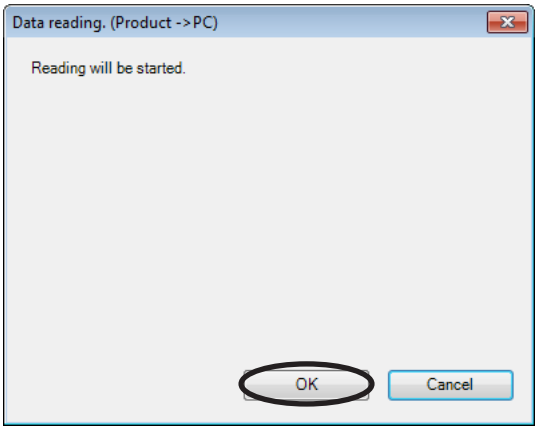
1. Click the [Data reading] icon in the toolbar.

2. If the data is being edited in the **MEXE02**, a confirmation message for saving the data is shown.
   Click [Yes] to save the edited data or [No] not to save it.

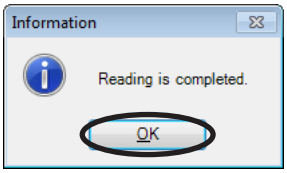
   Note If you select [No], the data under editing is cleared and overwritten with the data to be read.



3. Click [OK].
   Data reading starts.



4. After it is completed, click [OK].
   The screen shows the data that has been read.

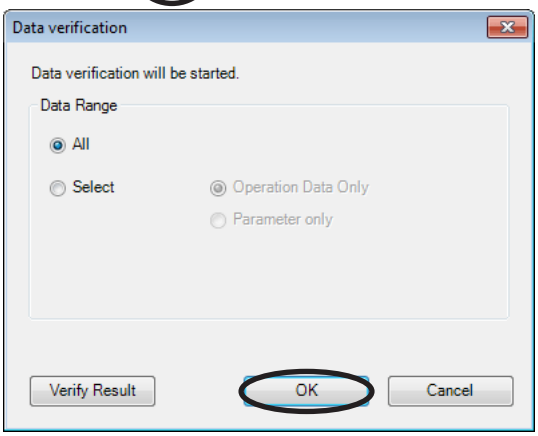


7.6 Verifying data

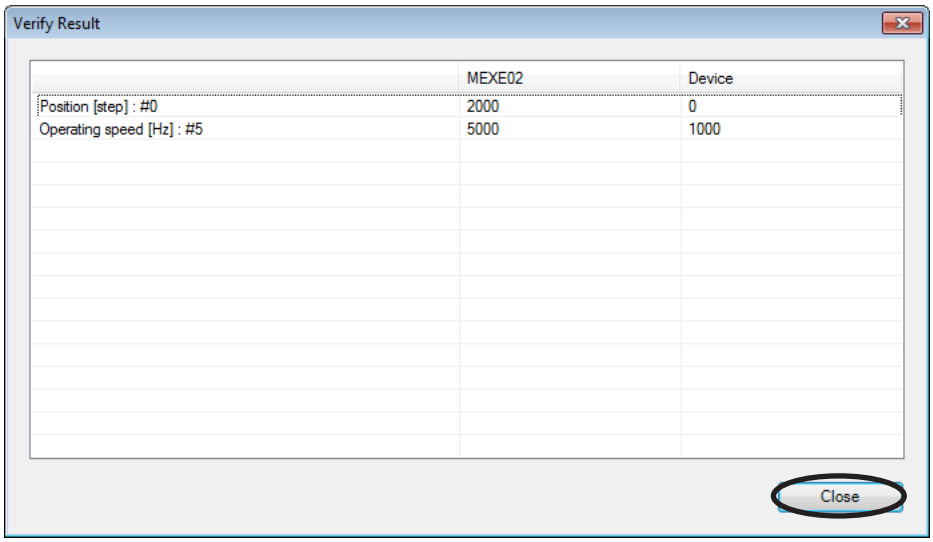
The data saved in the applicable product can be verified against the data displayed in the **MEXE02**.

1. Click the [Data verification] icon in the toolbar.

2. Select the data to be verified, and then click [OK].
   Data is verified.



The results are displayed after the completion of verification.

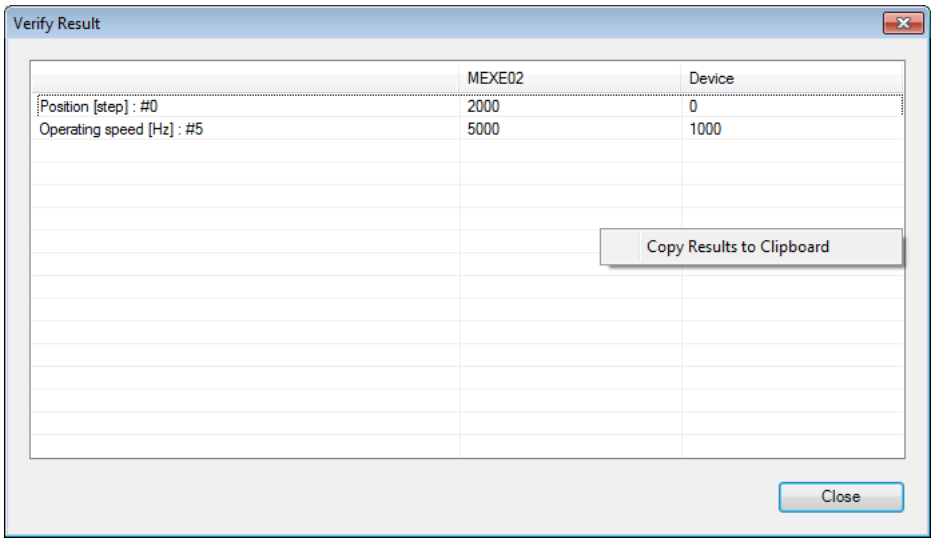


3. After checking the verification results, click [Close].

■ Copying verification results

The verification results can be copied to the clipboard by clicking the right mouse button on the area that displays the results and clicking [Copy Results to Clipboard]. The copied data can be pasted to other applications.

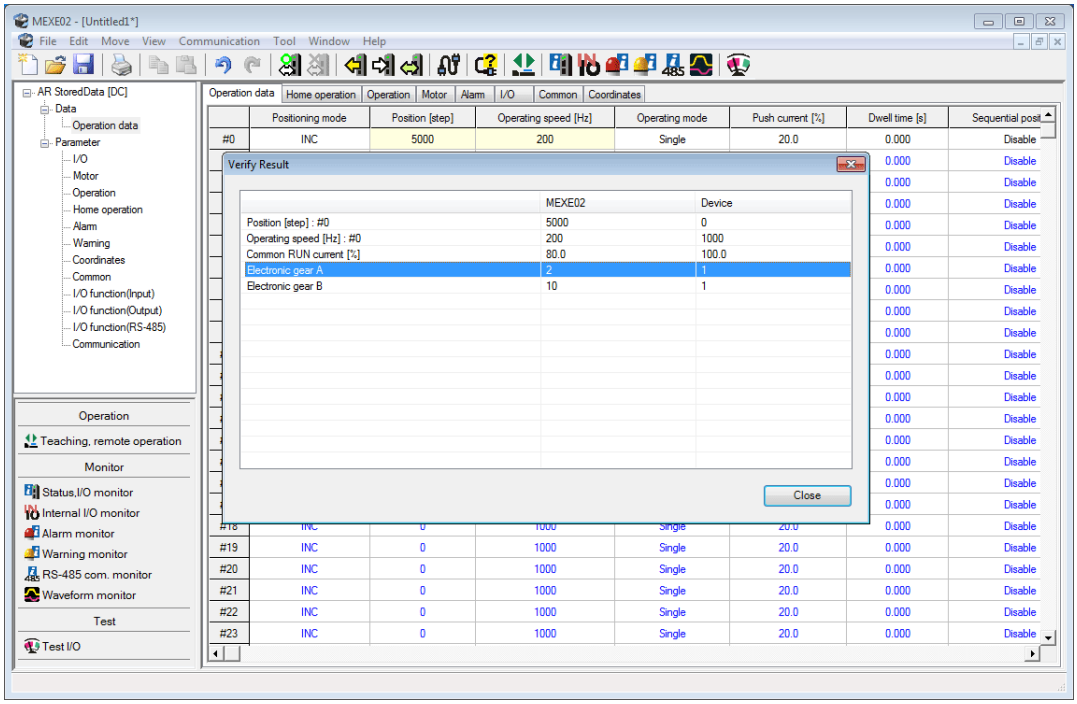
Note Nothing is copied if the data completely matches.



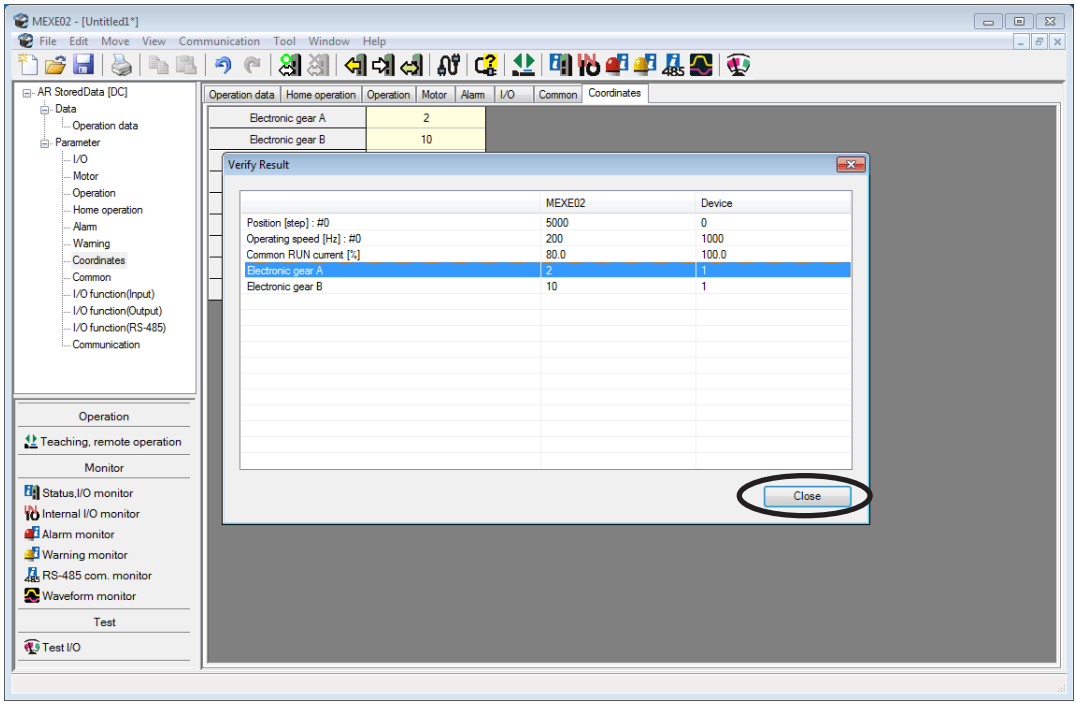
■ Jumping to desired data from verification results

You can jump from the list of verification results to the edit window for the displayed data.

1. Select and double-click data that you want to edit.
   The window for editing the desired data appears.



2. Click [Close].

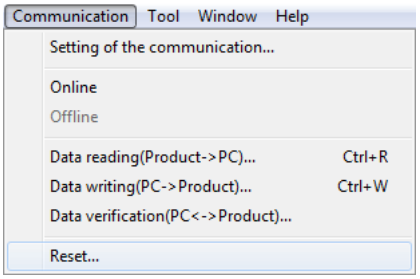


7.7 Resetting data of applicable product to factory default settings

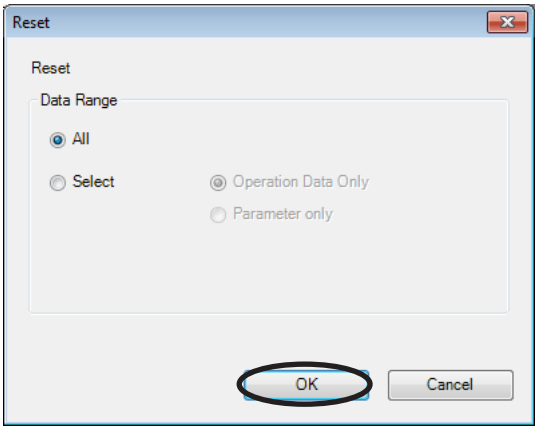
The data saved in the non-volatile memory of the applicable product can be reset to the factory default settings.

Note Do not turn off the power of the applicable product while initializing. Doing so may destroy the data.

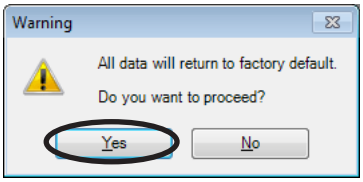
1. Click [Reset] from the [Communication] menu.



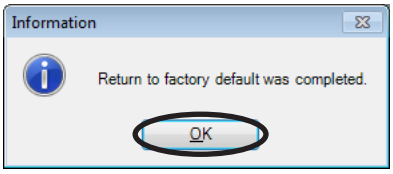
2. Select data that you want to reset to the factory default settings and click [OK].



3. Click [Yes].
   The data saved in the non-volatile memory of the applicable product will be reset to the factory default settings.

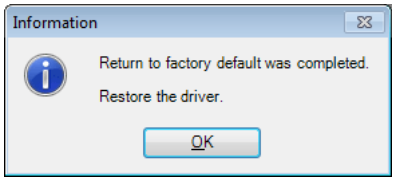


4. After it is completed, click [OK].

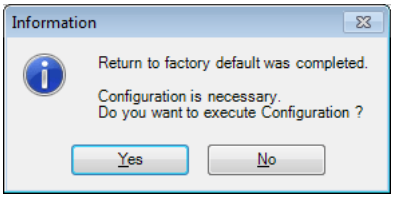


Note Depending on the data, you may need to turn off and on the power or execute Configuration. Follow the instructions in the displayed messages.

- Restarting power

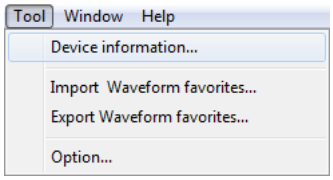


- Executing Configuration
  Click [Yes] to execute Configuration.
  If you click [No], execute Configuration manually.
  Refer to p.65 for details.

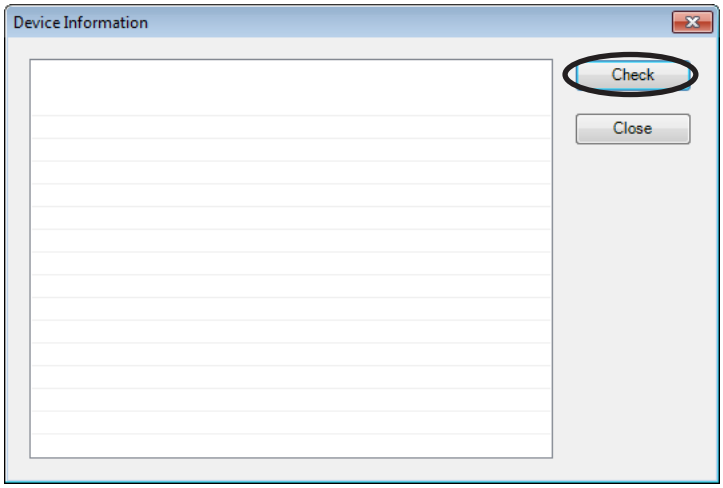


7.8 Checking the connected product

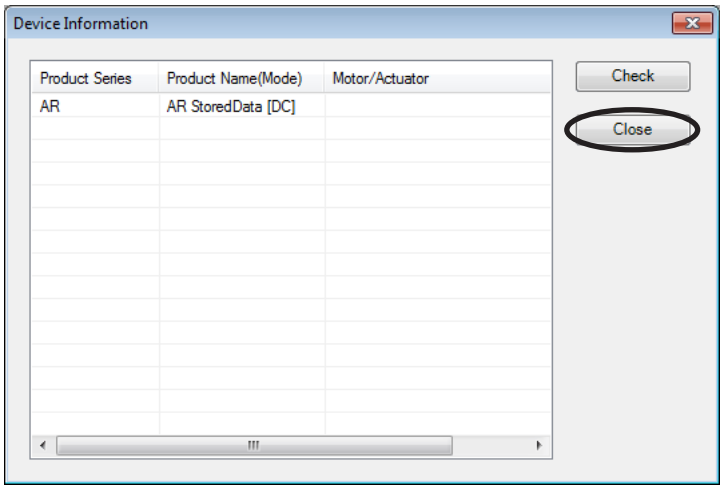
1. Click [Device Information] from the [Tool] menu.



2. Click [Check].
   The check on the connected product starts.



3. When the results are displayed, click [Close].



- When the series name or product name (mode) of the applicable product is not displayed:

  Verify the following points:
  - Is the applicable product powered on?
  - Is the cable completely inserted?
  - Is the connected product compatible with the **MEXE02**?

- When "Unsupported Product" is shown in the product name column.

  Verify that the connected product is compatible with the **MEXE02**.

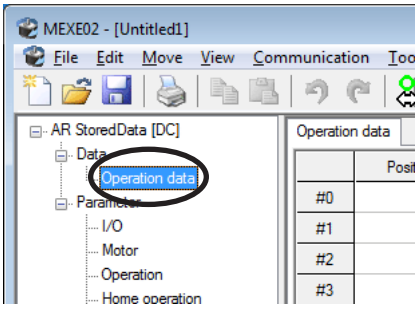
8 Setup function

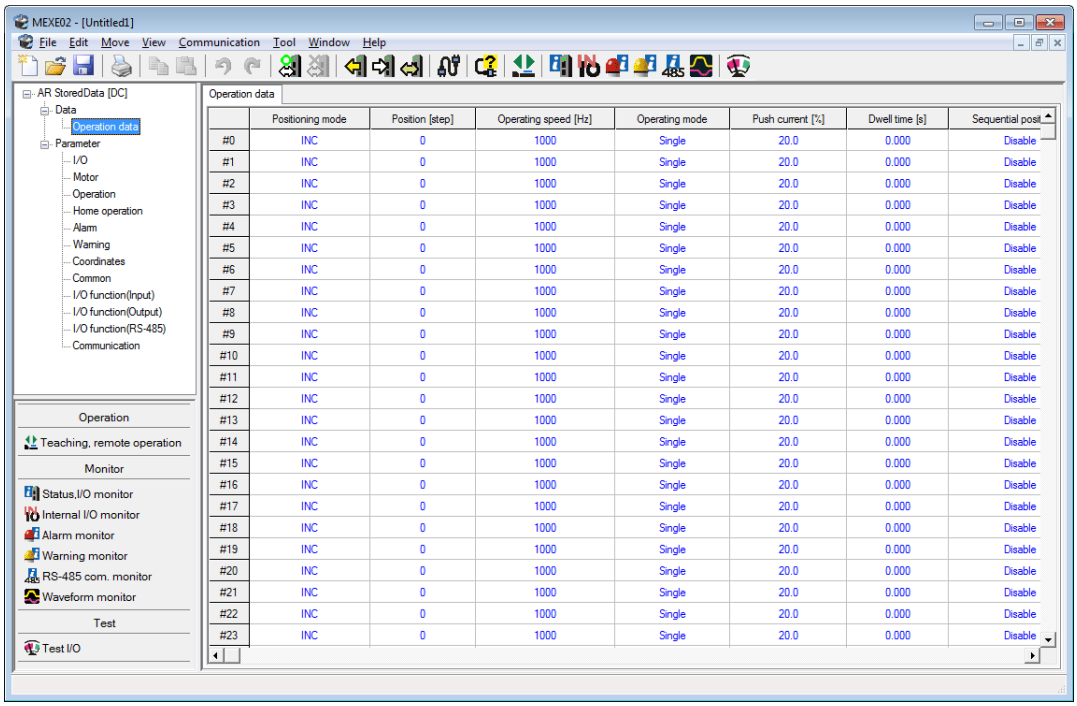
This chapter explains the functions mainly used to start up an applicable product.

8.1 Editing operation data

The operation data of an applicable product can be edited using the **MEXE02**.
If "Data writing" is executed, the edited data can be written to the applicable product. Refer to p.30 for details.

1. Open the data edit window.
2. Click [Operation data] on the tree view.
   The operation data edit window appears.



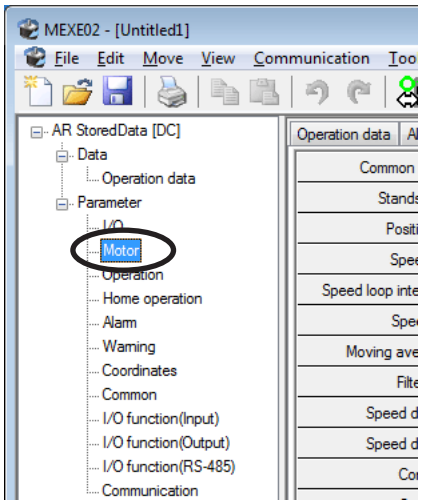


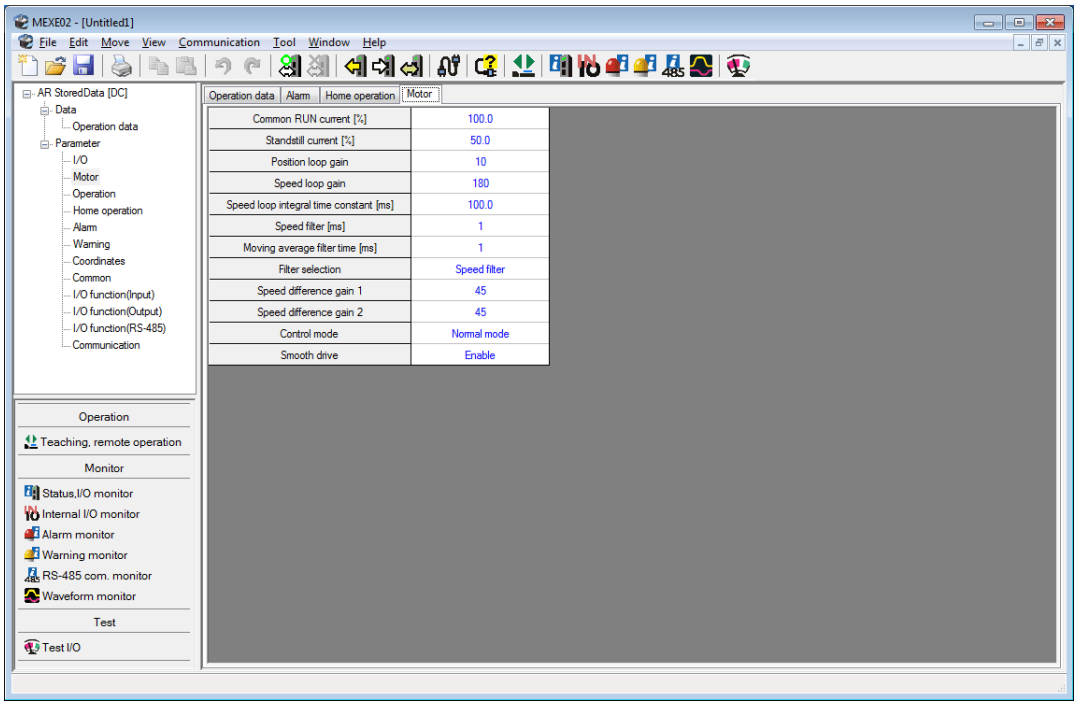
Refer to "5 Data edit" on p.17 for how to edit data and other information.

8.2 Editing parameters

The parameters of an applicable product can be edited using the **MEXE02**.
If "Data writing" is executed, the edited data can be written to the applicable product. Refer to p.30 for details.

1. Open the data edit window.
2. Click a parameter group that you want to edit from the tree view.
   The parameter edit window appears.





Refer to "5 Data edit" on p.17 for how to edit data and other information.

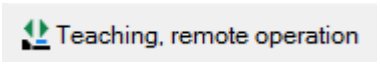
8.3 Teaching/remote operation

A motor can be operated using the **MEXE02**. This function lets you check how the motor will operate before actually connecting it to a programmable controller. Operation data can also be set using teaching function.

Note The teaching/remote operation and I/O test cannot be executed simultaneously.

1. Click the [Teaching, remote operation] icon in the toolbar or click the [Teaching, remote operation] shortcut button.

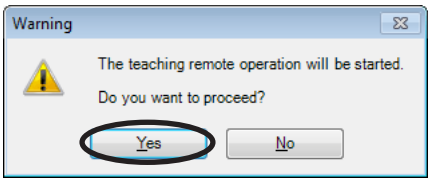
or



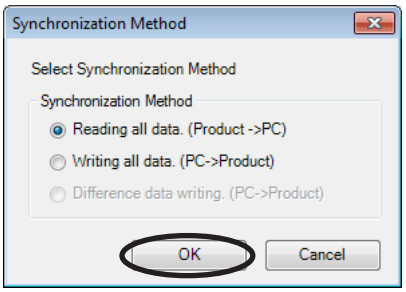
The teaching/remote operation window appears.

2. Click "Start the teaching remote operation."

3. Click [Yes].
The teaching/remote operation is enabled.



The teaching/remote operation requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

4. To end the teaching/remote operation, unselect "Start the teaching remote operation."

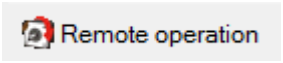
8.4 Remote operation

A motor can be operated using the **MEXE02**. This function lets you check how the motor will operate before actually connecting it to a programmable controller.

Note The remote operation and I/O test cannot be executed simultaneously.

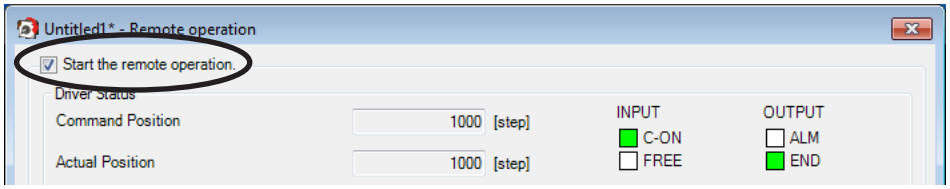
1. Click the [Remote operation] icon in the toolbar or click the [Remote operation] short-cut button.

or

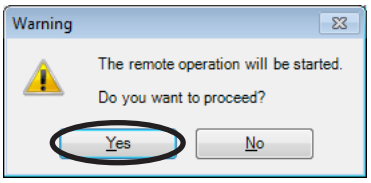


The remote operation window appears.

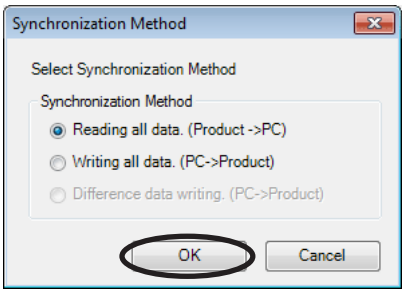
2. Click "Start the remote operation."



3. Click [Yes].
The remote operation is enabled.



The remote operation requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

4. To end the remote operation, unselect "Start the remote operation."

8.5 I/O test

I/O signals of direct I/O and remote I/O can be tested. Also, you can monitor input signals and cause output signals to be output forcibly.
This function is convenient if you want to check the wire connection of physical I/O with the programmable controller and the operation of network I/O.

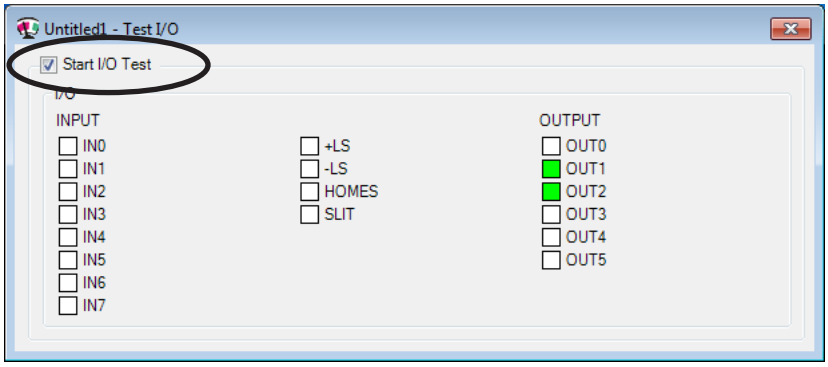
Note

- In I/O test, you can forcibly turn on or off output signals. Consequently, other equipment connected to an applicable product may operate. Check the surrounding circumstances to ensure safety before conducting this procedure.
- The teaching/remote operation and I/O test cannot be executed simultaneously.

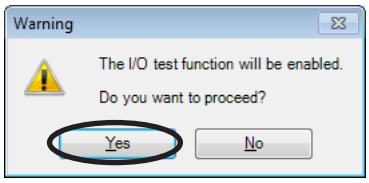
1. Click the [Test I/O] icon in the toolbar or click the [Test I/O] icon.

The I/O test window appears.

2. Click "Start I/O Test."



3. Click [Yes].
You can now perform I/O test.



4. Switch the ON/OFF status of input signals externally.
The check box ☐ of the corresponding "INPUT" is changed in the window.

Indicator	Direct I/O	Remote I/O (RS-485 communication)
ON (green)	Conducting	Active
OFF (white)	Non-conducting	Not active

5. When switching the ON/OFF status of output signals, click the check box ☐ of "OUTPUT" in the window.

Indicator	Direct I/O	Remote I/O (RS-485 communication)
ON (green)	Conducting	Active
OFF (white)	Non-conducting	Not active

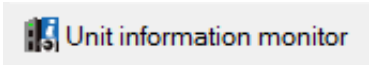
6. To end the I/O test, unselect "Start I/O Test."

8.6 Unit information monitor

You can monitor the product information of an applicable product.

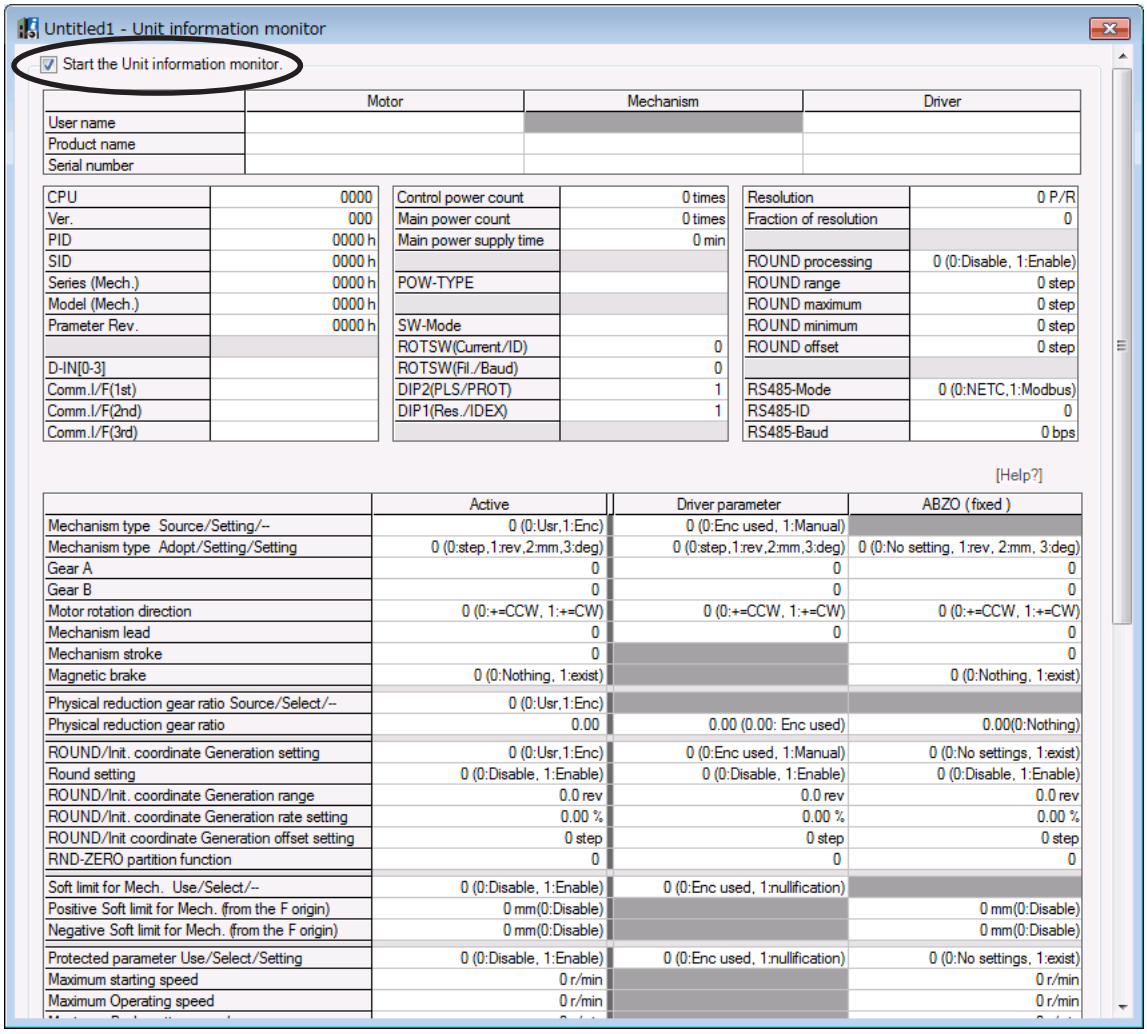
1. Click the [Unit information monitor] icon in the toolbar or click the [Unit information monitor] short-cut button.

or



The unit information monitor window appears.

2. Click "Start the Unit information monitor."
The unit information monitor starts.



	Motor	Mechanism	Driver
User name			
Product name			
Serial number			

CPU	0000	Control power count	0 times	Resolution	0 P/R
Ver.	000	Main power count	0 times	Fraction of resolution	0
PID	0000 h	Main power supply time	0 min		
SID	0000 h			ROUND processing	0 (0:Disable, 1:Enable)
Series (Mech.)	0000 h	POW-TYPE		ROUND range	0 step
Model (Mech.)	0000 h			ROUND maximum	0 step
Prameter Rev.	0000 h	SW-Mode		ROUND minimum	0 step
		ROTSW(Current/ID)	0	ROUND offset	0 step
D-IN[0-3]		ROTSW(Fil./Baud)	0		
Comm.I/F(1st)		DIP2(PLS/PROT)	1	RS485-Mode	0 (0:NETC,1:Modbus)
Comm.I/F(2nd)		DIP1(Res./IDEX)	1	RS485-ID	0
Comm.I/F(3rd)				RS485-Baud	0 bps

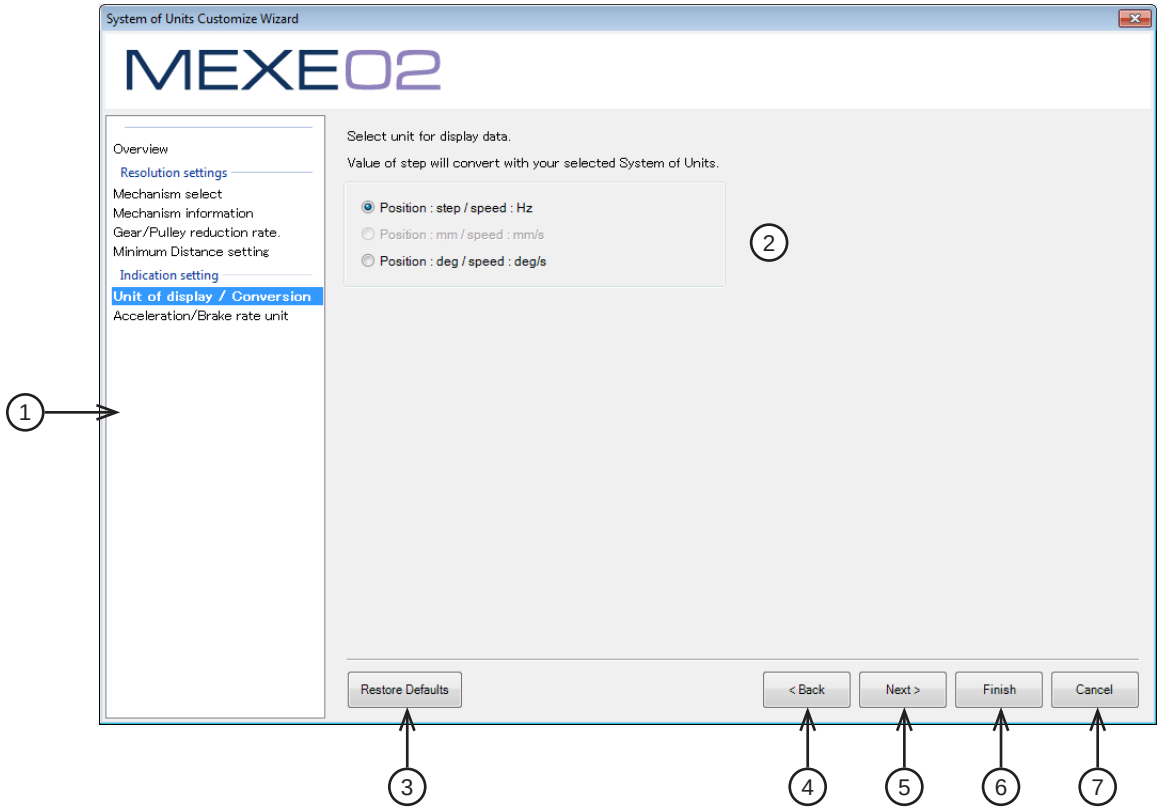
[Help?]

	Active	Driver parameter	ABZO (fixed)
Mechanism type Source/Setting/--	0 (0:Usr,1:Enc)	0 (0:Enc used, 1:Manual)	
Mechanism type Adopt/Setting/Setting	0 (0:step,1:rev,2:mm,3:deg)	0 (0:step,1:rev,2:mm,3:deg)	0 (0:No setting, 1:rev, 2:mm, 3:deg)
Gear A	0	0	0
Gear B	0	0	0
Motor rotation direction	0 (0:+=CCW, 1:+=CW)	0 (0:+=CCW, 1:+=CW)	0 (0:+=CCW, 1:+=CW)
Mechanism lead	0	0	0
Mechanism stroke	0		0
Magnetic brake	0 (0:Nothing, 1:exist)		0 (0:Nothing, 1:exist)
Physical reduction gear ratio Source/Select/--	0 (0:Usr,1:Enc)		
Physical reduction gear ratio	0.00	0.00 (0.00: Enc used)	0.00(0:Nothing)
ROUND/Init. coordinate Generation setting	0 (0:Usr,1:Enc)	0 (0:Enc used, 1:Manual)	0 (0:No settings, 1:exist)
Round setting	0 (0:Disable, 1:Enable)	0 (0:Disable, 1:Enable)	0 (0:Disable, 1:Enable)
ROUND/Init. coordinate Generation range	0.0 rev	0.0 rev	0.0 rev
ROUND/Init. coordinate Generation rate setting	0.00 %	0.00 %	0.00 %
ROUND/Init coordinate Generation offset setting	0 step	0 step	0 step
RND-ZERO partition function	0	0	0
Soft limit for Mech. Use/Select/--	0 (0:Disable, 1:Enable)	0 (0:Enc used, 1:nullification)	
Positive Soft limit for Mech. (from the F origin)	0 mm(0:Disable)		0 mm(0:Disable)
Negative Soft limit for Mech. (from the F origin)	0 mm(0:Disable)		0 mm(0:Disable)
Protected parameter Use/Select/Setting	0 (0:Disable, 1:Enable)	0 (0:Enc used, 1:nullification)	0 (0:No settings, 1:exist)
Maximum starting speed	0 r/min		0 r/min
Maximum Operating speed	0 r/min		0 r/min

3. To exit the monitor, unselect "Start the Unit information monitor."

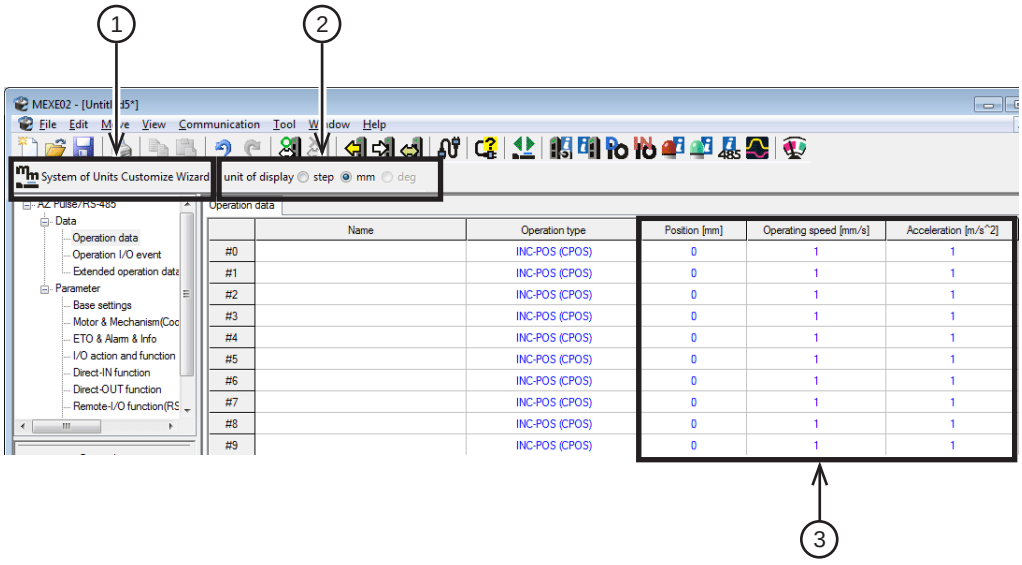
8.7 System of units customize wizard

The system of units customize wizard is a function to display or enter the travel distance, speed, and others by a desired unit.
Follow the instructions in the displayed window to proceed with the setting.



1	List of setting items	The current setting item is displayed in boldface type. Clicking an item will change the setting area.
2	Setting area	The setting can be performed by following the instructions in the window.
3	[Restore Defaults]	This button is used to restore the setting item to a value before the change.
4	[Back]	This button is used to switch the currently displayed item to the previous item.
5	[Next]	This button is used to switch the currently displayed item to the next item.
6	[Finish]	This button is used to exit the wizard. It is possible to exit the wizard before the setting is completed. A warning is displayed if there is an error in the setting item.
7	[Cancel]	This button is used to stop the setting in the wizard. The changed values are not applied.

After the setting is completed using the wizard, the window is shown as below.



1	[System of Units Customize Wizard]	This button is used to start the wizard with the current settings applied.
2	unit of display	A system of units is selected. It is also possible to change using the wizard.
3	Parameter	Numeric values can be displayed in the selected system of units. The selected system of units is also used when entering values.

9 Monitor function

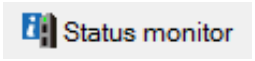
This chapter explains how to check the status of an applicable product using the **MEXE02**.

9.1 Status monitor

You can monitor the current status of an applicable product.

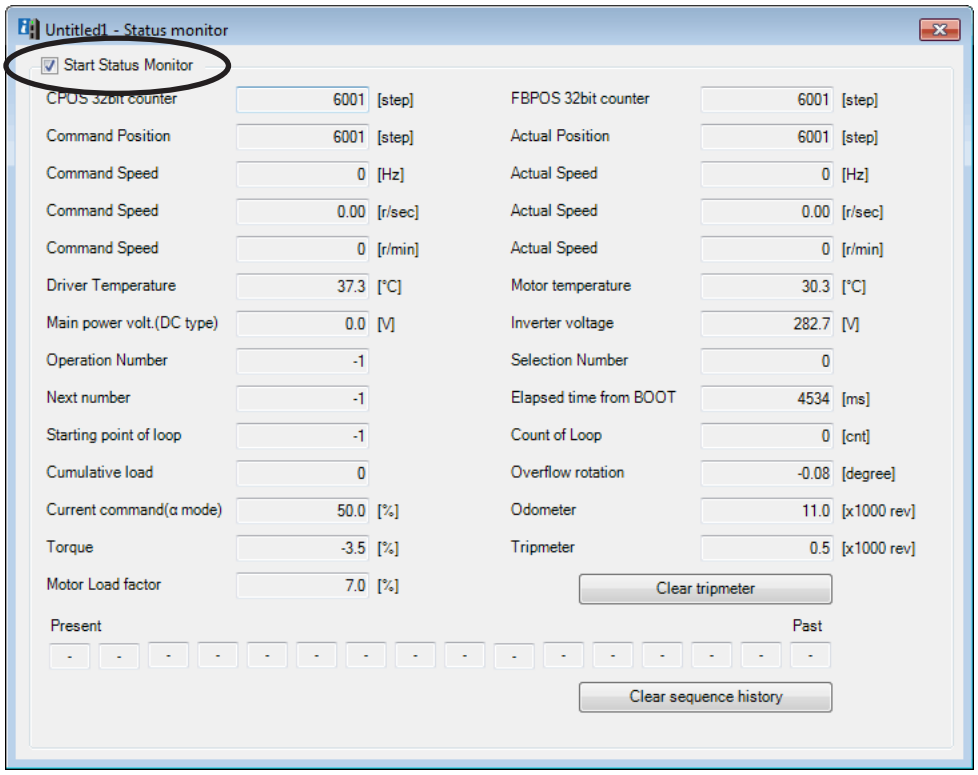
1. Click the [Status monitor] icon in the toolbar or click the [Status monitor] short-cut button.

or



The status monitor window appears.

2. Click "Start Status Monitor."
Status monitor starts.



3. To end status monitor, unselect "Start Status Monitor."

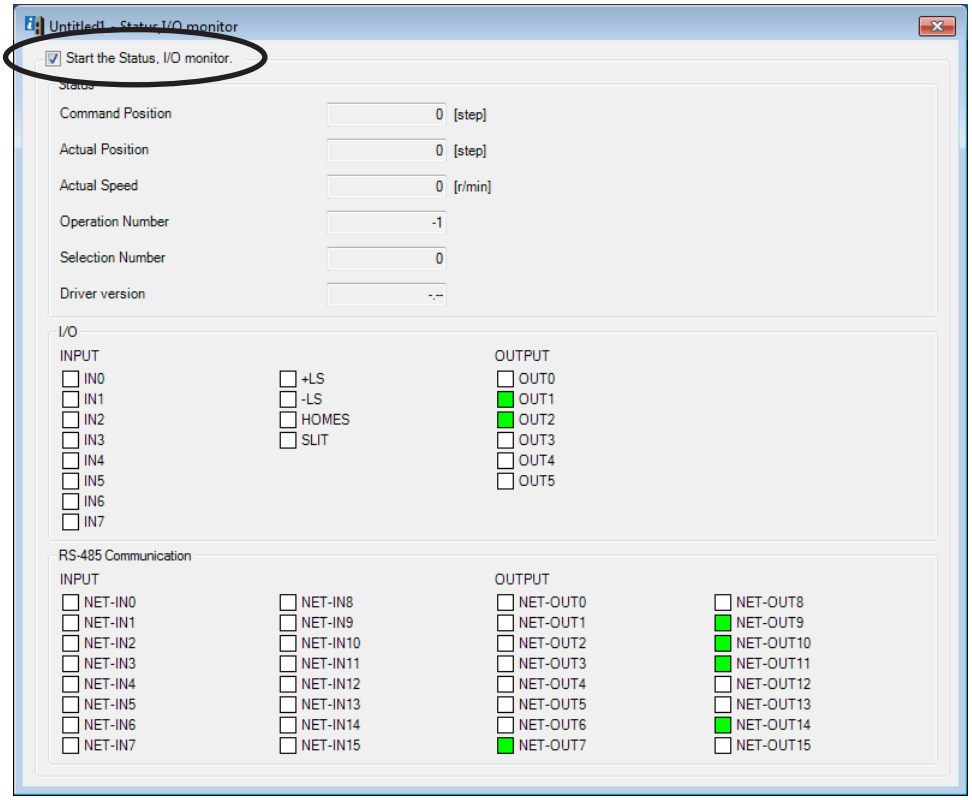
9.2 Status, I/O monitor

You can monitor the current status of an applicable product and the ON/OFF status of I/O signals.

1. Click the [Status, I/O monitor] icon in the toolbar or click the [Status, I/O monitor] short-cut button.

The status, I/O monitor window appears.

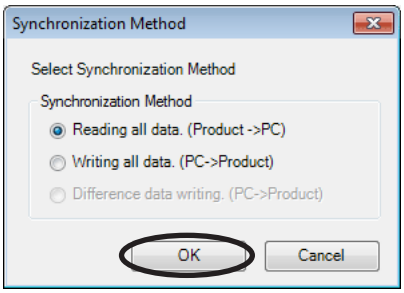
2. Click "Start the Status, I/O monitor."
The status, I/O monitor starts.



The ON/OFF status of I/O signals is displayed as shown below.

Indicator	I/O	RS-485 communication
ON (green)	Conducting	Active
OFF (white)	Non-conducting	Not active

The status, I/O monitor requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

3. To exit the monitor, unselect "Start the Status, I/O monitor."

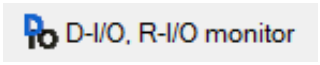
9.3 I/O monitor

■ D-I/O monitor, R-I/O monitor

You can monitor the ON/OFF status of I/O signals of an applicable product.
D-I/O represents direct I/O, and R-I/O represents remote I/O (controlled via RS-485 communication).

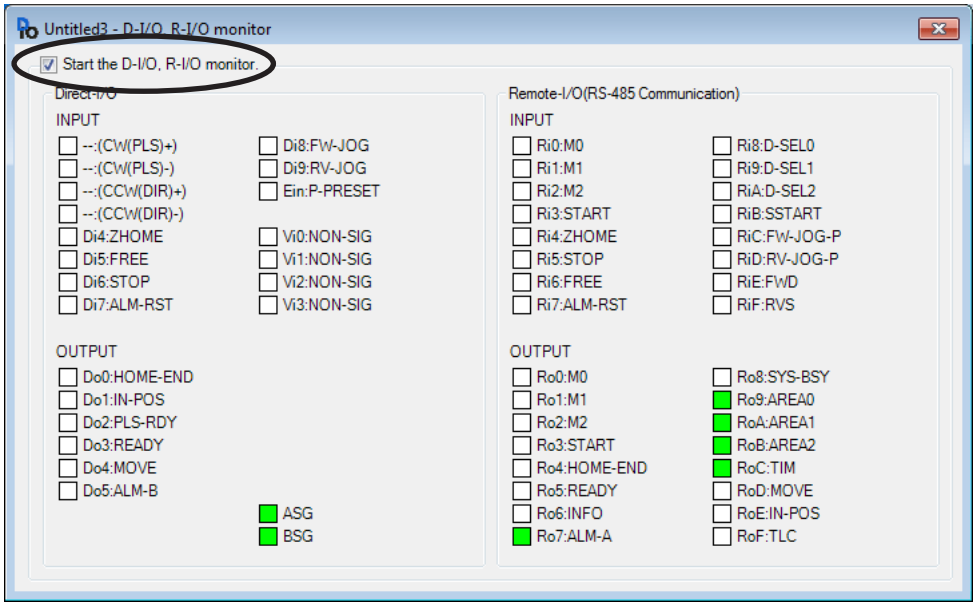
1. Click the [D-I/O, R-I/O monitor] icon in the toolbar or click the [D-I/O, R-I/O monitor] short-cut button.

or



The D-I/O, R-I/O monitor window appears.

2. Click "Start the D-I/O, R-I/O monitor."
The D-I/O, R-I/O monitor starts.



The ON/OFF status of I/O signals is displayed as shown below.

Indicator	Direct I/O	Remote I/O (RS-485 communication)
ON (green)	Conducting	Active
OFF (white)	Non-conducting	Not active

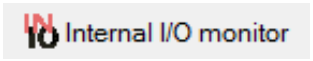
3. To exit the monitor, unselect "Start the D-I/O, R-I/O monitor."

■ Internal I/O monitor

All the I/O signals of an applicable product can be monitored. You can also check signals not assigned to direct I/O or remote I/O.

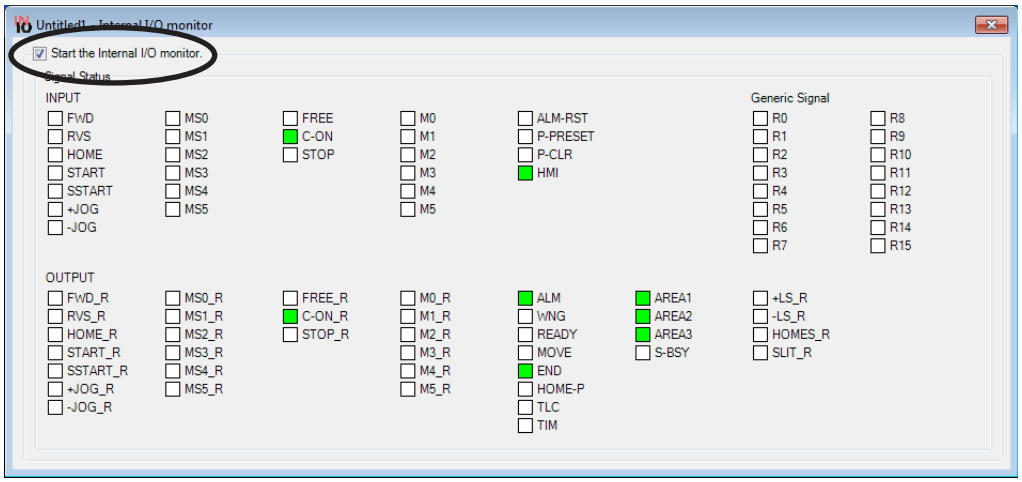
1. Click the [Internal I/O monitor] icon in the toolbar or click the [Internal I/O monitor] short-cut button.

or



The internal I/O monitor window appears.

2. Click "Start the Internal I/O monitor."
The internal I/O monitor starts.



The ON/OFF status of I/O signals is displayed as shown below.

Indicator	Internal signal status
ON (green)	Active
OFF (white)	Not active

3. To exit the monitor, unselect "Start the Internal I/O monitor."

■ Remote I/O monitor

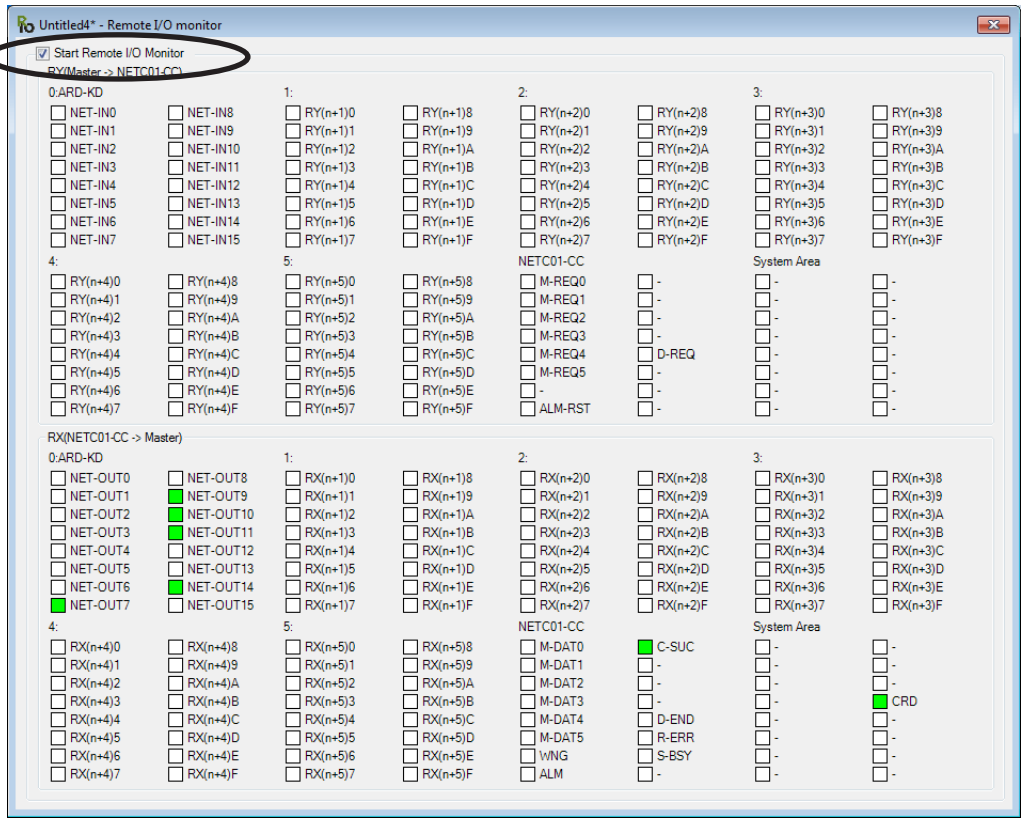
You can check the ON/OFF status of network I/O.

1. Click the [Remote I/O monitor] icon in the toolbar or click the [Remote I/O monitor] short-cut button.

or

The remote I/O monitor window appears.

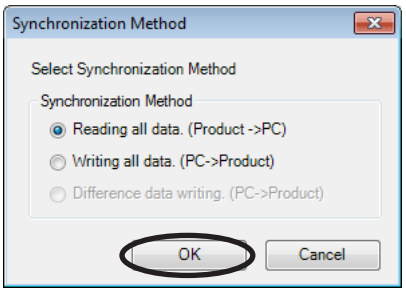
2. Click "Start Remote I/O Monitor."
The remote I/O monitor starts.



The ON/OFF status of I/O signals is displayed as shown below.

Indicator	Remote I/O (RS-485 communication)
ON(green)	Active
OFF (white)	Not active

The remote I/O monitor requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

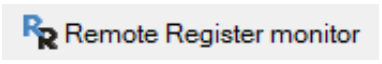
3. To exit the monitor, unselect "Start Remote I/O Monitor."

9.4 Remote register monitor

You can monitor the remote register status that can be read and written to via a network.

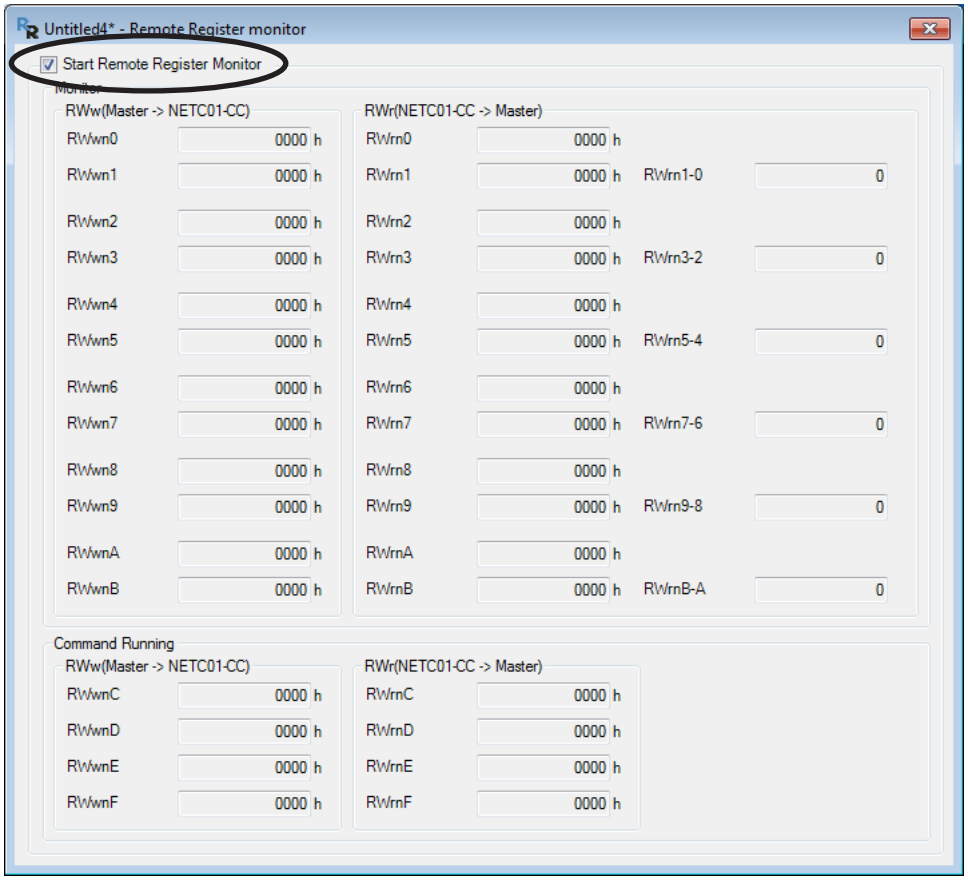
1. Click the {Remote Register Monitor] icon in the toolbar or click the [Remote Register Monitor] short-cut button.

or

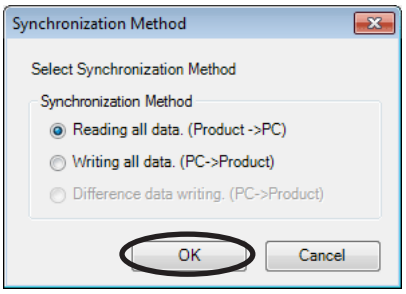


The remote register monitor window appears.

2. Click "Start Remote Register Monitor."
The remote register monitor starts.



The remote register monitor requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

3. To exit the monitor, unselect "Start Remote Register Monitor."

9.5 RS-485 status monitor

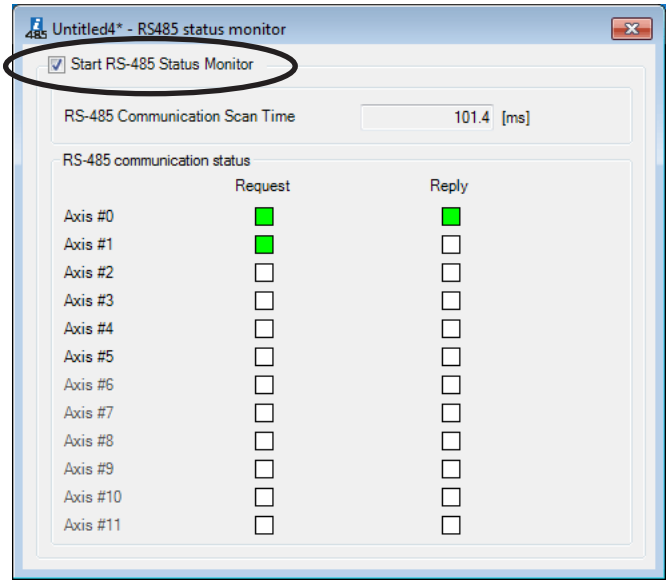
You can monitor the RS-485 communication status of an applicable product.

1. Click the [RS-485 status monitor] icon in the toolbar or click the [RS-485 status monitor] short-cut button.

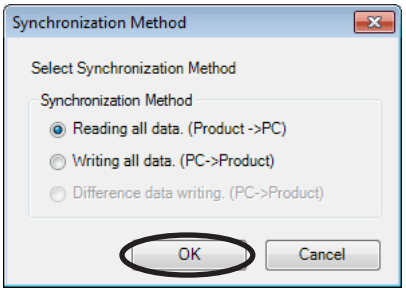
or

The RS-485 status monitor window appears.

2. Click "Start RS-485 Status Monitor."
The RS-485 status monitor starts.



The RS-485 status monitor requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

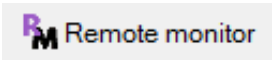
3. To exit the monitor, unselect "Start RS-485 Status Monitor."

9.6 Remote monitor

You can monitor the data sent and received between an applicable product and programmable controller.

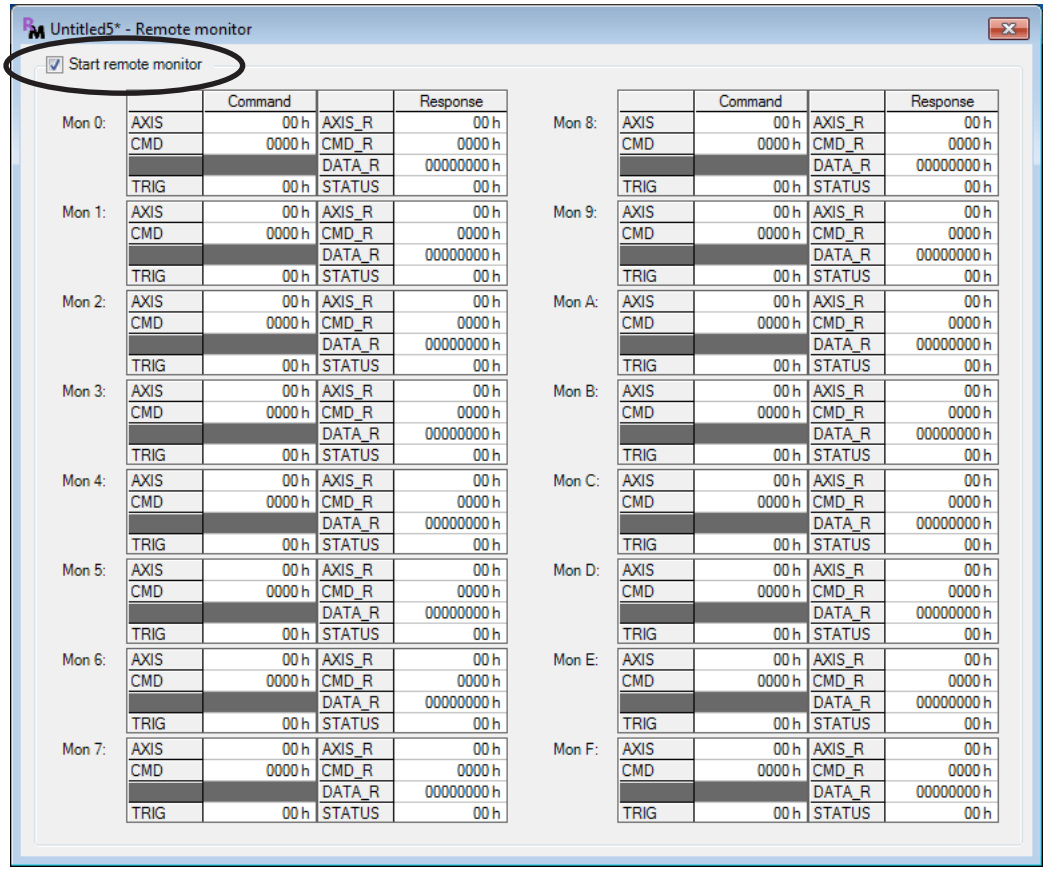
1. Click the [Remote monitor] icon in the toolbar or click the [Remote monitor] short-cut button.

or

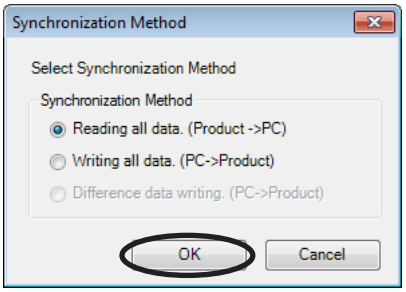


The remote monitor window appears.

2. Click "Start remote monitor."
The remote monitor starts.



The remote monitor requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

3. To exit the monitor, unselect "Start remote monitor."

10 Adjustment functions

This chapter explains how to adjust an applicable product using the **MEXE02**.

10.1 Waveform monitor

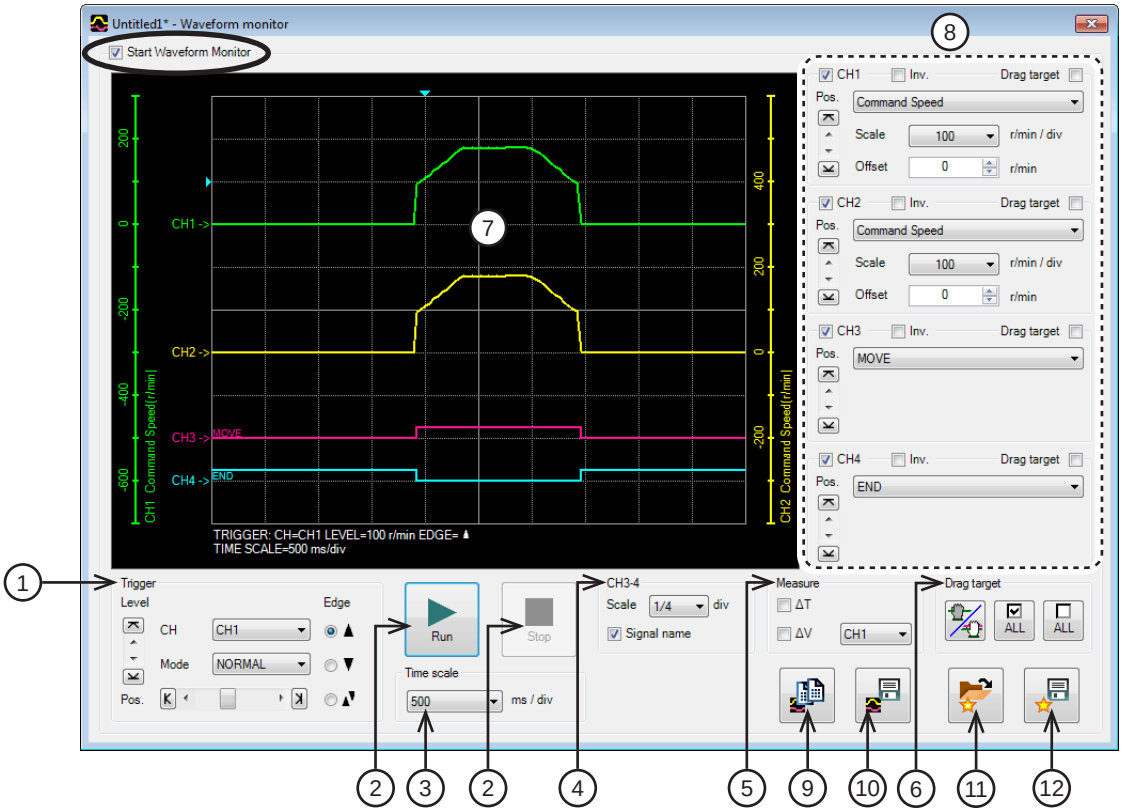
The motor speeds and I/O signal status can be checked in waveforms.
Refer to p.79 for how to utilize the waveform measurement conditions.

■ For other than the AZ Series

1. Click the [Waveform monitor] icon in the toolbar or click the [Waveform monitor] short-cut button.

The waveform monitor window appears.

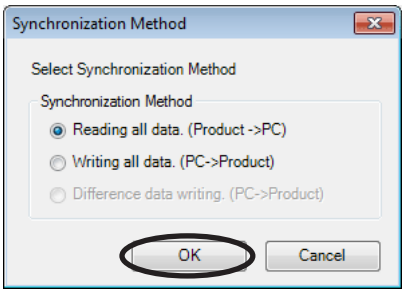
2. Click "Start Waveform Monitor."
The buttons in the window are enabled, allowing you to prepare for measurement of the waveform monitor.



1	Waveform measurement settings: Level, CH, Mode, Edge (detection condition), and Pos (trigger position) can be specified. For "CH," only those CHs displayed at ⑦ can be specified.
2	Run: This button is used to start measurement. Stop: This button is used to stop measurement.
3	The measurement time range can be set.
4	The display method for CH3 and CH4 can be set. Scale: The display size can be selected from 1/1 (100%), 1/2 (50%), or 1/4 (25%). Signal name: The signal name can be shown or hidden.
5	The measure for measurement can be shown or hidden. Also, the CH to be measured can be selected.
6	When changing the display positions of waveforms drawn in the window, you can drag the CHs selected in this area simultaneously.
7	Measurement results are drawn in this area.
8	The measurement conditions for each CH can be set.

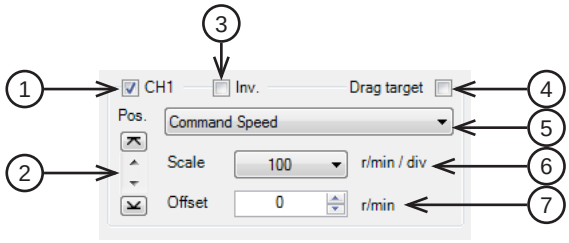
9	The currently displayed waveform can be copied to the clipboard.
10	The currently displayed waveform can be saved to an external file. Refer to p.83 for details.
11	The setting for measurement can be loaded from "Favorites data." Refer to p.82 for details.
12	The setting for measurement can be saved as "Favorites data."

The waveform monitor may synchronize the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

3. Set the measurement conditions for each CH.



1	Each CH can be shown or hidden.
2	The display position of a waveform can be moved up or down.
3	The display of measured signal can be inverted.
4	Selecting this check box can drag displayed waveforms drawn in the window simultaneously.
5	This is used to select a signal to be measured.
6	This is used to select a display scale for signals (CH1 and CH2 only). Using this setting in combination with ⑦ can zoom in on signals.
7	The set offset value is added to the signal display (CH1 and CH2 only). Using this setting in combination with ⑥ can zoom in on signals.

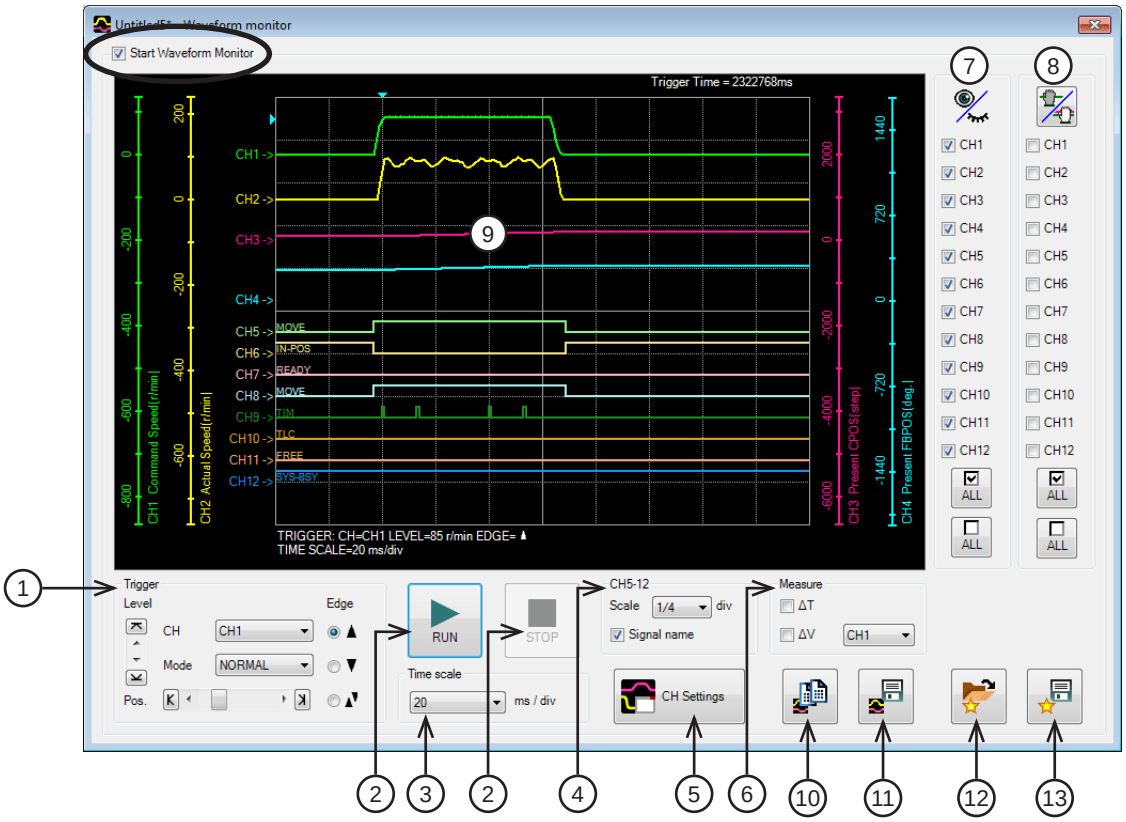
4. Click [Run].
   The waveform measurement starts.
5. During measurement, click [Stop] to exit the waveform measurement.
   If "SINGLE" is selected for Mode in Trigger, measurement automatically ends when waveform drawing ends.
6. To exit the waveform measurement, unselect "Start Waveform Monitor."

■ For the AZ Series

1. Click the [Waveform monitor] icon in the toolbar or click the [Waveform monitor] short-cut button.

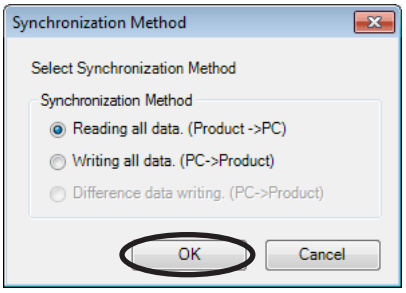
The waveform monitor window appears.

2. Click "Start Waveform Monitor."
The buttons in the window are enabled, allowing you to prepare for measurement of the waveform monitor.



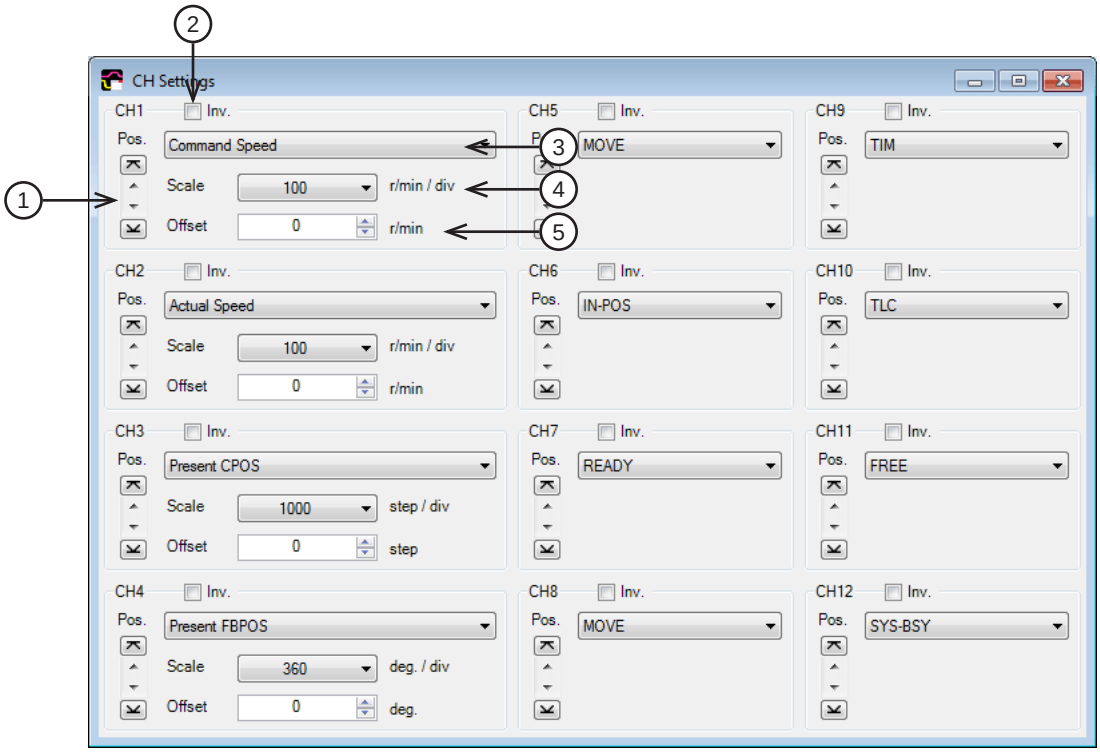
1	Waveform measurement settings: Level, CH, Mode, Edge (detection condition), and Pos (trigger position) can be specified. For "CH," only those CHs displayed at ⑨ can be specified.
2	RUN: This button is used to start measurement. STOP: This button is used to stop measurement.
3	The measurement time range can be set.
4	The display method for CH5 to CH12 can be set. Scale: The display size can be selected from 1/1 (100%), 1/2 (50%), or 1/4 (25%). Signal name: The signal name can be shown or hidden.
5	The CH settings window can be displayed.
6	The measure for measurement can be shown or hidden. Also, the CH to be measured can be selected.
7	Each CH can be shown or hidden.
8	When changing the display positions of waveforms drawn in the window, you can drag the CHs selected in this area simultaneously.
9	Measurement results are drawn in this area.
10	The currently displayed waveform can be copied to the clipboard.
11	The currently displayed waveform can be saved to an external file.
12	The setting for measurement can be loaded from "Favorites data." Refer to p.82 for details.
13	The setting for measurement can be saved as "Favorites data."

The waveform monitor may synchronize the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

3. Click [CH Settings].
   The CH settings window appears. The measurement conditions for each CH can be set.



1	The display position of a waveform can be moved up or down.
2	The display of measured signal can be inverted.
3	This is used to select a signal to be measured.
4	This is used to select a display scale for signals (CH1 through CH4 only). Using this setting in combination with ⑤ can zoom in on signals.
5	The set offset value is added to the signal display (CH1 through CH4 only). Using this setting in combination with ④ can zoom in on signals.

4. Click [RUN].
   The waveform measurement starts.
5. During measurement, click [STOP] to exit the waveform measurement.
   If "SINGLE" is selected for Mode in Trigger, measurement automatically ends when waveform drawing ends.
6. To exit the waveform measurement, unselect "Start Waveform Monitor."

10.2 Gain tuning

You can adjust parameters while checking the motor speeds and I/O signal status in waveforms.

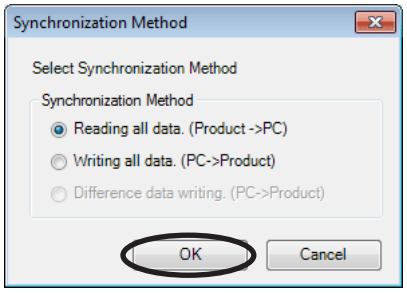
1. Click the [Gain tuning] icon in the toolbar or click the [Gain tuning] short-cut button.

The gain tuning window appears.

2. Click "Start Gain Tuning."
The buttons in the window are enabled, allowing you to prepare for measurement of gain tuning.

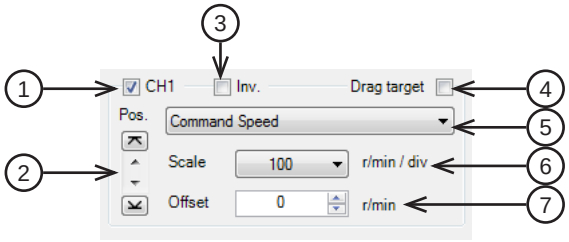
1	Waveform measurement settings: Level, CH, Mode, Edge (detection condition), and Pos (trigger position) can be specified. For "CH," only those CHs displayed at ⑦ can be specified.
2	Run: This button is used to start measurement. Stop: This button is used to stop measurement.
3	The measurement time range can be set.
4	The display method for CH3 and CH4 can be set. Scale: The display size can be selected from 1/1 (100%), 1/2 (50%), or 1/4 (25%). Signal name: The signal name can be shown or hidden.
5	The measure for measurement can be shown or hidden. Also, the CH to be measured can be selected.
6	The display positions of waveforms drawn in the window can be moved. Normally, CHs selected at ⑨ are moved. Clicking ☑ ALL can move all the CHs simultaneously.
7	Measurement results are drawn in this area.
8	The settings of gain tuning can be specified.
9	The measurement conditions for each CH can be set.
10	The currently displayed waveform can be copied to the clipboard.
11	The currently displayed waveform can be saved to an external file. Refer to p.83 for details.
12	The setting for measurement can be loaded from "Favorites data." Refer to p.82 for details.
13	The setting for measurement can be saved as "Favorites data."

The gain tuning requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



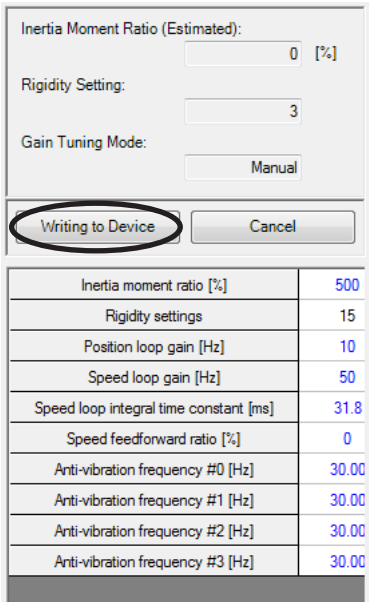
Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

3. Click the "CH setting" tab.
   The measurement conditions for each CH can be set.



1	Each CH can be shown or hidden.
2	The display position of a waveform can be moved up or down.
3	The display of measured signal can be inverted.
4	Selecting this check box can drag displayed waveforms drawn in the window simultaneously.
5	This is used to select a signal to be measured.
6	This is used to select a display scale for signals (CH1 and CH2 only). Using this setting in combination with ⑦ can zoom in on signals.
7	The set offset value is added to the signal display (CH1 and CH2 only). Using this setting in combination with ⑥ can zoom in on signals.

4. Click [Run].
   The waveform measurement starts.
5. During measurement, click [Stop] to exit the waveform measurement.
   If "SINGLE" is selected for Mode in Trigger, measurement automatically ends when waveform drawing ends.
6. To adjust parameters while checking the waveform status, click the "GAIN" tab.
7. After editing the parameters, click [Writing to Device].
   The changed parameters are written to the driver.
8. To exit the waveform measurement, unselect "Start Gain Tuning."



11 Diagnosis functions

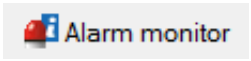
Using the alarm monitor and the warning monitor, you can check the causes of errors and troubles of an applicable product.

11.1 Alarm monitor

The alarm records of up to ten most recent alarms starting from the latest one can be checked. In addition, the detailed information of an applicable product can also be checked.

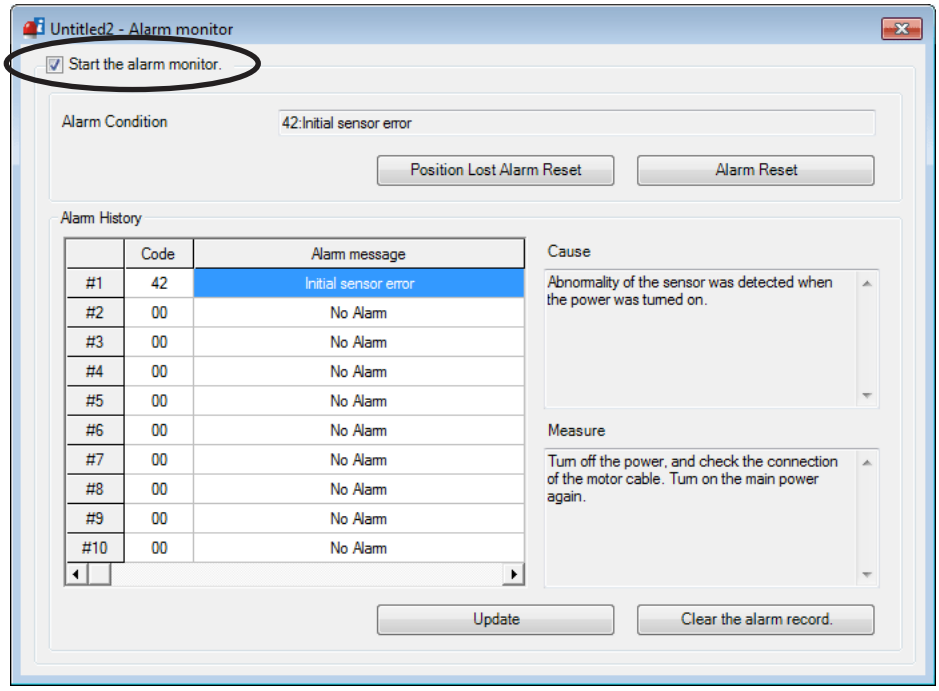
1. Click the [Alarm monitor] icon in the toolbar or click the [Alarm monitor] short-cut button.

or



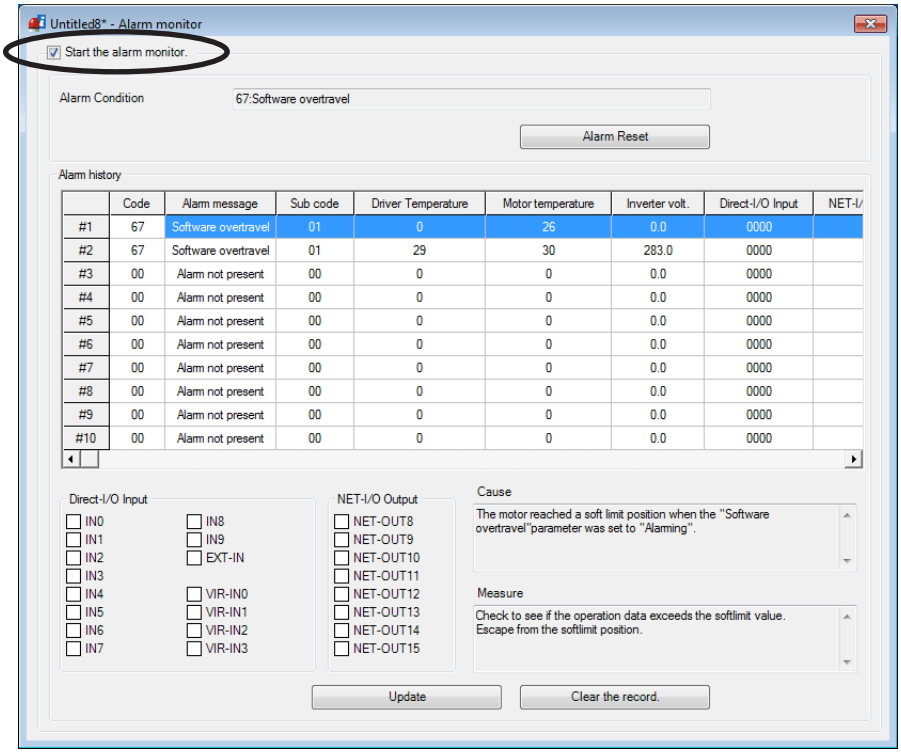
The alarm monitor window appears.

2. Click "Start the alarm monitor."
The alarm monitor starts.
The current alarm and past alarm records are displayed. Click the displayed alarm to show the cause and measure for it.

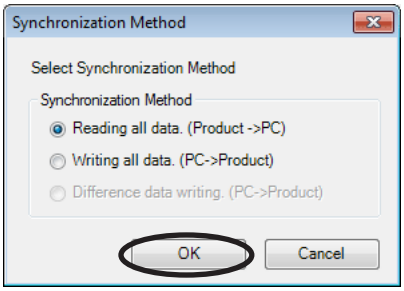


For the **AZ** Series

The current alarm and past alarm records are displayed. Click the displayed alarm to show the cause and measure for it. You can also check the I/O status when an alarm generates.



The alarm monitor may synchronize the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

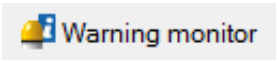
3. To exit the monitor, unselect "Start the alarm monitor."

11.2 Warning monitor

The warning records of up to ten most recent warnings starting from the latest one can be checked.

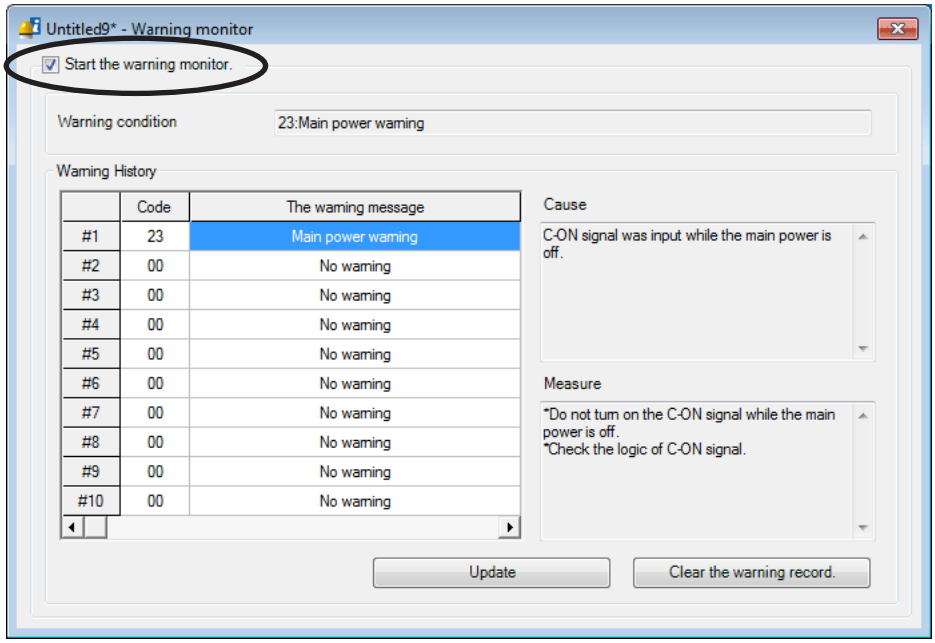
1. Click the [Warning monitor] icon in the toolbar or click the [Warning monitor] short-cut button.

or

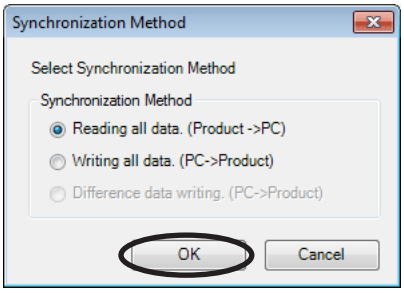


The warning monitor window appears.

2. Click "Start the warning monitor."
The warning monitor starts.
The current warning and past warning records are displayed. Click the displayed warning to show the cause and measure for it.



The warning monitor may synchronize the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

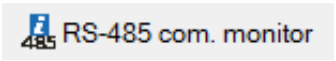
3. To exit the monitor, unselect "Start the warning monitor."

11.3 RS-485 communication monitor

You can check the received data and errors in RS-485 communication.

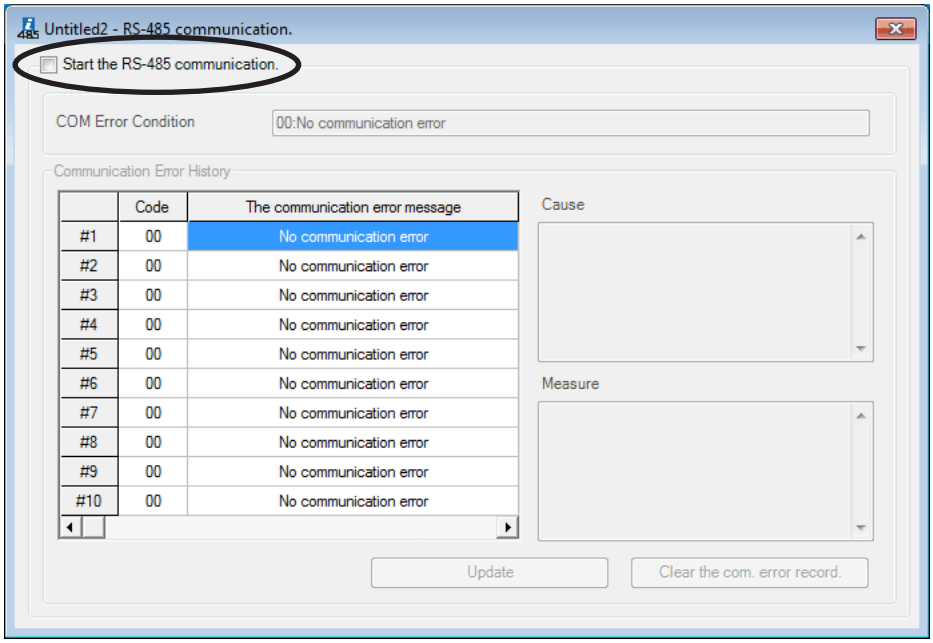
1. Click the [RS-485 com. monitor] icon in the toolbar or click the [RS-485 com. monitor] short-cut button.

or

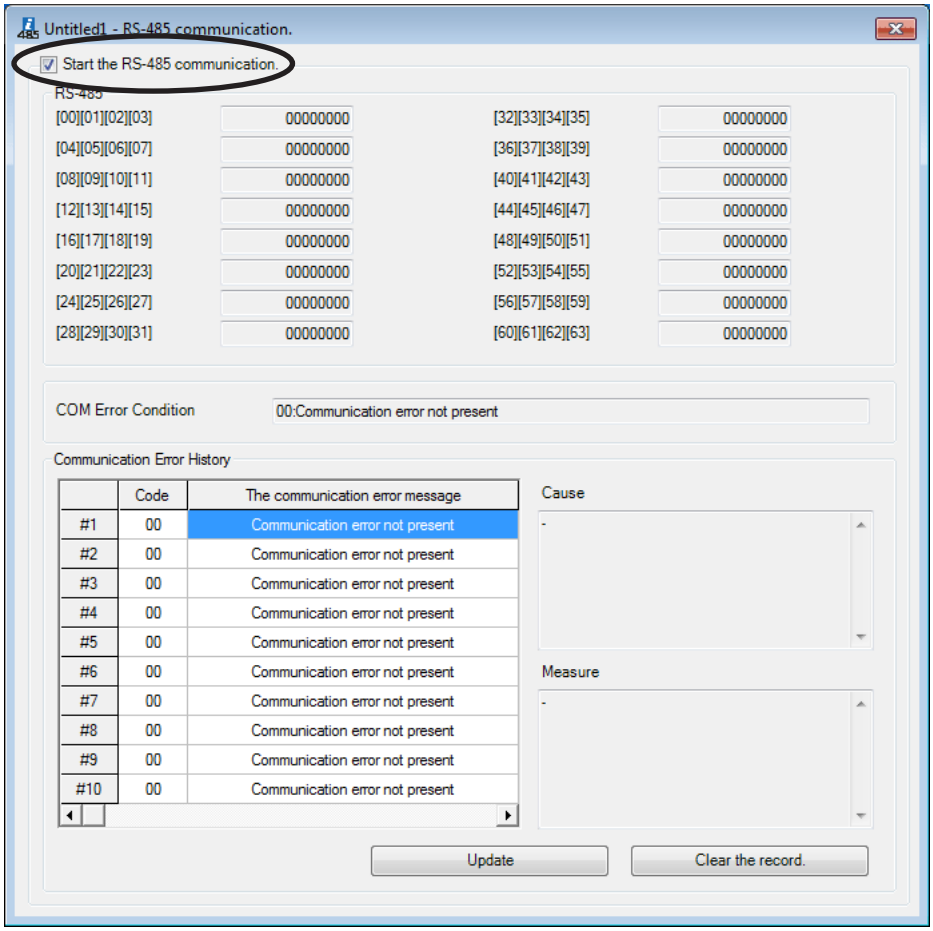


The RS-485 communication monitor window appears.

2. Click "Start the RS-485 communication."
The RS-485 communication monitor starts.
The current communication error and past communication error records are displayed. Click the displayed communication error to show the cause and measure for it.



For the **AZ** Series
The current communication error and past communication error records are displayed. Click the displayed communication error to show the cause and measure for it. You can also check the current RS-485 communication status.



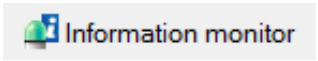
3. To exit the monitor, unselect "Start the RS-485 communication."

11.4 Information monitor

You can check the 16 latest items of arbitrary information that you set, starting from the newest one.

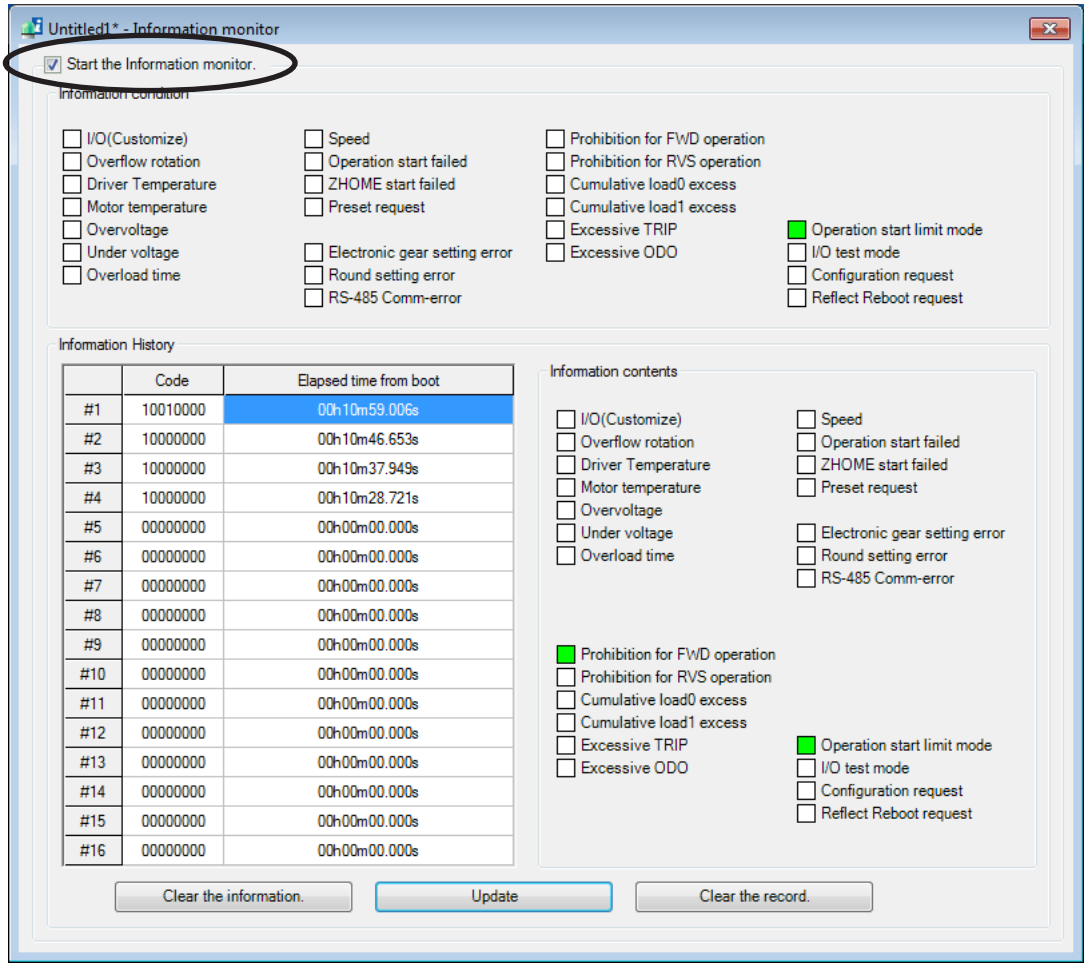
1. Click the [Information monitor] icon in the toolbar or click the [Information monitor] short-cut button.

or



The information monitor window appears.

2. Click "Start the Information monitor."
The information monitor starts.
The current information and past information records are displayed. Click the displayed record to show the information that was set at the time.



3. To exit the monitor, unselect "Start the Information monitor."

12 Maintenance function

This chapter explains how to conduct maintenance of an applicable product using the **MEXE02**.

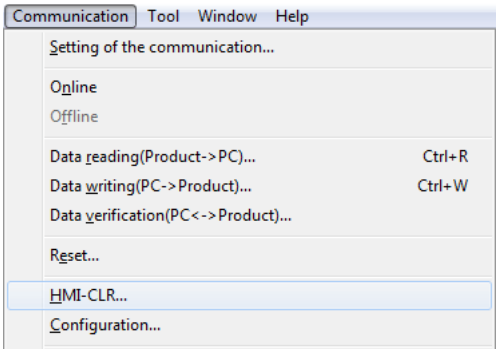
12.1 Clearing the HMI input

You can forcibly clear the HMI input regardless of the ON/OFF status of the HMI input.

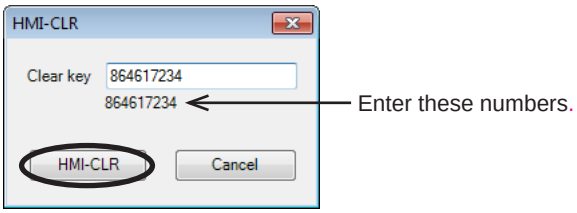
Note

- When clearing the HMI input, be sure to obtain approval from the device administrator before doing so.
- Turning off the power of an applicable product resets the cleared status of the HMI input.

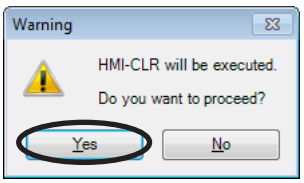
1. Click [HMI-CLR] from the [Communication] menu.



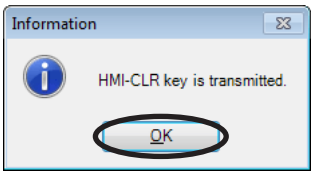
2. Enter the clear key (numbers shown under the input field) and click [HMI-CLR]..



3. Click [Yes].
   The HMI input is cleared.



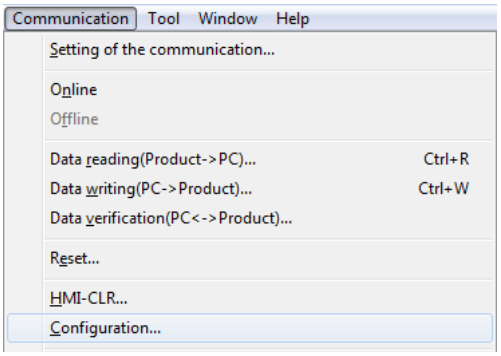
4. After it is completed, click [OK].



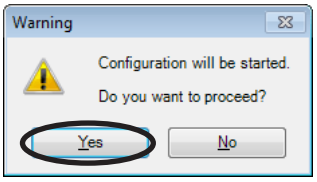
12.2 Executing Configuration

When the data of an applicable product is changed, the timing that the new value is applied varies depending on the data. When a message prompts asking to execute Configuration, perform according to the following procedure.

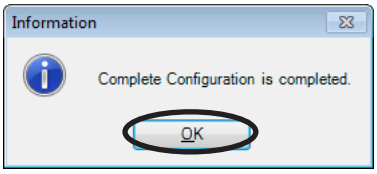
1. Click [Configuration] from the [Communication] menu.



2. Click [Yes].
   Configuration is executed.



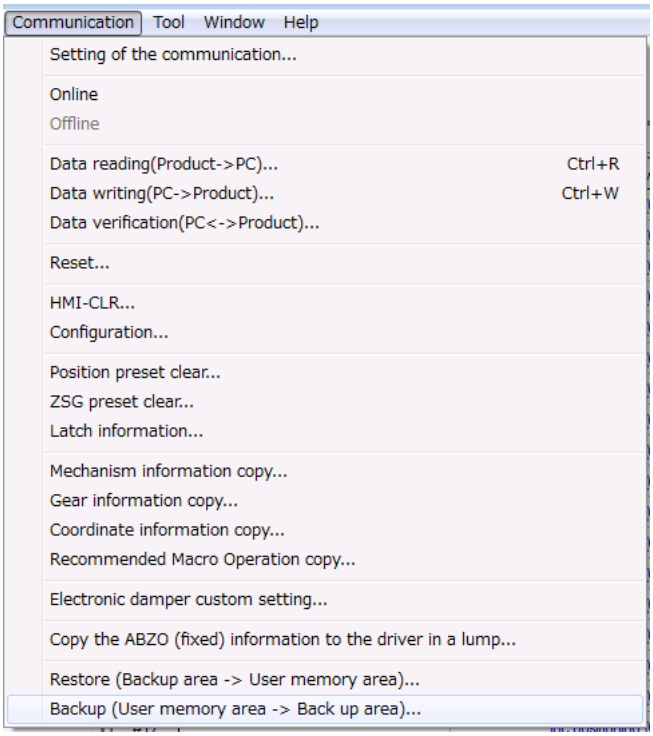
3. After it is completed, click [OK].



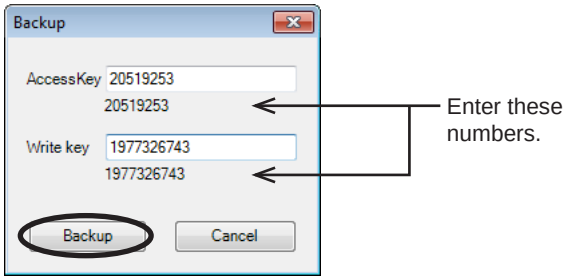
12.3 Backup function

You can save data of an applicable product to the backup area in the applicable product.
The saved backup data can be loaded using the restore function.

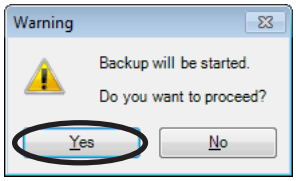
1. Click [Backup] from the [Communication] menu.



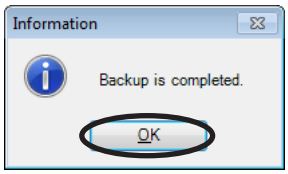
2. Enter the access and write keys (numbers shown under the input field) and click [Backup].



3. Click [Yes].
The backup starts.



4. After it is completed, click [OK].



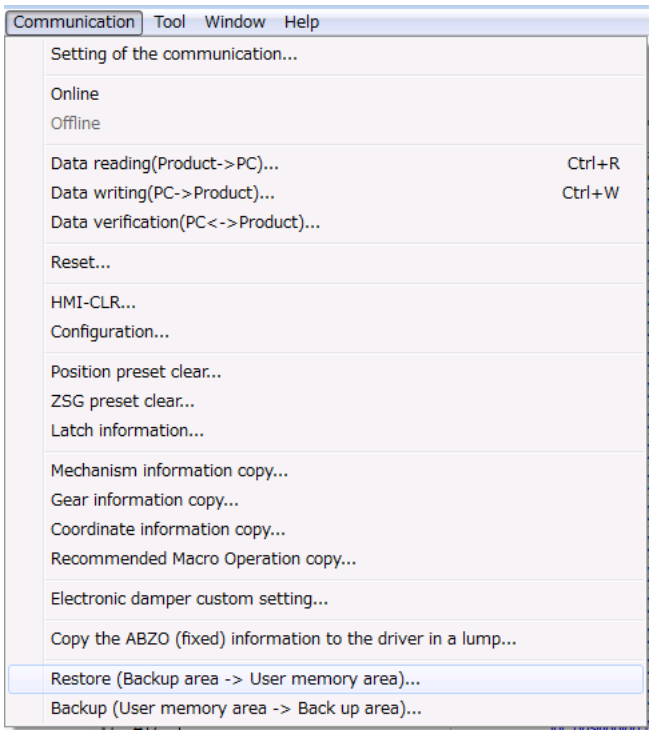
5. Turn on the power of the applicable product.

Note After the power is turned on, data is written to the backup area.

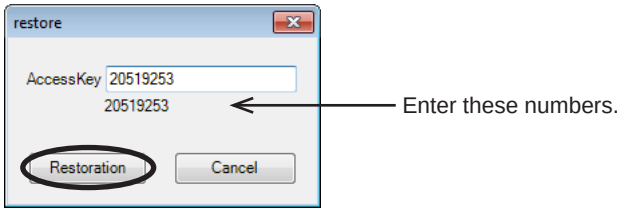
12.4 Restore function

You can load the data saved using the backup function.

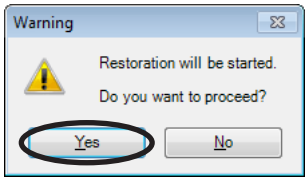
1. Click [Restore] from the [Communication] menu.



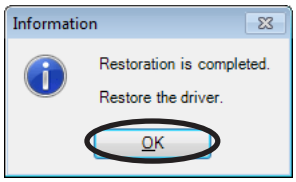
2. Enter the access key (numbers shown under the input field) and click [Restoration].



3. Click [Yes].
   The restoration starts.



4. After it is completed, click [OK].



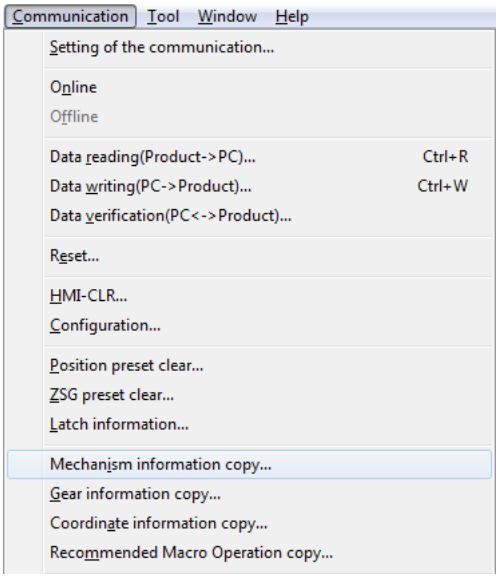
5. Turn on the power of the applicable product.

Note After the power is cycled, the data that was restored will be applied to the applicable product.

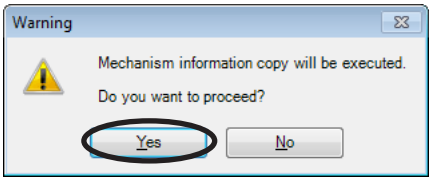
12.5 Mechanism Information copy

The mechanism information parameters saved in the encoder can be copied to the user parameters of an applicable product.

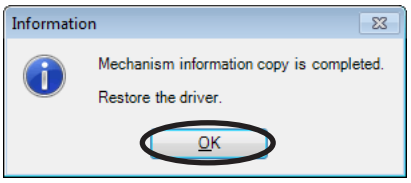
1. Click [Mechanism information copy] from the [Communication] menu.



2. Click [Yes].
   The mechanism information parameters are copied to the user parameters.



3. After it is completed, click [OK].

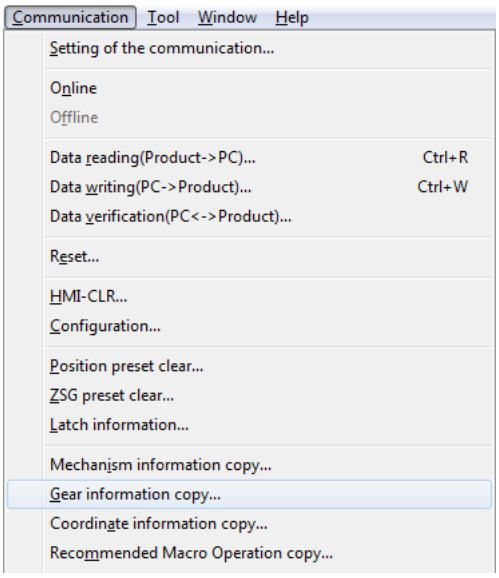


4. Cycle the power of the applicable product.

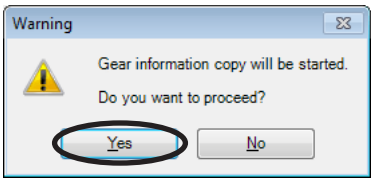
12.6 Gear Information copy

The gear information parameters saved in the encoder can be copied to the user parameters of an applicable product.

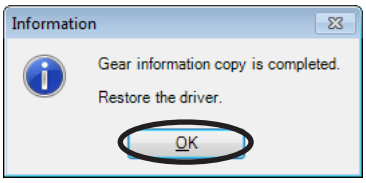
1. Click [Gear information copy] from the [Communication] menu.



2. Click [Yes].
   The gear information parameters are copied to the user parameters.



3. After it is completed, click [OK].

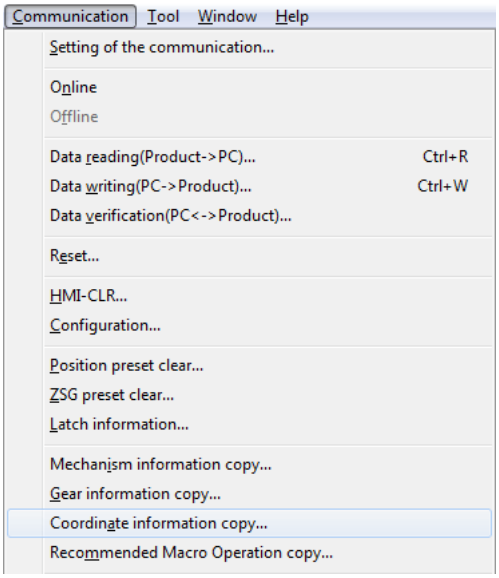


4. Cycle the power of the applicable product.

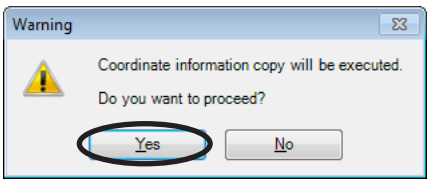
12.7 Coordinate Information copy

The coordinate information parameters saved in the encoder can be copied to the user parameters of an applicable product.

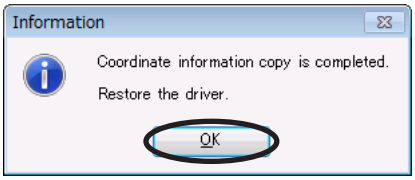
1. Click [Coordinate information copy] from the [Communication] menu.



2. Click [Yes].
   The coordinate information parameters are copied to the user parameters.



3. After it is completed, click [OK].

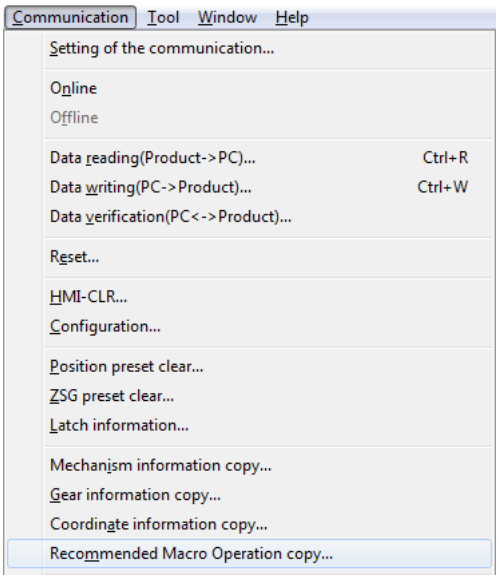


4. Cycle the power of the applicable product.

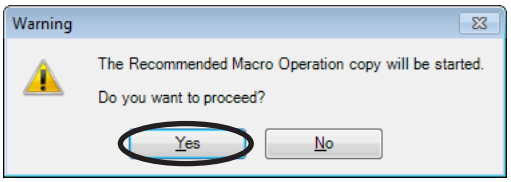
12.8 Recommended macro operation copy

The recommended macro operation parameters saved in the encoder can be copied to the user parameters of an applicable product.

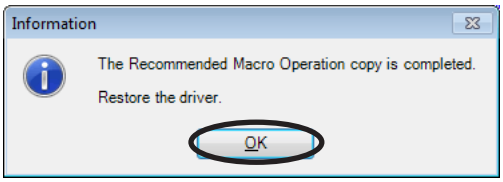
1. Click [Recommended Macro Operation copy] from the [Communication] menu.



2. Click [Yes].
   The recommended macro operation parameters are copied to the user parameters.



3. After it is completed, click [OK].



4. Cycle the power of the applicable product.

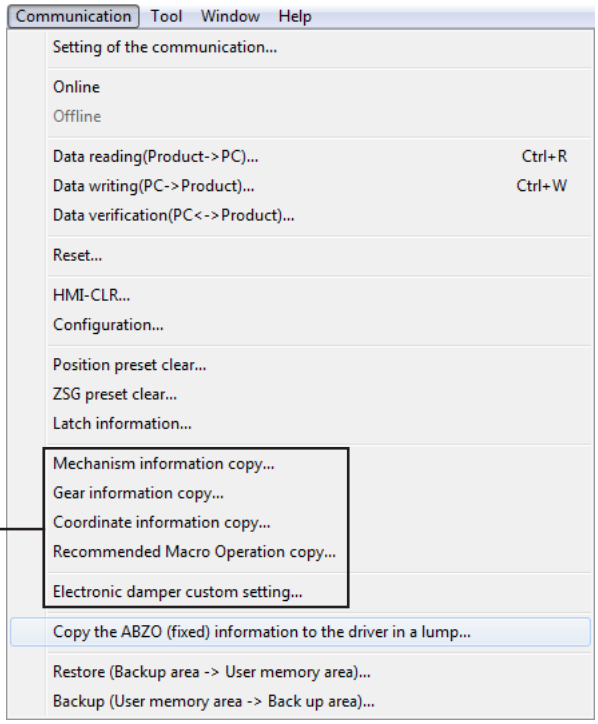
12.9 Batch copy of ABZO sensor information (fixed value) to driver

The information saved in the ABZO sensor can be copied to the driver all together. The information items of batch copy are listed below.

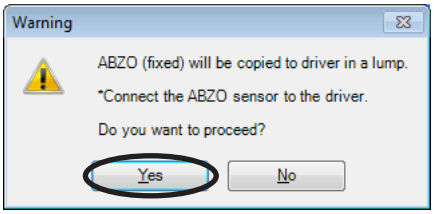
- Mechanism information, gear information, coordinate information, recommended macro operation, electronic damper custom setting

The information in the ABZO sensor is fixed. It cannot be rewritten.

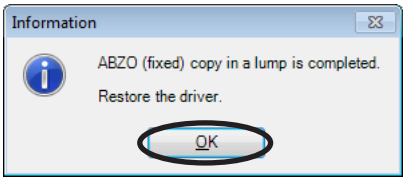
1. Click [Copy the ABZO (fixed) information to the driver in a lump] from the [Communication] menu.



2. Click [Yes].
   The batch copy is executed.



3. After it is completed, click [OK].

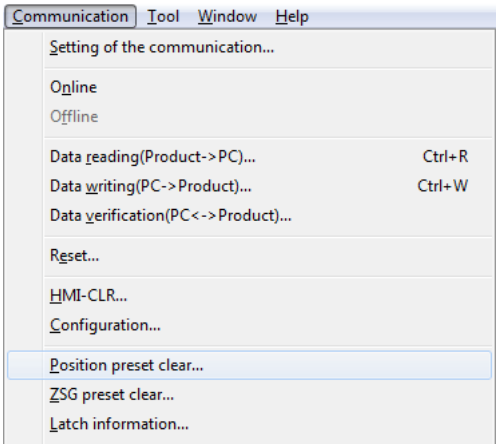


4. Cycle the power of the applicable product.

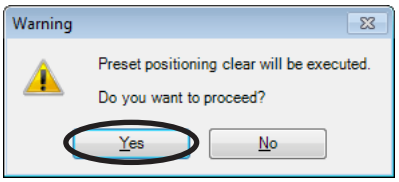
12.10 Position preset clear

The coordinate preset status can be cleared.

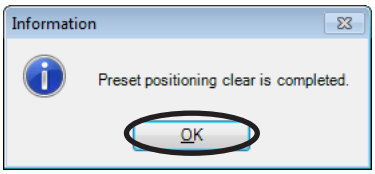
1. Click [Position preset clear] from the [Communication] menu.



2. Click [Yes].
   The position preset clear is executed.



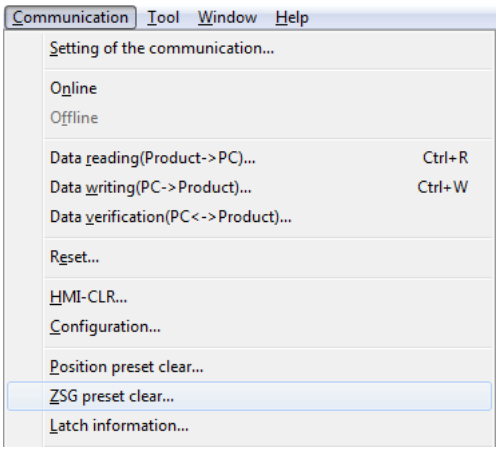
3. After it is completed, click [OK].



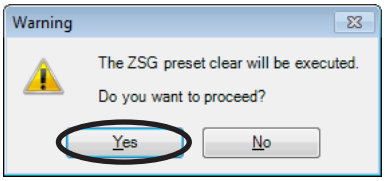
12.11 ZSG preset clear

The ZSG position information saved in the encoder can be cleared.

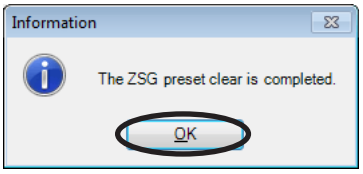
1. Click [ZSG preset clear] from the [Communication] menu.



2. Click [Yes].
   The ZSG preset clear is executed.



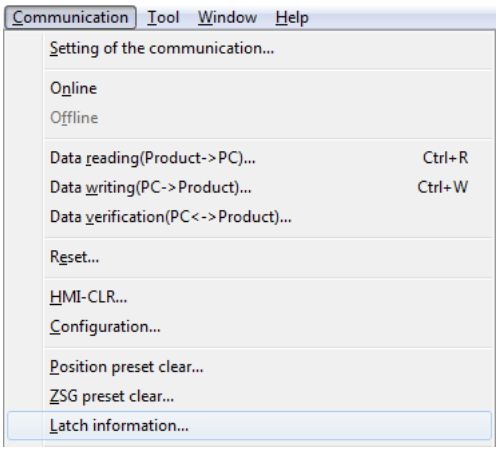
3. After it is completed, click [OK].



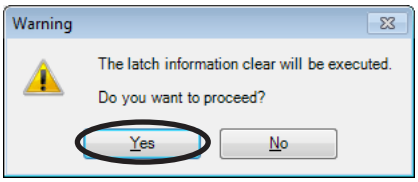
12.12 Latch information clear

The latched information of an applicable product can be cleared.

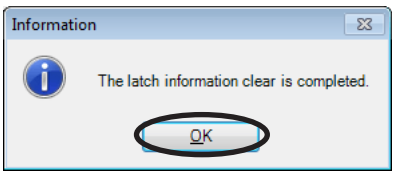
1. Click [Latch information] from the [Communication] menu.



2. Click [Yes].
   The latch information clear is executed.

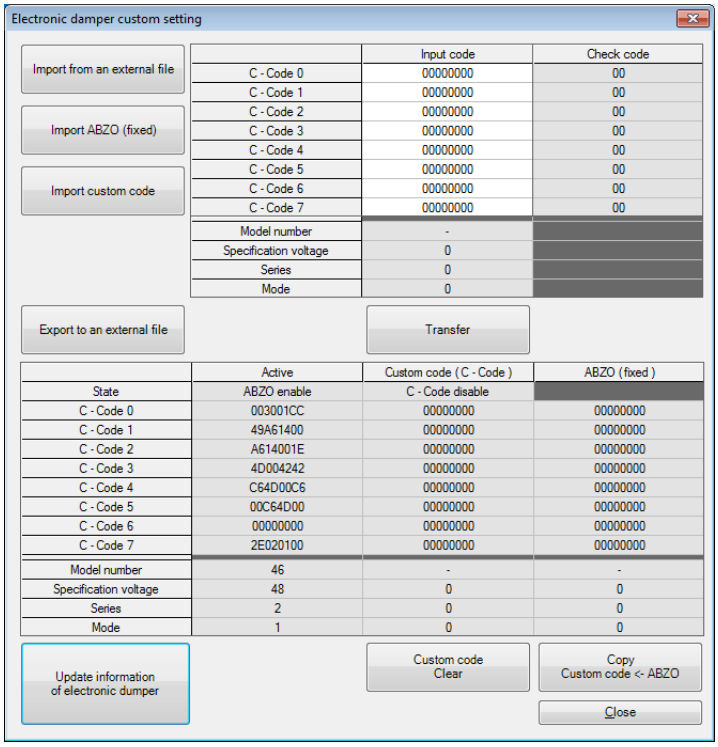


3. After it is completed, click [OK].



12.13 Electronic damper

This is the dedicated menu for maintenance of Oriental Motor. Do not touch this screen.



	Input code	Check code
C - Code 0	00000000	00
C - Code 1	00000000	00
C - Code 2	00000000	00
C - Code 3	00000000	00
C - Code 4	00000000	00
C - Code 5	00000000	00
C - Code 6	00000000	00
C - Code 7	00000000	00
Model number	-	
Specification voltage	0	
Series	0	
Mode	0	

	Active	Custom code (C - Code)	ABZO (fixed)
State	ABZO enable	C - Code disable	
C - Code 0	003001CC	00000000	00000000
C - Code 1	49A61400	00000000	00000000
C - Code 2	A614001E	00000000	00000000
C - Code 3	4D004242	00000000	00000000
C - Code 4	C64D00C6	00000000	00000000
C - Code 5	00C64D00	00000000	00000000
C - Code 6	00000000	00000000	00000000
C - Code 7	2E020100	00000000	00000000
Model number	46	-	-
Specification voltage	48	0	0
Series	2	0	0
Mode	1	0	0

13 Utilizing MEXE02

This chapter provides some examples of utilizing the **MEXE02**.

13.1 Operating motor using the MEXE02

A motor can be operated using the **MEXE02**. This function lets you check how the motor will operate before actually connecting it to a programmable controller.
Operation data can be set using teaching function. Although there is no need to connect to a programmable controller, the applicable product must be connected to the power supply.
Use the teaching/remote operation. The teaching/remote operation allows you to perform the following operations.

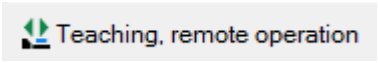
- Positioning operation
- Return-to-home operation
- ZHOME operation
- JOG operation
- Teaching

Note
- The teaching/remote operation and I/O test cannot be executed simultaneously.
- Before performing this operation, set necessary data and write it to an applicable product.

■ Enabling teaching/remote operation

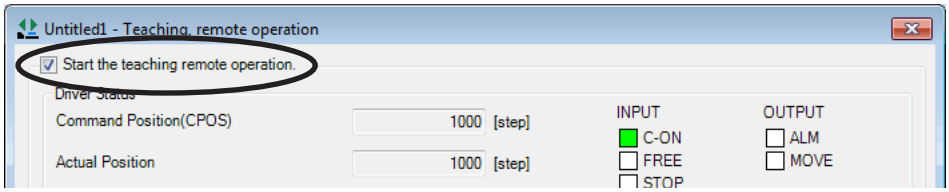
1. Connect an applicable product to the power supply.
2. Click the [Teaching, remote operation] icon in the toolbar or click the [Teaching, remote operation] short-cut button.

or

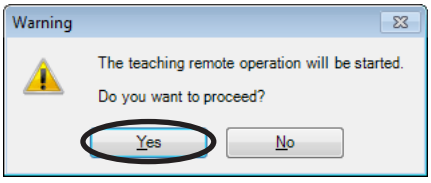


The teaching/remote operation window appears.

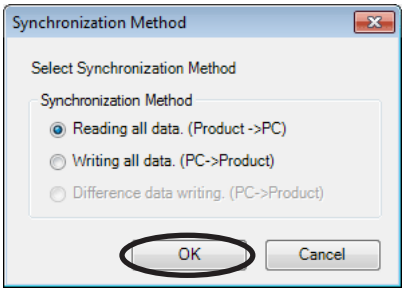
3. Click "Start the teaching remote operation."



4. Click [Yes].
The teaching/remote operation is enabled.



The teaching/remote operation requires synchronization of the data under editing and the data of an applicable product. When the data is not synchronized, the following window appears. Select a synchronization method and click [OK].



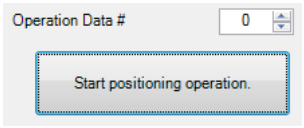
Note When the above window appears, all the communications in progress are disabled. All the other monitors in progress in other windows are also stopped. Resume monitor after synchronization is completed.

5. To end the teaching/remote operation, unselect "Start the teaching remote operation."

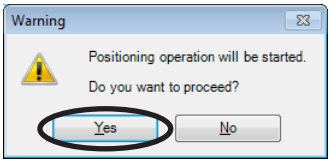
■ Positioning operation

You can operate the motor using the operation data written to the applicable product.

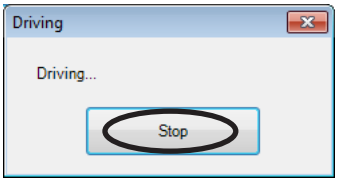
1. Set the number of operation data that you want to execute in "Operation Data #."
2. Click [Start positioning operation].



3. Click [Yes].
   The positioning operation with the selected operation data number starts.

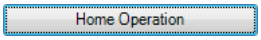


Click [Stop] to stop the operation before completion.

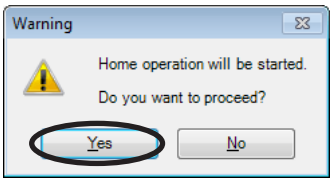


■ Return-to-home operation

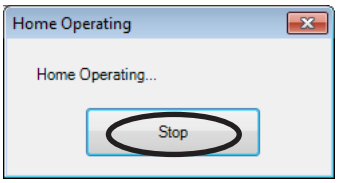
1. Click [Home Operation].



2. Click [Yes].
   The return-to-home operation starts.



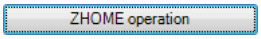
Click [Stop] to stop the operation before completion.



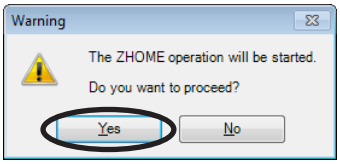
■ ZHOME operation

You can perform return-to-mechanical home (ZHOME) operation.

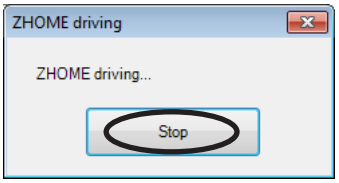
1. Click [ZHOME operation].



2. Click [Yes].
   The ZHOME operation starts.



Click [Stop] to stop the operation before completion.



■ JOG operation

You can operate the motor either continuously or in steps of the specified minimum distance.

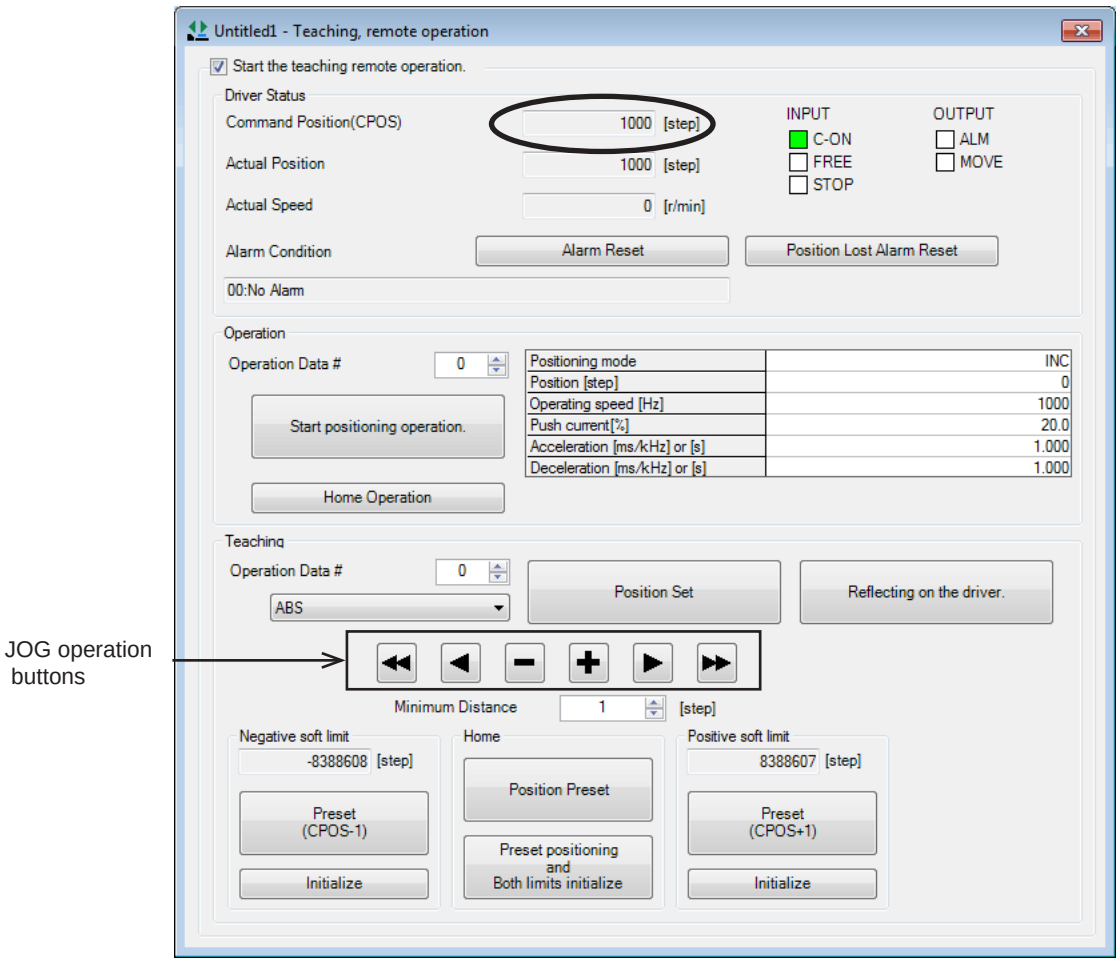
JOG operation can be executed using the following buttons. The JOG operating speed can be changed using a parameter.

: Move the motor in the negative direction at the JOG operating speed.
: Move the motor in the negative direction with a speed slower than the JOG operating speed.
: Move the motor in the negative direction by the minimum distance.
: Move the motor in the positive direction by the minimum distance.
: Move the motor in the positive direction with a speed slower than the JOG operating speed.
: Move the motor in the positive direction at the JOG operating speed.

■ Teaching

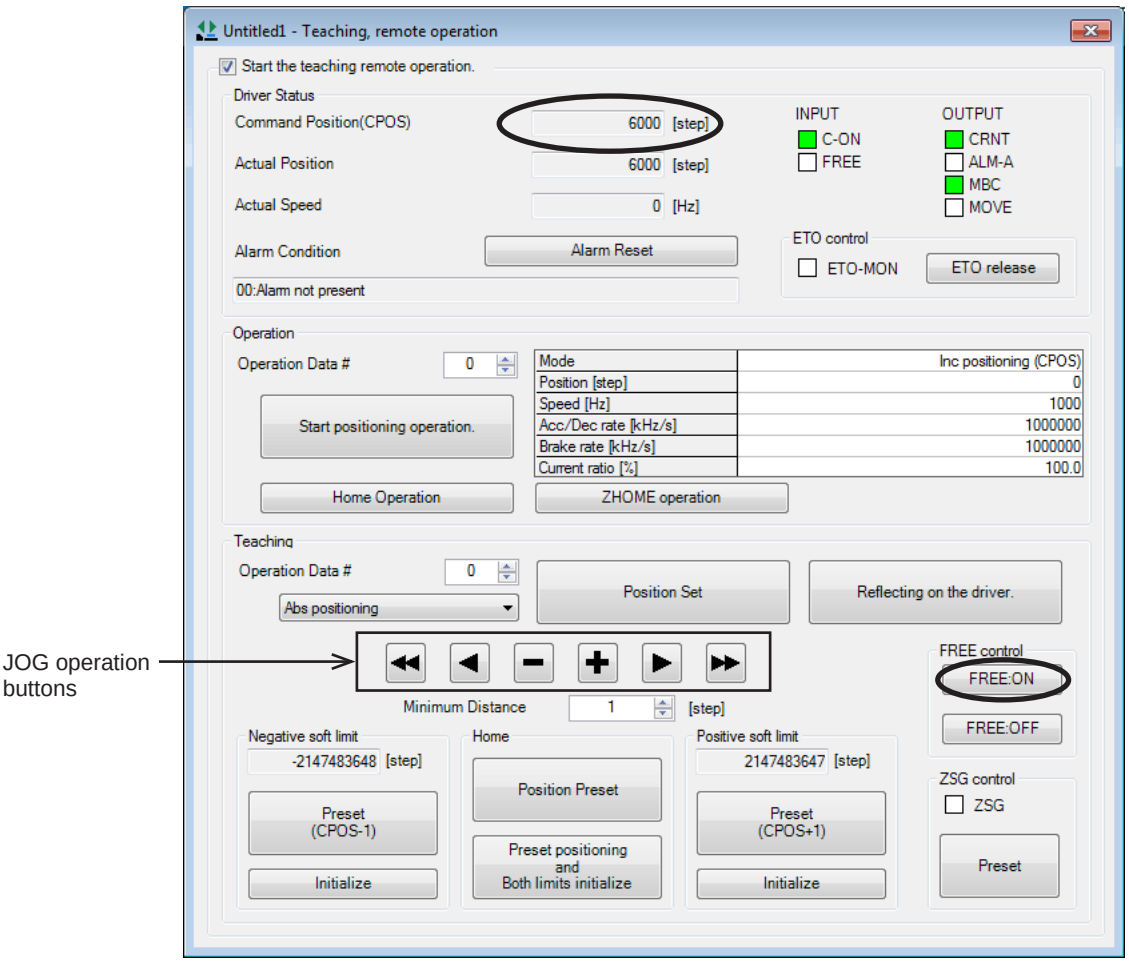
While operating the motor, you can set the current motor position as the operation data.

1. Change the current motor position either manually or with JOG operation.
   Do so while checking the "Command Position (CPOS)" in "Driver Status."
   Use the JOG operation buttons to move the motor with JOG operation.



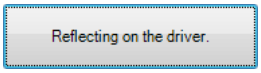
JOG operation buttons

For the **AZ** Series
Do so while checking the "Command Position (CPOS)" in "Driver Status."
Use the JOG operation buttons to move the motor with JOG operation.
Click [Free:ON] in "FREE Input control" to operate the motor manually. This lets you move the motor output shaft with external forces.

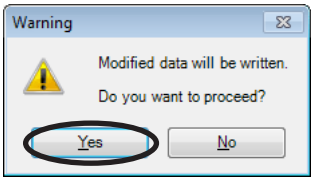


2. Select an operation data number at "Operation Data #" in "Teaching."
3. Select an operation mode and click [Position Set].
   If you select "No setting for operation mode," the operation mode set in the operation data number is used.
   The new position information is set to the selected operation data number.

4. Click [Reflecting on the driver] to set the teaching data to the applicable product.



5. Click [Yes].
   The data is written to the applicable product.



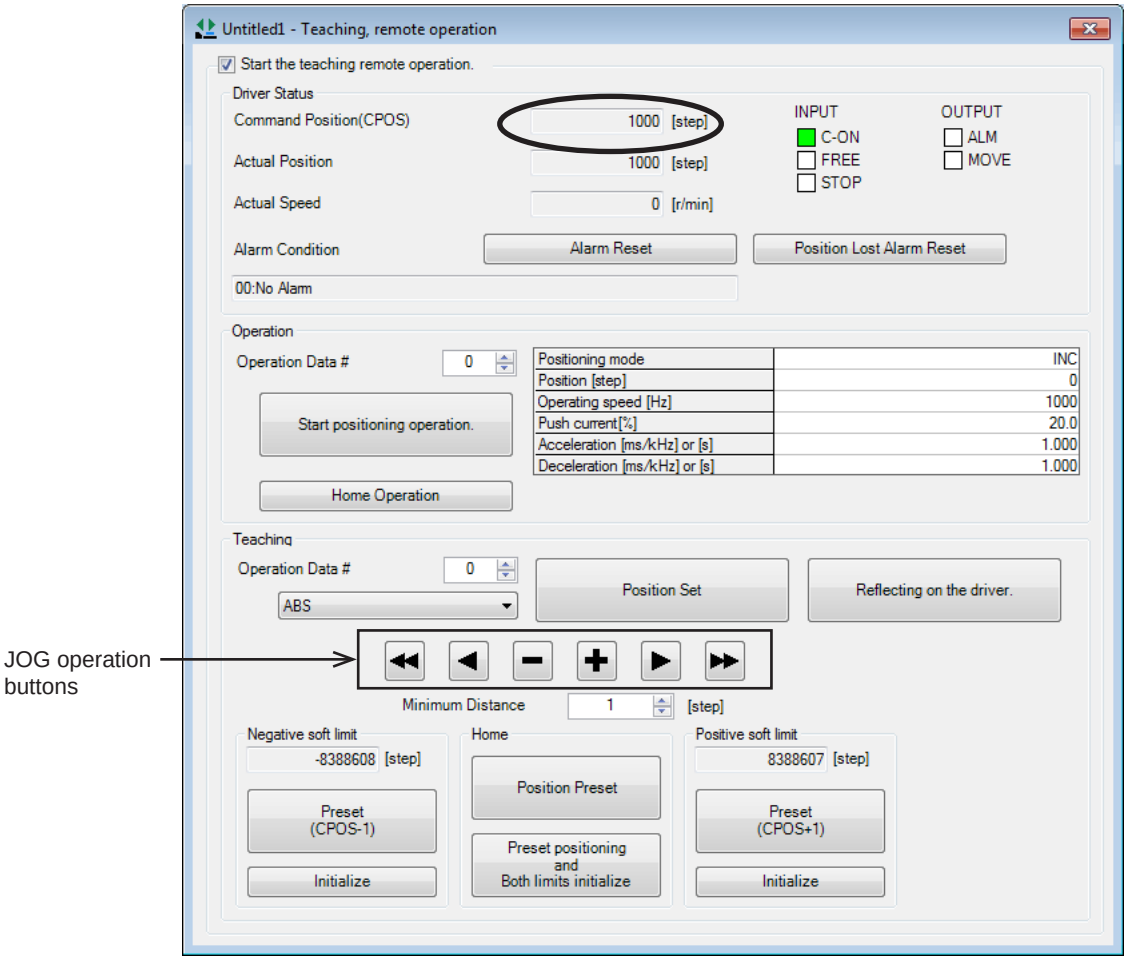
Note

- Just clicking [Position Set] does not write the data to the applicable product. Be sure to execute [Reflecting on the driver].
- While the applicable product and PC are connected (online), you cannot edit data other than the operation mode and position. Edit these data under disconnected condition (offline).

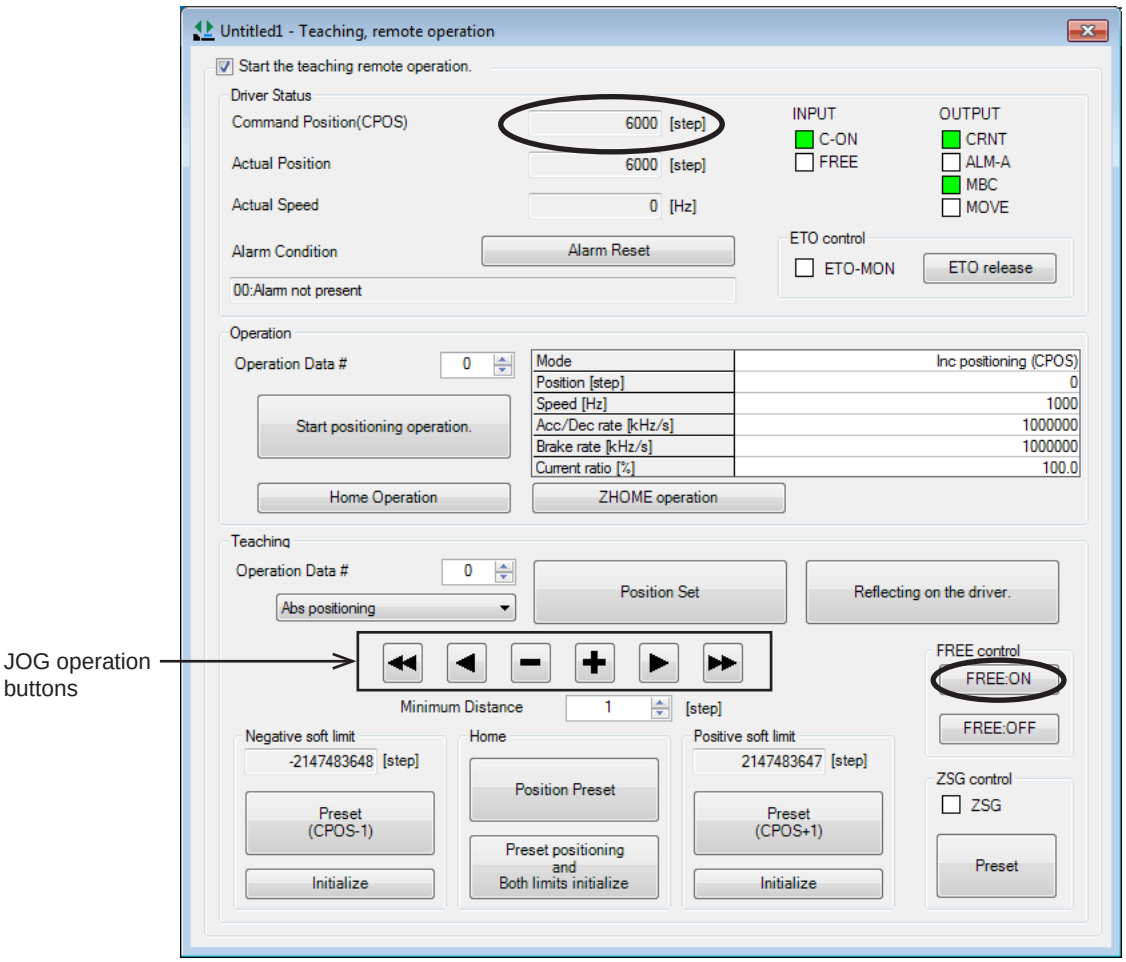
13.2 Teaching software limit

While operating the motor, you can set the current motor position as the software limit value.

1. Enable the teaching/remote operation.
2. Change the current motor position either manually or with JOG operation.
   Do so while checking the "Command Position (CPOS)" in "Driver Status."
   Use the JOG operation buttons to move the motor with JOG operation.



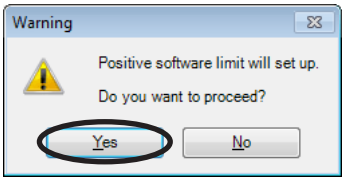
For the **AZ** Series
Do so while checking the "Command Position (CPOS)" in "Driver Status."
Use the JOG operation buttons to move the motor with JOG operation.
Click [Free:ON] in "FREE Input control" to operate the motor manually. This lets you move the motor output shaft with external forces.



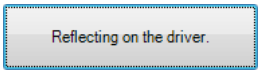
JOG operation buttons

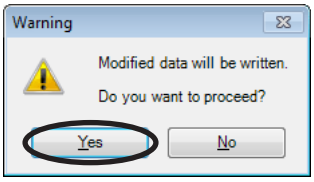
3. Click [Preset (CPOS-1)] to set a software limit value in the negative direction.
   Click [Preset (CPOS+1)] to set a software limit value in the positive direction.

4. Click [Yes].
   The software limit value is set.
   When [Preset (CPOS+1)] is selected, the positive software limit value is the command position +1.
   When [Preset (CPOS-1)] is selected, the negative software limit value is the command position −1.



5. For other models than the **AZ** Series, click [Reflecting on the driver] and then [Yes].
   The data is written to the applicable product.
   This procedure is not necessary for the **AZ** Series. Click [Yes] in Step 4 to write data.





13.3 Utilizing waveform monitor

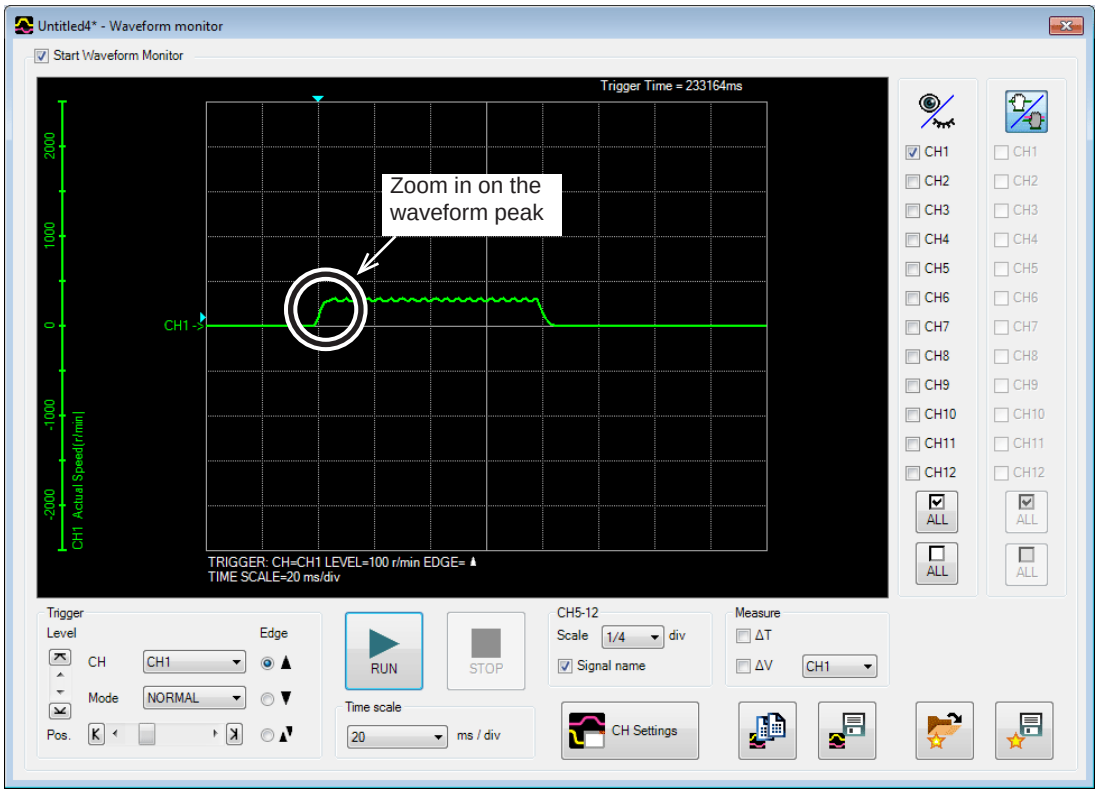
Refer to p.52 for the basic usage procedure of the waveform monitor.
This section explains some examples of utilizing the waveform monitor as shown below.

- Zooming in on waveform data
- Moving drawing positions of waveforms for multiple CHs simultaneously
- Saving waveform measurement results as images
- Saving waveform measurement results as data

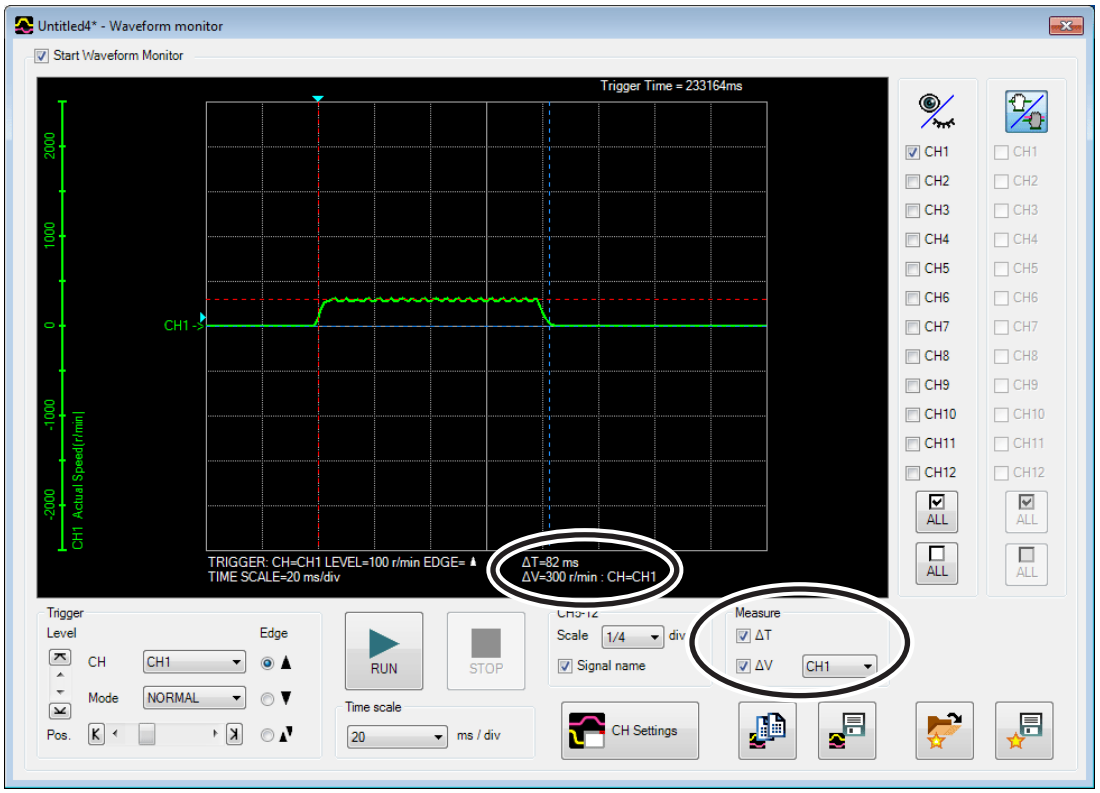
■ Zooming in on waveform data

You can enlarge and display part of the measured waveform data.
The following shows an example of zooming in on around the peak value after measuring the detection speed of CH1.

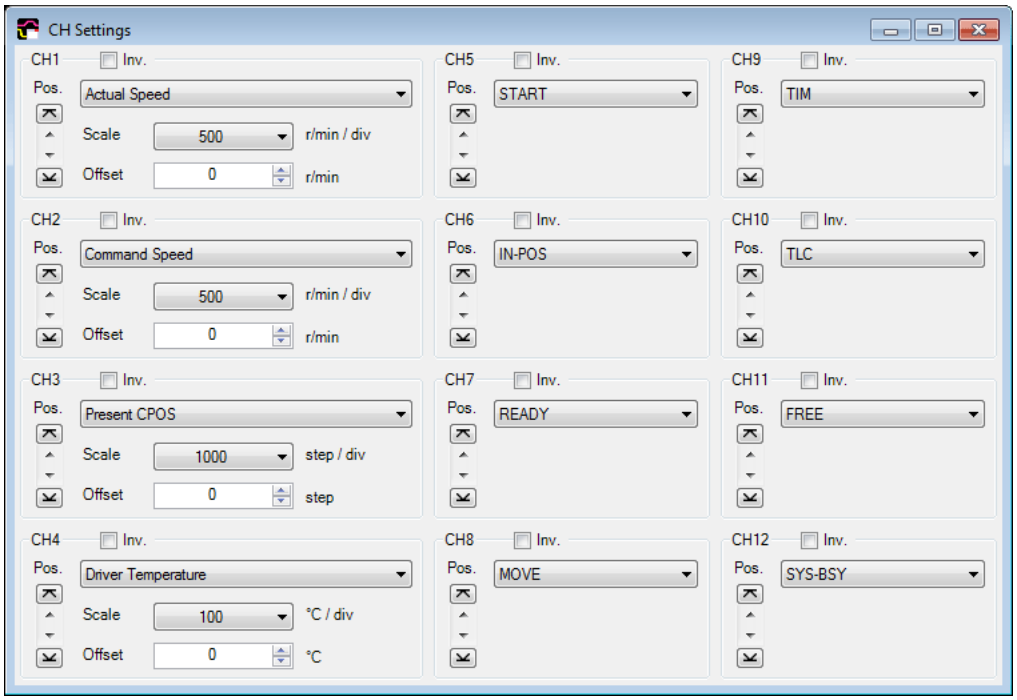
1. Measure the waveform.
   In this example, the detection speed of CH1 is measured.



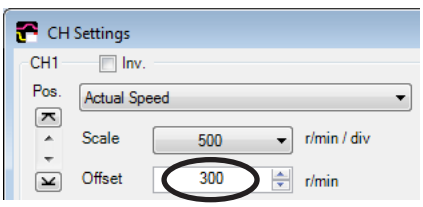
2. Select "CH1" in "Measure," and select the ΔV check box.
The result shows the peak value of CH1 at around 300 r/min.



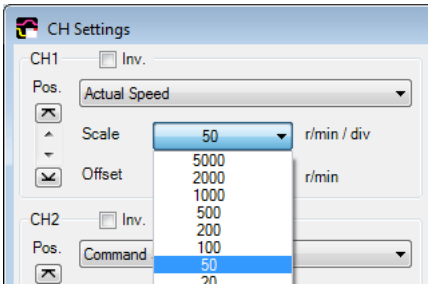
3. Click [CH Settings].
The CH settings window appears.



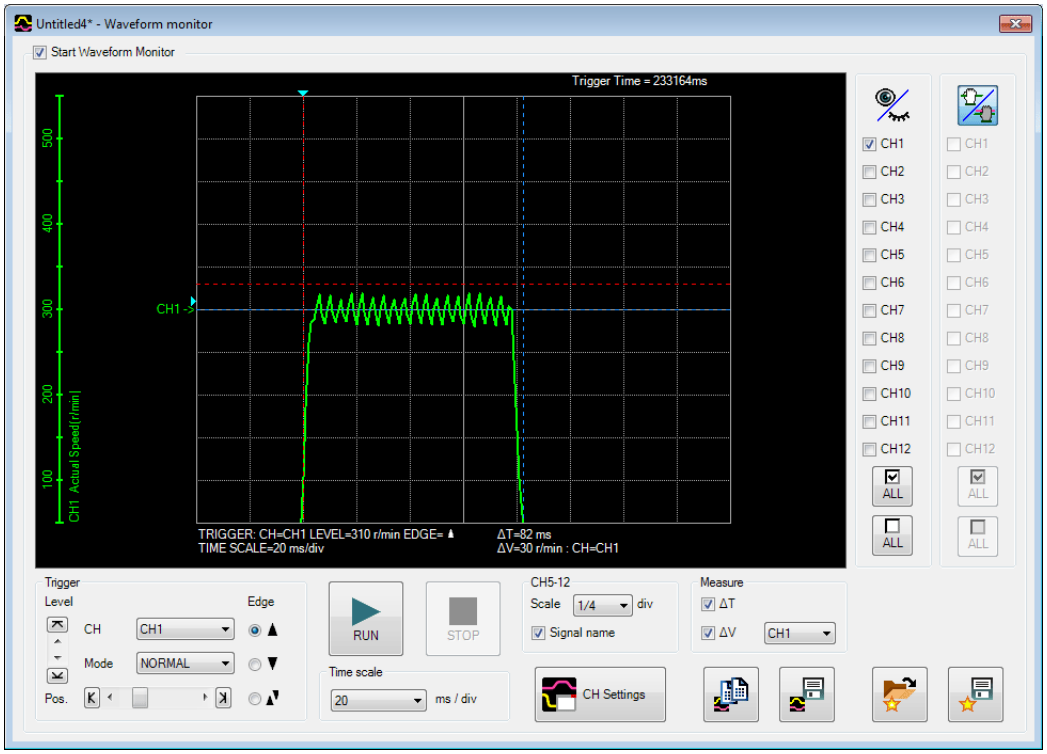
4. In "Offset" of CH1, enter a center value onto which you want to zoom in.
In this example, enter 300 (r/min), the measurement result of Step 2, to zoom in on around the peak value.



5. Change "Scale" of CH1.
   In this example, set the speed for each scale on the vertical axis.



The waveform is zoomed in, centering on the value entered as the offset value.

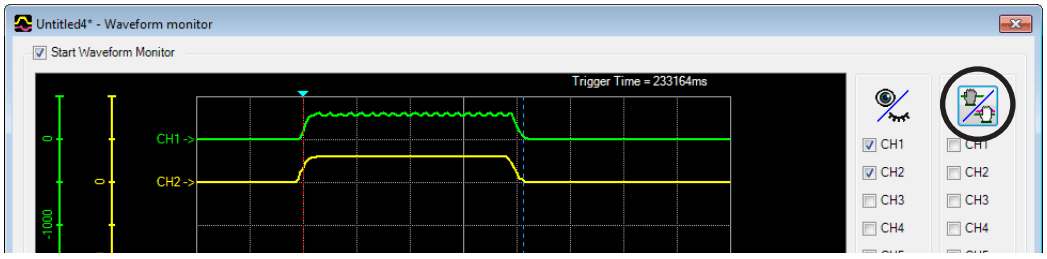


■ Moving drawing positions of waveforms simultaneously

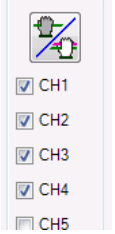
You can change the display positions by moving the waveform curves in the window.
This section explains how to move multiple CH curves simultaneously.

1. After waveform measurement, click the  button located in the upper right corner of the waveform monitor window

   The button is changed to  .



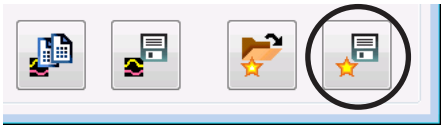
2. Click the CHs that you want to move simultaneously.
   Click  to select all the CHs.
3. Drag the waveform curves in the window to move them vertically.
   The selected CHs are moved simultaneously.



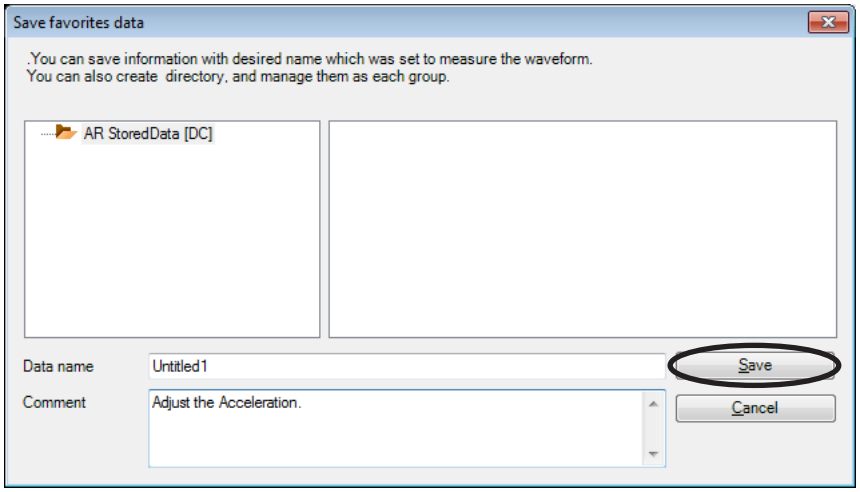
■ Saving setting conditions for measurement

The setting for measurement can be saved as "Favorites data."

1. In the waveform monitor window, click [Save Favorites data].



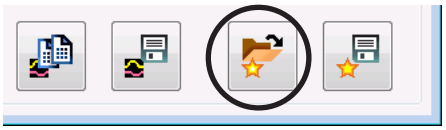
2. Enter a data name and click [Save].
   You can also enter a memo in the comment field.



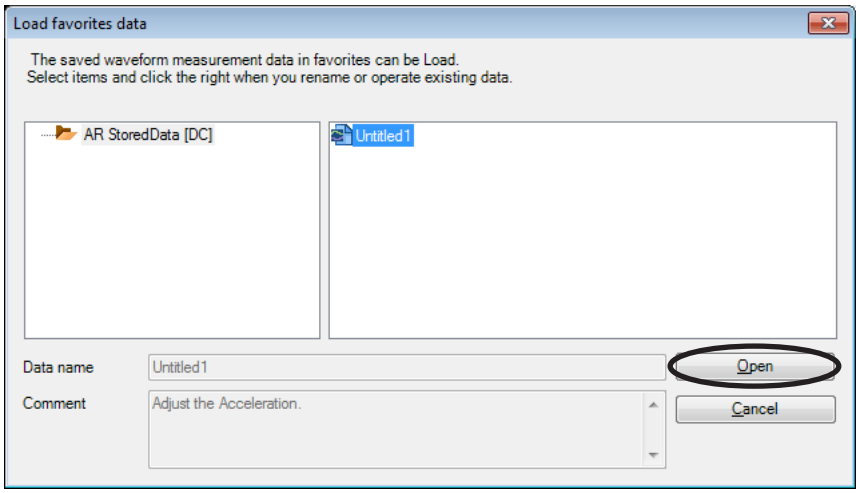
■ Loading saved setting conditions

The setting for measurement can be loaded from "Favorites data."

1. In the waveform monitor window, click [Load Favorites data].



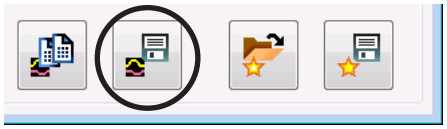
2. Select data that you want to load and click [Open].
   The loaded setting conditions are applied to the waveform monitor window.



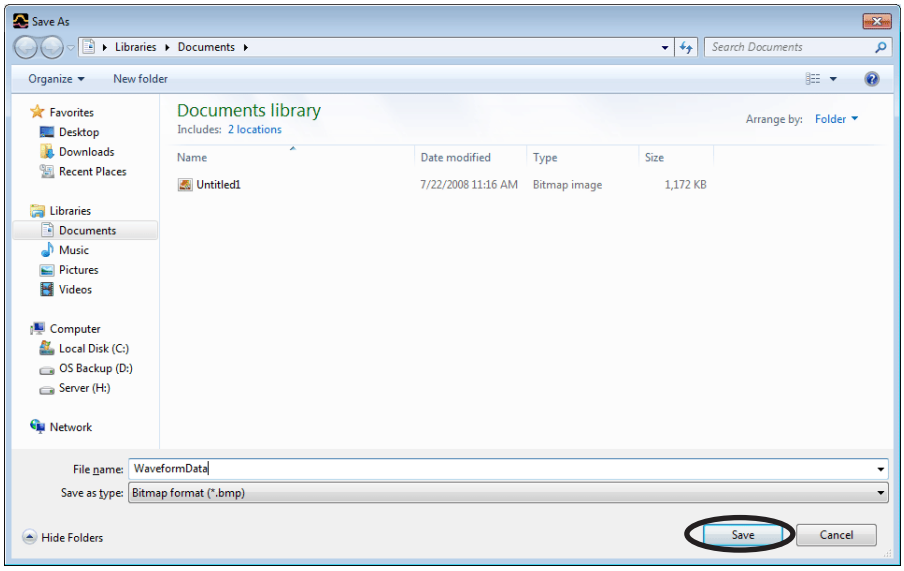
■ Saving waveform measurement results as images

The currently displayed waveform can be saved as a bitmap-format image.

1. In the waveform monitor window, click [Save waveform data].



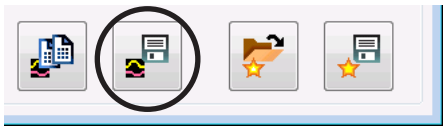
2. Enter a file name, set the file type to the bitmap format (*.bmp), and click [Save].
The waveform is saved in the bitmap format.



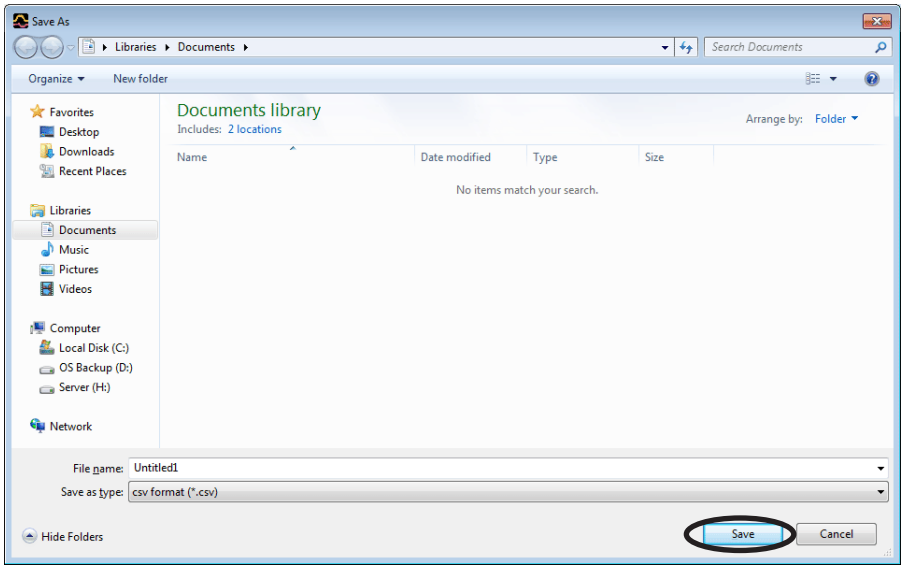
■ Saving waveform measurement results in CSV format

The currently displayed waveform can be saved in the CSV format.

1. In the waveform monitor window, click [Save waveform data].



2. Enter a file name, set the file type to the CSV format (*.csv), and click [Save].
The waveform is saved in the CSV format.



13.4 Checking wiring of applicable product

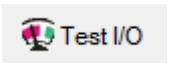
Using I/O test, you can monitor input signals and cause output signals to be output forcibly. This function is convenient if you want to check the wiring of I/O signals and the operation of network I/O.

Note

- In I/O test, you can forcibly turn on or off output signals. Consequently, other equipment connected to an applicable product may operate. Check the surrounding circumstances to ensure safety before conducting this procedure.
- The teaching/remote operation and I/O test cannot be executed simultaneously.

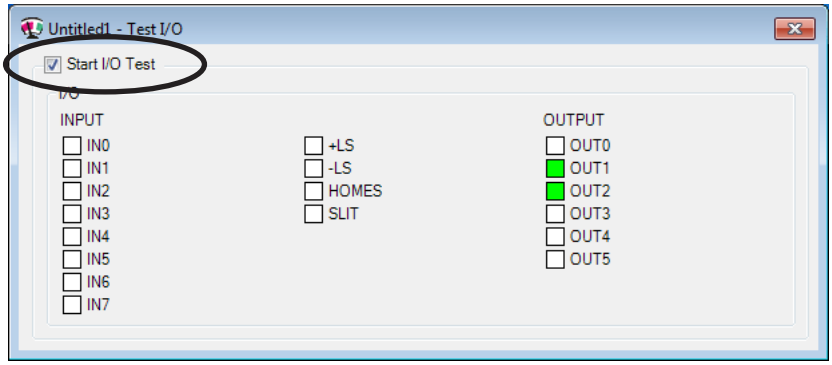
1. Click the [Test I/O] icon in the toolbar or click the [Test I/O] short-cut button.

or

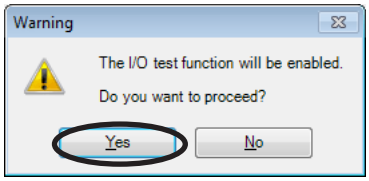


The test I/O window appears.

2. Click "Start I/O Test."



3. Click [Yes].
I/O test is enabled.



4. Switch the ON/OFF status of input signals externally.
The check box ☐ of the corresponding "INPUT" is changed in the window.

Indicator	Direct I/O	Remote I/O (RS-485 communication)
ON(green)	Conducting	Active
OFF(white)	Non-conducting	Not active

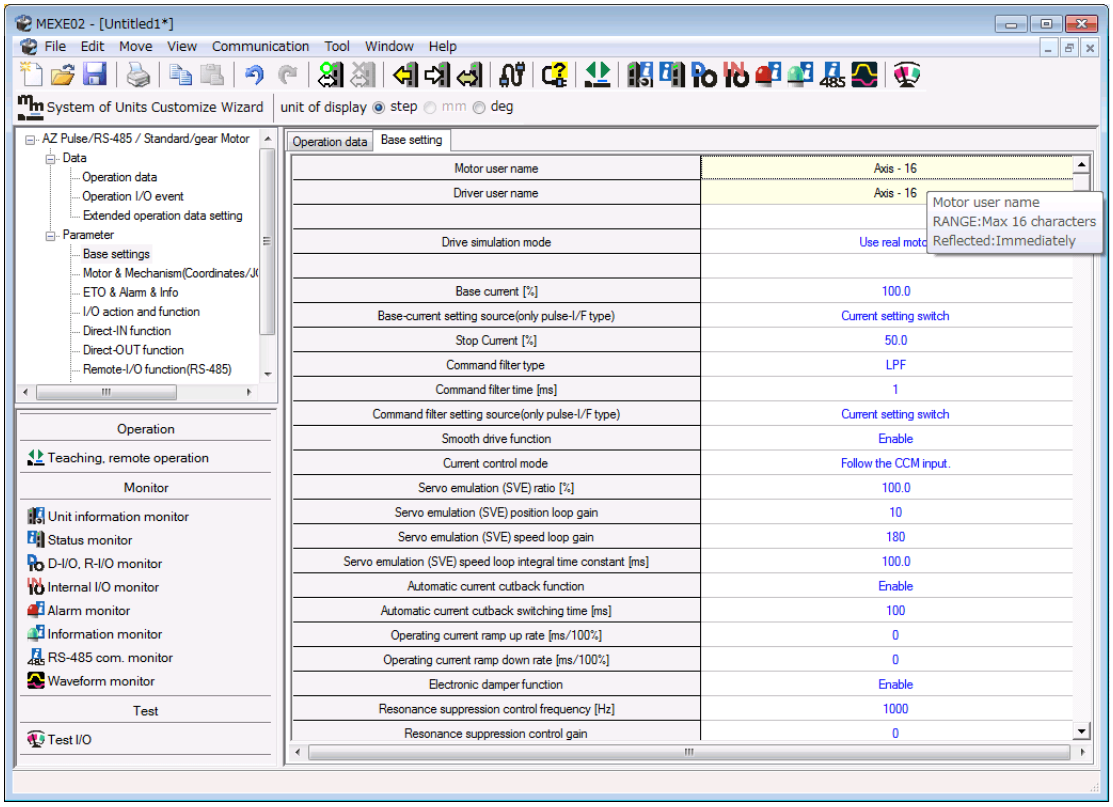
5. When switching the ON/OFF status of output signals, click the check box ☐ of "OUTPUT" in the window.

Indicator	Direct I/O	Remote I/O (RS-485 communication)
ON(green)	Conducting	Active
OFF(white)	Non-conducting	Not active

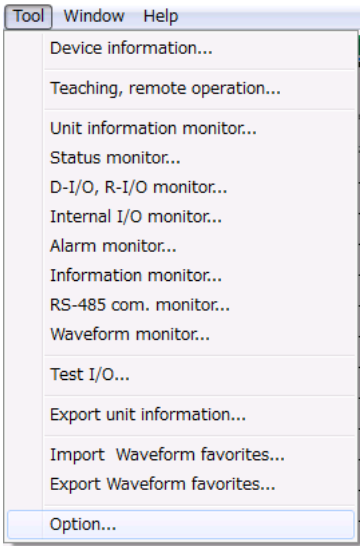
6. To exit I/O test, unselect "Start I/O Test."

13.5 Utilizing the warning function for when writing data

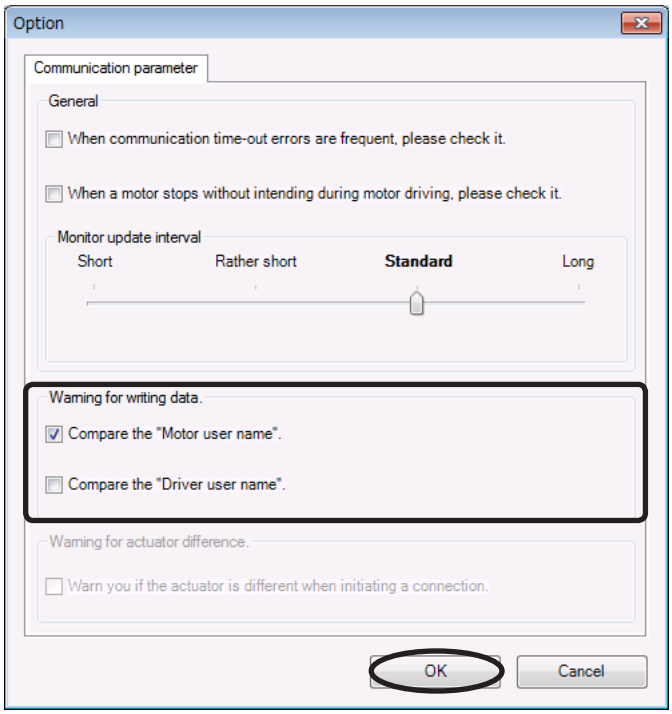
A desired name (user name) for the motor or driver can be set using the base setting parameter.
When writing the **MEXE02** data to the applicable product, setting the user name can prevent from overwriting the data to a wrong product.



1. Click [Option] from the [Tool] menu.

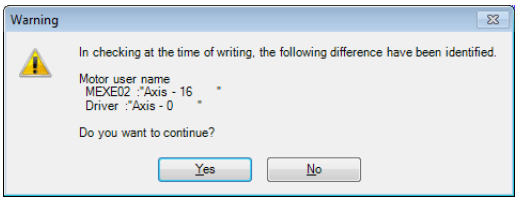


2. Select the user name to be compared from "Warning for writing data," and click [OK].



■ When writing data

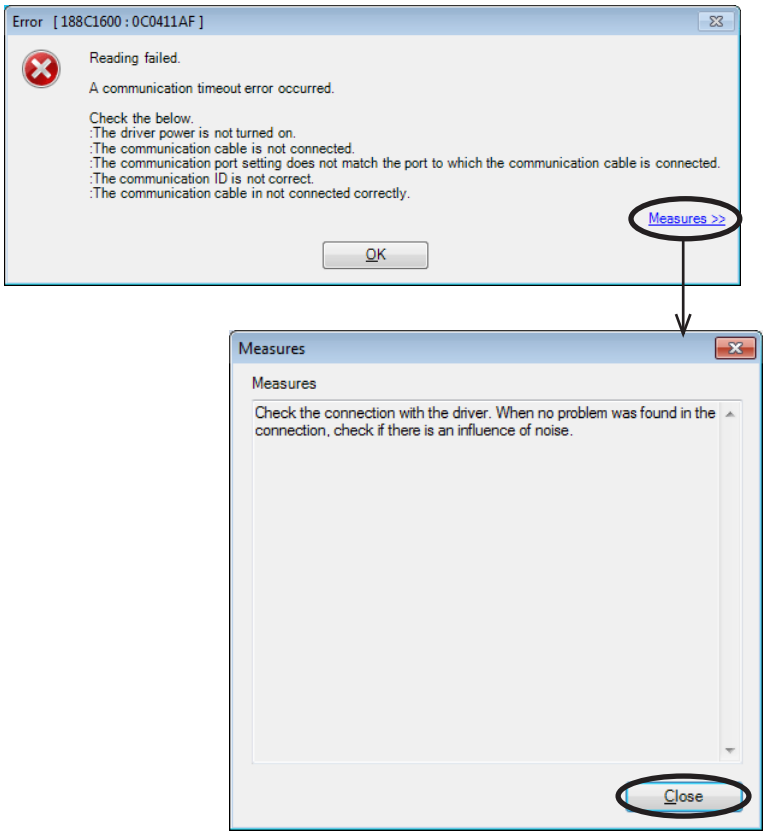
When writing data, if the user name is not same between the **MEXE02** and applicable product, the following message is displayed.
Click either [Yes] of [No] after checking the applicable product.
[Yes]: Writing data will be executed.
[No]: Writing data will be discontinued.



14 Troubleshooting

14.1 Checking error message

If the **MEXE02** has encountered a problem while running, a corresponding error message is shown in the window. "Measures" may be displayed depending on the contents of the error message. Click "Measures" to display the error details. Check the screen and appropriately deal with the issue.



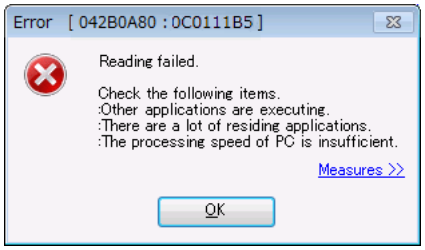
14.2 Frequently encountered errors

This section explains frequently encountered errors and measures required for them.

■ Communication fails

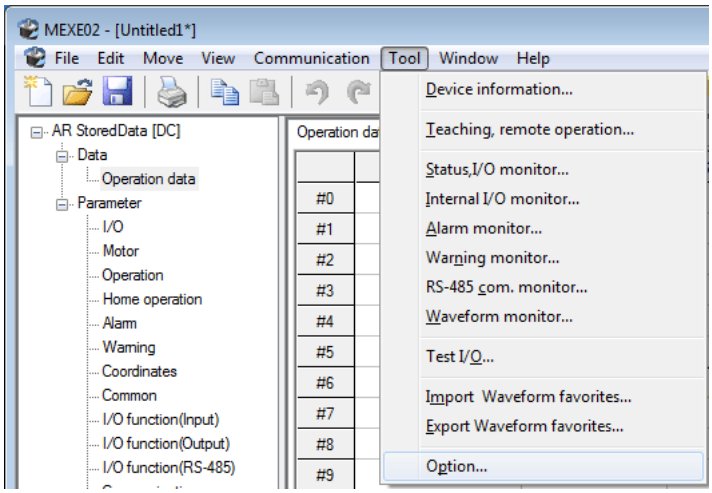
During data reading, writing, monitoring and testing, the following error message may be displayed, and communication may not start.

Example: When reading data

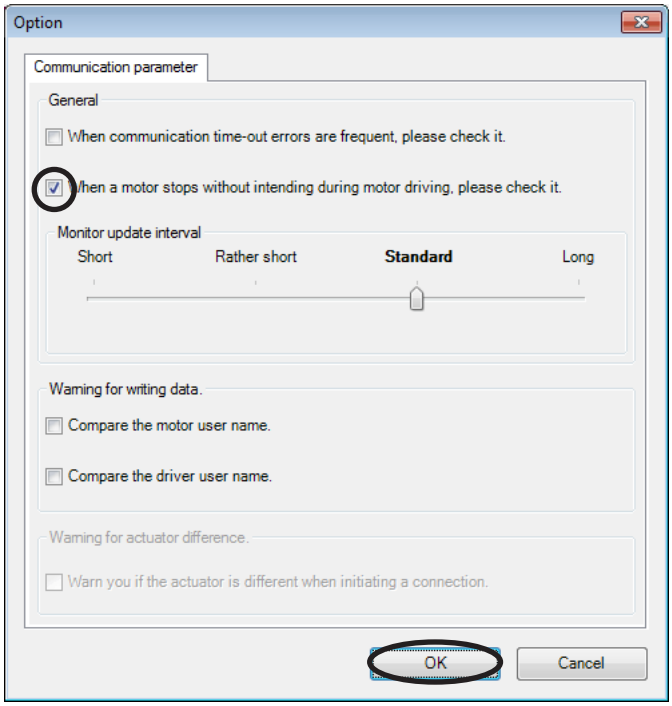


The problem may be resolved if you specify the settings in the procedure shown below.

1. Click [Option] from the [Tool] menu.
   The "Options" dialog appears.



2. Click "When a motor stops without intending during motor driving, please check it." and then click [OK].



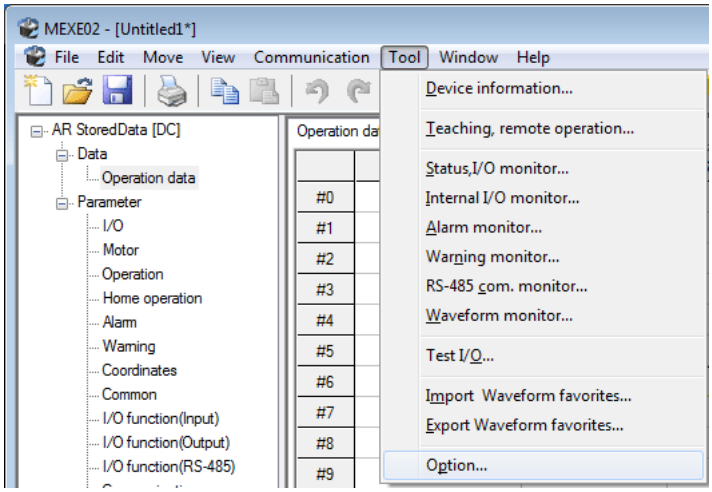
If the problem persists after you take the procedure above, the cause may be one of the following. Take an appropriate measure.

Cause	Measure
1. Other applications are running	Exit the applications other than the **MEXE02** before continuing the operation.
2. Too many applications stay resident	Exit the resident applications before continuing the operation. For some types of applications, exiting them may not resolve problems. In this case, use a PC on which the relevant applications are not installed.
3. The processing speed of PC is insufficient	• Take the measures 1 and 2 above. • Refer to p.12 and check that your PC satisfies the system requirements.

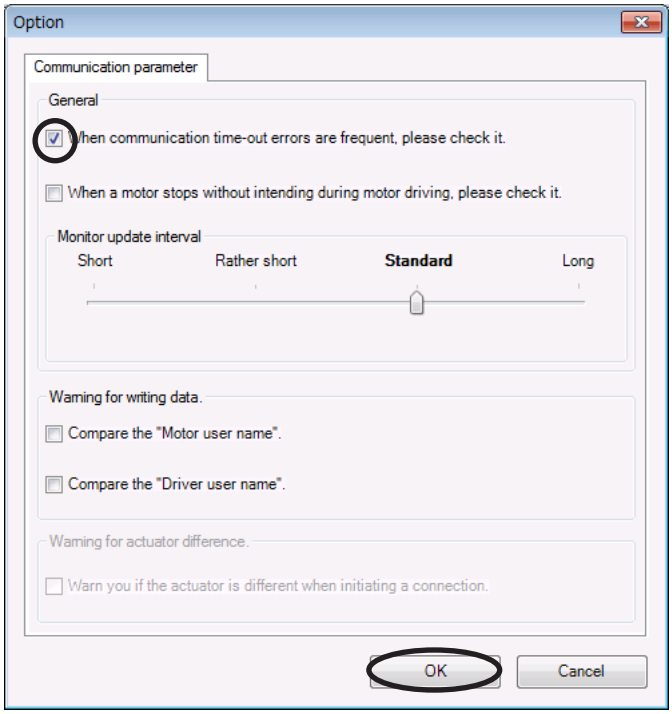
■ Communication timeout error occurs

If communication is not possible even when the applicable product is powered on and a correct communication port is selected, perform the following procedure.

1. Click [Option] from the [Tool] menu.
   The "Options" dialog appears.



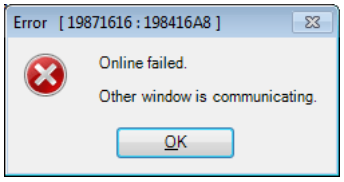
2. Click "When communication time-out errors are frequent, please check it." and then click [OK].



■ Other window is communicating

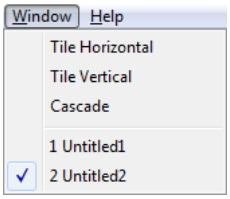
At the start of monitor or test, the following error message may be displayed, and communication may not start.

Example: Performing waveform monitor

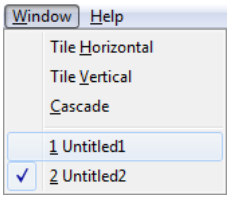


Other data setting window may be executing the communication function. While one window is executing the communication function, other windows cannot use it. Check this point using the following procedure:

1. Click the [Window] menu.
   A list of currently open windows is displayed.

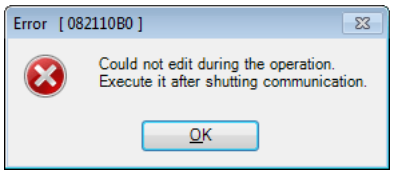


2. Select another window to check if it is online.
   If it is, click the [Offline] icon in the toolbar to clear the communication.



■ Editing cannot perform in communication

When editing data, the following error message may be displayed.



You cannot edit data while the communication function is executed.
Click the [Offline] icon in the toolbar to clear the communication.
Data can be edited.

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ORIENTAL MOTOR U.S.A CORP.
Technical Support Tel:(800)468-3982
8:30 A.M. to 5:00 P.M., P.S.T. (M-F)
7:30 A.M. to 5:00 P.M., C.S.T. (M-F)
E-mail: techsupport@orientalmotor.com
www.orientalmotor.com

ORIENTAL MOTOR (EUROPA) GmbH
Headquarters and Düsseldorf Office
Tel:0211-52067-00 Fax:0211-52067-099
Munich Office
Tel:089-3181225-00 Fax:089-3181225-25
Hamburg Office
Tel:040-76910443 Fax:040-76910445

ORIENTAL MOTOR (UK) LTD.
Tel:01256-347090 Fax:01256-347099

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Tel:01 47 86 97 50 Fax:01 47 82 45 16

ORIENTAL MOTOR ITALIA s.r.l.
Tel:02-93906346 Fax:02-93906348

SHANGHAI ORIENTAL MOTOR CO., LTD.
Tel:400-820-6516 Fax:021-6278-0269

TAIWAN ORIENTAL MOTOR CO., LTD.
Tel:(02)8228-0707 Fax:(02)8228-0708

ORIENTAL MOTOR ASIA PACIFIC PTE. LTD.
Tel:+65-6745-7344 Fax:+65-6745-9405

ORIENTAL MOTOR (MALAYSIA) SDN. BHD.
Tel:(03)22875778 Fax:(03)22875528

ORIENTAL MOTOR (THAILAND) CO., LTD.
Tel:+66-2-251-1871 Fax:+66-2-251-1872

INA ORIENTAL MOTOR CO., LTD.
KOREA
Tel:080-777-2042 Fax:02-2026-5495

ORIENTAL MOTOR CO., LTD.
Headquarters Tokyo, Japan
Tel:03-6744-0361 Fax:03-5826-2576