# **Oriental motor**



# 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 (**MEXEO2**) ("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.

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- 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 <u>USER MANUAL</u> for an applicable product to check the available functions.

		AR Series						
Function name	AZ 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	0	0	-	_	0	0		
Parameter setting	0	0	0	0	0	0		
Teaching/remote operation	0	0	_	_	0	0		
Remote operation	-	-	0	0	-	-		
I/O test	0	0	0	0	0	0		
Unit information monitor	0	-	-	-	-	-		
Customize wizard	0*	-	-	-	-	-		
Status monitor	0	-	-	-	-	-		
Status, I/O monitor	-	0	0	0	0	0		
D-I/O monitor, R-I/O monitor	0	-	-	-	-	-		
Internal I/O monitor	0	-	-	-	0	0		
Remote I/O monitor	-	-	-	-	-	-		
Remote register monitor	-	-	-	-	-	-		
RS-485 status monitor	-	-	-	-	-	-		
Remote monitor	-	-	-	-	-	-		
Waveform monitor	0	0	0	0	0	0		
Gain tuning	-	-	-	-	-	-		
Alarm monitor	0	0	0	0	0	0		
Warning monitor	_	0	0	0	0	0		
RS-485 communication monitor	0	-	-	-	0	0		
Information monitor	0	-	-	-	-	-		
HMI-CLR	0	-	-	-	-	-		
Configuration execution	0	-	-	-	-	-		
Restore function	0	-	-	-	-	-		
Backup function	0	-	-	-	-	-		
Mechanism information copy	0	-	-	-	-	-		
Gear information copy	0	-	-	-	-	-		
Coordinate information copy	0	-	-	-	-	-		
Recommended macro operation copy	0	-	_	-	-	-		

\* 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 c	ompatible			Built-in contro	ller type		
1 station occupied ADVANCED mode	1 station occupied BASIC mode	2 station occupied ADVANCED mode	2 station occupied BASIC mode	MECHATROLINK- II compatible	Controller mode	Driver mode		
0	0	0	0	-	0	-		
0	0	0	0	0	0	0		
0	0	0	0	-	0	-		
-	-	-	-	-	-	0		
0	0	0	0	0	0	0		
-	-	-	-	-	-	-		
_	-	-	-	-	-	-		
-	-	-	-	-	-	-		
0	0	0	0	0	0	0		
-	-	-	-	-	-	-		
-	-	-	-	-	-	-		
0	0	0	0	-	-	-		
0	-	0	-	-	-	-		
-	-	-	-	-	-	-		
_	-	-	-	-	-	-		
-	-	-	-	-	-	-		
-	-	-	-	-	-	-		
0	0	0	0	0	0	0		
-	_	_	-	-	-	-		
-	-	-	-	-	-	-		
_	-	-	-	-	-	-		
-	-	-	-	-	-	-		
-	-	-	-	-	-	-		
-	-	-	-	-	-	-		
-	-	-	-	-	-	-		
-	-	-	_	-	-	-		
_	-	-	-	-	-	-		
-	-	-	-	-	-	-		
_	_	_	-	_	_	-		

		AR Series						
Function name	AZ 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	0	-	-	-	-	-		
Position preset clear	0	-	-	-	-	-		
ZSG preset clear	0	-	-	-	-	-		
Latch information clear	0	-	-	-	-	-		

ARL Series							
	CC-Link c	compatible			Built-in contro	ller type	
1 station occupied ADVANCED mode	1 station occupied BASIC mode	2 station occupied ADVANCED mode	2 station occupied BASIC mode	MECHATROLINK- II compatible	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 <u>USER MANUAL</u> for an applicable product to check the available functions.

		NX S	PKA Series	RK I Series		
Function name	Position control mode	Speed control mode	Torque control mode	Tension control mode	Built-in controller type	Built-in controller type
Operation data editing	0	0	0	0	0	0
Parameter setting	0	0	0	0	0	0
Teaching/remote operation	-	-	-	-	0	0
Remote operation	0	0	0	0	-	-
I/O test	0	0	0	0	0	0
Unit information monitor	-	-	-	-	-	-
Customize wizard	-	-	-	-	-	-
Status monitor	-	-	-	-	-	-
Status, I/O monitor	0	0	0	0	0	0
D-I/O monitor, R-I/O monitor	-	-	-	-	-	-
Internal I/O monitor	-	-	-	-	0	0
Remote I/O monitor	-	-	-	-	-	-
Remote register monitor	-	-	-	-	-	-
RS-485 status monitor	-	-	-	-	-	-
Remote monitor	-	-	-	-	-	-
Waveform monitor	0	0	0	0	0	0
Gain tuning	0	0	-	-	-	-
Alarm monitor	0	0	0	0	0	0
Warning monitor	0	0	0	0	0	0
RS-485 communication monitor	-	-	-	-	0	0
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	-	-	-	-	-	-

	<b>BLE</b> 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)	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
_	-	_	-	0	_	0	
0	0	0	0	_	0	_	
0	0	0	0	0	0	0	
-	-	-	-	-	-	-	
	-	-	-	-	_	-	
-	-	-	-	-	-	-	
0	0	0	0	0	0	0	
-	-	-	-	-	-	-	
0	0	0	0	0	0	0	
-	-	-	-	-	-	-	
_	-	-	-	-	-	-	
-	_	-	_	_	-	-	
_	-	-	-	-	-	-	
0	0	0	0	0	0	0	
	-	-	-	-	-	-	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
-	-	0	-	-	-	-	
_	_	_	_	_	_	_	
-	_	-	_	-	-	_	
	_	-	_	-	-	_	
-	-	-	-	-	-	-	
	-	-	-	-	_	-	
-	-	-	-	-	-	-	
	-	-	-	-	-	-	
-	-	-	-	-	-	-	
_	-	-	-	-	-	-	
-	-	-	-	-	-	-	
	-	-	-	-	_	-	
-	-	-	-	-	-	-	
	_	_	_	_	-	_	

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 <u>USER MANUAL</u> for an applicable product to check the available functions.

	CRK Series	DRL I Series	Network converter				
Function name	Built-in controller type	Built-in controller type	CC-Link compatible	MECHATROLINK- II compatible	MECHATROLINK-III compatible	EtherCAT compatible	
Operation data editing	0	0	-	-	-	-	
Parameter setting	0	0	0	0	0	0	
Teaching/remote operation	0	0	-	-	-	-	
Remote operation	-	-	-	-	-	-	
I/O test	0	0	-	-	-	-	
Unit information monitor	-	_	-	-	-	-	
Customize wizard	-	_	-	-	-	-	
Status monitor	-	-	-	-	-	-	
Status, I/O monitor	0	0	-	-	-	-	
D-I/O monitor, R-I/O monitor	-	-	-	-	-	-	
Internal I/O monitor	-	-	-	-	-	-	
Remote I/O monitor	-	-	0	0	0	0	
Remote register monitor	-	-	0	0	0	0	
RS-485 status monitor	-	-	0	0	0	0	
Remote monitor	-	-	-	-	-	0	
Waveform monitor	0	0	-	-	-	-	
Gain tuning	-	-	-	-	-	-	
Alarm monitor	0	0	0	0	0	0	
Warning monitor	0	0	0	0	0	0	
RS-485 communication monitor	0	0	-	-	-	-	
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 **MEXEO2** using an account with Administrator privileges.

Use the **MEXEO2** correctly and safely after thoroughly reading the manual and understanding the basic operating procedures and other details.

#### Applicable product

The **MEXEO2** 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 **MEXEO2** 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	[]	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.	
will be using.		Dialog box messages, etc., are enclosed in double quotations marks.	

#### Functions of MEXE02

The **MEXEO2** 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 **MEXEO2** 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 **MEXEO2** in either the **MEXEO2**'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** <u>INSTALLATION MANUAL</u>.

#### Communication cables

Communication cables vary depending on the applicable product. Check the <u>USER MANUAL</u> 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 **MEXEO2** has been downloaded from the Oriental Motor Website, note that this cable is sold separately (as an accessory).

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	25x58.6x16 mm (0.98x2.31x0.63 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

#### General specifications of CC05IF-USB

#### System requirements

The installation of the **MEXEO2** 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 <b>CC05IF-USB</b> : 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 (x60) version: 15 CP

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 **MEXEO2** that you purchased. Report any missing or damaged items to the branch or sales office from which you purchased the product.

- (one PC interface cable and one USB cable)

#### • INSTALLATION MANUAL

#### Hazardous substances

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

## 3 Safety precautions

The **MEXEO2** 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 <u>USER MANUAL</u> for the product to be used in combination with the **MEXEO2**.

🕂 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 **MEXEO2**, 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 **MEXEO2** shuts down.



## 4.3 Checking version information

You can check the version of the  $\ensuremath{\mathsf{MEXE02}}$  software you are using.

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

Help	
	About MEXE02

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

About MEXE02		<b>X</b>
	Data Setting Software	
	MEXE02 Version 3.10	
	(C) Copyright 2007-2014 ORIENTAL MOTOR CO.,LTD. All rights reserved	
	This product is licensed to:	
	ORIENTAL MOTOR CO.,LTD O.M.	
	This product is protected by Japanese copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.	*
		Ŧ
	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.

Select Product			
Product Series List AR ARL AZ BLE BX2 CRK DRL2 NETC NX PKA RK2	Product Name(Mode) List AZ Pulee Input/StoredData Motor/Actuator Standard/Geared Motor Resolution 10000P/R EAS(0.01mm/step) EAS(0.01mm/step) EZS(0.01mm/step) EZS(0.01mm/step) DG2	OK System of Units Customize Wizard Cancel Search model	(1) (2) (3)
Selection Log			
Product Series P	Product Name(Mode)	Motor/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	<ul> <li>Product Series List</li> <li>Product Name (Mode) List</li> <li>Motor/Actuator</li> </ul>	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.

MEXE02 - [Untitled]								
Eile Edit Move View Com	nmunicatio	n <u>T</u> ool <u>W</u> indow <u>H</u>	lelp					_ & ×
ै। 🖆 🖬 🖕 🐂 📖 🤊 🤉 🗶 🕼 🏭 📢 🖓 📢 📽 🤹 😫 🛄 🔞 🗳 📲 🥵 🦉								
AR StoredData [DC] Operation data								
🖃 Data		Positioning mode	Position [step]	Operating speed [Hz]	Operating mode	Push current [%]	Dwell time [s]	Sequential post
Operation data	#0	INC	0	1000	Single	20.0	0.000	Disable
1/0	#1	INC	0	1000	Single	20.0	0.000	Disable
Motor	#2	INC	0	1000	Single	20.0	0.000	Disable
- Operation	#3	INC	0	1000	Single	20.0	0.000	Disable
- Home operation	#4	INC	0	1000	Single	20.0	0.000	Disable
Waming	#5	INC	0	1000	Single	20.0	0.000	Disable
Coordinates	#6	INC	0	1000	Single	20.0	0.000	Disable
Common	#7	INC	0	1000	Single	20.0	0.000	Disable
- I/O function(Input)	#7 #0	INC	0	1000	Single	20.0	0.000	Diable
I/O function(RS-485)	#0	INC	0	1000	Single	20.0	0.000	Disable
Communication	#3	INC	0	1000	angle	20.0	0.000	Disable
	#10	INC	0	1000	Single	20.0	0.000	Disable
	#11	INC	0	1000	Single	20.0	0.000	Disable
-	#12	INC	0	1000	Single	20.0	0.000	Disable
Operation	#13	INC	0	1000	Single	20.0	0.000	Disable
👥 Teaching, remote operation	#14	INC	0	1000	Single	20.0	0.000	Disable
Monitor	#15	INC	0	1000	Single	20.0	0.000	Disable
Status I/O monitor	#16	INC	0	1000	Single	20.0	0.000	Disable
Internal I/O monitor	#17	INC	0	1000	Single	20.0	0.000	Disable
Alarm monitor	#18	INC	0	1000	Single	20.0	0.000	Disable
Warning monitor	#19	INC	0	1000	Single	20.0	0.000	Disable
BS-485 com monitor	#20	INC	0	1000	Single	20.0	0.000	Disable
Waveform monitor	#21	INC	0	1000	Single	20.0	0.000	Disable
Test	#22	INC	0	1000	Single	20.0	0.000	Disable
Taret 1/0	#23	INC	0	1000	Single	20.0	0.000	Disable 🕌
TESTIO								Þ

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].

👻 Open				<b>—</b> ×
↓ Libraries	Documents	•	✓ Search Doc	uments 🔎
Organize 🔻 New folde	r			iii • 🔟 🔞
★ Favorites ■ Desktop	Documents library Includes: 2 locations		Arra	nge by: Folder 🔻
Downloads	Name	Date modified	Туре	Size
The Recent Places	Untitled1.mx2a	4/22/2014 6:48 PM	MX2A File	154 KB
词 Libraries	Untitled2.mx2	4/22/2014 6:48 PM	MX2 File	153 KB
Documents     Music     Pictures     Videos     Computer     Local Disk (C:)     Local Disk (C:)     Local Disk (F:)     Removable Disk (G:)     W Network				
File <u>n</u> a	me: Untitled2.mx2		All MEXE02 f	ormat (*.mx2;*.mx.  Cancel

	The data edit window appear	s, just like when	you are creating a	new data file.
--	-----------------------------	-------------------	--------------------	----------------

@ MEXE02 - [Untitled1]								
👻 Eile Edit Move View Communication Iool Window Help 🛛 🖉 🛪								
1 🚰 🔚 🕹 🖻 🛍	9	े । 🎗 🎆 🖓 🖓	୍ୟା 🖏 🕅	🕰 👥 🕅 🕪 🕯	P 🚅 🧸 🕓	<b></b>		
□ AR StoredData [DC]	Operation	n data						
- Data		Positioning mode	Position [step]	Operating speed [Hz]	Operating mode	Push current [%]	Dwell time [s]	Sequential post
- Parameter	#0	INC	0	1000	Single	20.0	0.000	Disable
	#1	INC	0	1000	Single	20.0	0.000	Disable
Motor	#2	INC	0	1000	Single	20.0	0.000	Disable
Operation	#3	INC	0	1000	Single	20.0	0.000	Disable
- Alarm	#4	INC	0	1000	Single	20.0	0.000	Disable
Waming	#5	INC	0	1000	Single	20.0	0.000	Disable
Coordinates	#6	INC	0	1000	Single	20.0	0.000	Disable
- I/O function(Input)	#7	INC	0	1000	Single	20.0	0.000	Disable
- I/O function(Output)	#8	INC	0	1000	Single	20.0	0.000	Disable
I/O function(RS-485)	#9	INC	0	1000	Single	20.0	0.000	Disable
Communication	#10	INC	0	1000	Single	20.0	0.000	Disable
	#11	INC	0	1000	Single	20.0	0.000	Disable
	#12	INC	0	1000	Single	20.0	0.000	Disable
Operation	#13	INC	0	1000	Single	20.0	0.000	Disable
teaching, remote operation	#14	INC	0	1000	Single	20.0	0.000	Disable
Monitor	#15	INC	0	1000	Single	20.0	0.000	Disable
Return I/O monitor	#16	INC	0	1000	Single	20.0	0.000	Disable
N Internal I/O monitor	#17	INC	0	1000	Single	20.0	0.000	Disable
Alarm monitor	#18	INC	0	1000	Single	20.0	0.000	Disable
Warning monitor	#19	INC	0	1000	Single	20.0	0.000	Disable
RS-485 com. monitor	#20	INC	0	1000	Single	20.0	0.000	Disable
Waveform monitor	#21	INC	0	1000	Single	20.0	0.000	Disable
Tast	#22	INC	0	1000	Single	20.0	0.000	Disable
	#23	INC	0	1000	Single	20.0	0.000	Disable 🥃
¶⊈9 Test ⊮O								Þ
	, 							

## Description of edit window

$\frown$	😢 ME	EXE02 - [Untitled1]								
(1)	>	ile <u>E</u> dit <u>M</u> ove <u>V</u> iew <u>C</u> om	munication	Tool Window H	Help			<u> </u>		_ 8 ×
-	7	🚰 🔚   🌺   🍋 🖪	96	8	-XI 📢 👫 🛛	🤹 🁥 🕮 16 🕯	🗖 🚄 🦧 🕰 🕴	¥2		
OF	⊡ A	R StoredData [DC]	Operation d	ata						
e		- Data		Positioning mode	Position [step]	Operating speed [Hz]	Operating mode	Push current [%]	Dwell time [s]	Sequential posit
		- Parameter	#0	INC	0	1000	Single	20.0	0.000	Disable
		1/0	#1	INC	0	1000	Single	20.0	0.000	Disable
6		Motor	#2	INC	0	1000	Single	20.0	0.000	Disable
9	-	Home operation	#3	INC	0	1000	Single	20.0	0.000	Disable
		Alam	#4	INC	0	1000	Single	20.0	0.000	Disable
		Warning	#5	INC	0	1000	Single	20.0	0.000	Disable
		Common	#6	INC	0	1000	Single	20.0	0.000	Disable
		- I/O function(Input)	#7	INC	0	1000	Single	20.0	0.000	Disable
		I/O function(Output)	#8	INC	0	1000	Single	20.0	0.000	Disable
		I/U function(RS-485)	#9	INC	0	1000	Single	20.0	0.000	Disable
			#10	INC	0	1000	Single	20.0	0.000	Disable
			#11	INC	0	1000 (5)	Single	20.0	0.000	Disable
$\bigcirc$			#12	INC	0	1000	Single	20.0	0.000	Disable
4	> _	Operation	#13	INC	0	1000	Single	20.0	0.000	Disable
-	<u>₽</u> ⊺	Feaching, remote operation	#14	INC	0	1000	Single	20.0	0.000	Disable
		Monitor	#15	INC	0	1000	Single	20.0	0.000	Disable
	En:	Status,I/O monitor	#16	INC	0	1000	Single	20.0	0.000	Disable
	10	Internal I/O monitor	#17	INC	0	1000	Single	20.0	0.000	Disable
	📕 🐗 /	Alarm monitor	#18	INC	0	1000	Single	20.0	0.000	Disable
	📕 🚅 V	Warning monitor	#19	INC	0	1000	Single	20.0	0.000	Disable
	4	RS-485 com. monitor	#20	INC	0	1000	Single	20.0	0.000	Disable
	- S	Waveform monitor	#21	INC	0	1000	Single	20.0	0.000	Disable
		Test	#22	INC	0	1000	Single	20.0	0.000	Disable
	Test I/O		#23	INC	0	1000	Single	20.0	0.000	Disable
										.H.
	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 butto	ons	Using th function	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 a	rea	This is a the tree	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.

INDEX01	INC-POS (CPOS)
INDEX02	INC-POS (CPOS)

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.

(SVE)Position loop gain	10
(SVE)Speed loop gain	180

#### 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.

Smooth-Drive function	Ineffective 🗸 🗸
Current-Control-Mode selection	Ineffective
Carrent Control Mode Selection	Enable

### 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.

*** 🚰 🔚   🗞 🛙	୬ ୯   ଥା ଥା   ୧୩ ୧୬ ୧୬   ୫୪   ୧୫	👥 🖾 🕅	
	Operation data Operation		
Data     Operation data	Common acceleration [ms/kHz] or [s]	20.000	
	Common deceleration [ms/kHz] or [s]	20.000	Destination cell
1/0	Starting speed [Hz]	500	
Motor	Jog operating speed [Hz]	1000	

#### 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 **MEXEO2** or data read by the applicable product will be saved as a file. Data files can be saved in the MEXEO2 format (.mx2), MEXEO2 extended format (.mx2a), or CSV format (.csv). Data files saved in the **MEXEO2** format and **MEXEO2** 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.

☆ Favorites ■ Desktop	Documents library Includes: 2 locations			Arrange by: Fold	er 🔻
<ul> <li>Downloads</li> <li>Recent Places</li> <li>screen shots [aftre</li> <li>Libraries</li> <li>Documents</li> <li>Music</li> <li>Pictures</li> <li>Videos</li> <li>Local Disk (Cs)</li> <li>OS Backup (D;)</li> </ul>	Name	Date modified Type No items match your sear	Size		
Setwork -					
File <u>n</u> ame: Untit	tled1.mx2				
Save as type: MEXE	02 format (*.mx2)				
Hide Folders			$\langle$	Save Car	ncel
If the data, w MEXE02 for saving form:	which has been sa mat (.mx2) again,	ved in the <b>MEXE02</b> extende the extended information wi	ed format (.m) ill be erased.	(2a), will be sa Be sure to che	ved i eck th

### Saving data in CSV format

Hide Folders

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**.

Save Can

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

File	Edit	Move	View	Commur
	New		(	Ctrl+N
	Open.			Ctrl+O
	Close			
	Save			Ctrl+S
	Save A	s		
	Export			
	Page S	Setup		
	Print P	review		
	Print			Ctrl+P
	Exit			

2. Enter a file name, and click [Save].

All operation data and parameters are saved in CSV format.

👻 Save As						<b>X</b>
COO V Ibraries	Documents			<b>-  -  -  - - - - - - </b>	Search Documents	٩
Organize 👻 New folde	r					• 🔞
★ Favorites ■ Desktop	Documents library Includes: 2 locations				Arrange by: F	older 🔻
Downloads  Recent Places  cent Places  cent Places  cent Places  cent Places  Videos  Computer  Computer  Computer  Computer  Server (H:)  Center (	Name	Date modified No items ma	Type atch your search.	Size		
File <u>n</u> ame: Untitle Save as <u>t</u> ype: CSV fo	ed1.csv prmat (*.csv)					•
Hide Folders					Save	Cancel

## 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.

Edit	) Move	View	Commu
	Undo	(	Ctrl+Z
	Redo	(	Ctrl+Y
	Сору	C	Ctrl+C
	Paste	(	Ctrl+V
	Initialize		
	All	C	Ctrl+A

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.

4000		1	000
1000	C	Сору	Ctrl+C
1000	F	Paste	Ctrl+V
1000	I	nitialize	
1000	4	All	Ctrl+A
1000			-

## 5.6 Ending data edit

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

File	Edit Move	View	Commu
	New		Ctrl+N
	Open		Ctrl+0
	Close		
	Save		Ctrl+S
	Save As		
	Export		
	Page Setup		
	Print Preview		
	Print		Ctrl+P
	Exit		

## 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.

File	<u>E</u> dit <u>M</u> ove	View	<u>C</u> ommur
	<u>N</u> ew	(	Ctrl+N
	Open		Ctrl+O
	<u>C</u> lose		
	Save		Ctrl+S
	S <u>a</u> ve As		
	Export		
	Page Set <u>u</u> p		
	Print Preview		
	<u>P</u> rint		Ctrl+P
	Exit		

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

Print	
Print Item(s)         Image: Operation Data       Image: Operation Data         Image: Operati	mon parameter unction (Input) unction (Output) unction(RS-485) munication paramet form (Image)
Print what	Color
<ul> <li>Active Item(s)</li> </ul>	Black and White
© Selectio <u>n</u>	Color
Print Preview Pag	e Set <u>u</u> p

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

Print		×
Printer		
<u>N</u> ame:	licrosoft XPS Document Writer	▼ <u>P</u> roperties
Status: Type: Where:	Ready Microsoft XPS Document Writer XPSPort:	
Comment:		Print to file
Print range		Copies
Al		Number of <u>c</u> opies: 1
Pages Selection	_from: to: on	11 22 33 Collate
		OK Cancel

## 6.2 **Print preview**

Print

Print Item(s)

٠.

Print what

C

Operation Data

V I/O parameter

Motor parameter

Alarm parameter

Clear all

Active Item(s)
 Selection

Print Preview

Warning parameter Coordinates parameter

Ш

Operation parameter

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

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

🗹 Home operation parameter 🗹 Communication paramet

Select all



×

Run

Cancel

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

Common parameter

I/O Function (Input)

☑ I/O Function (Output)

I/O Function(RS-485)

Color

Page Setup..

Þ

Black and White

Color

Waveform (Image)

The print preview window appears.

Print	Preview						
age	1	€ 100%	•	Print Page S	etup (	Close	
	0	neration Dat	9				
	_		-				
		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 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	
	#1	0 INC	0	1000	Single	20.0	
	#1	1 INC	0	1000	Single	20.0	
	#1	2 INC	0	1000	Single	20.0	
	#1	3 INC	0	1000	Single	20.0	
	#1	4 INC	0	1000	Single	20.0	
	#1	5 INC	0	1000	Single	20.0	
	#1	6 INC	0	1000	Single	20.0	
	#1	7 INC	0	1000	Single	20.0	
	#1	8 INC	0	1000	Single	20.0	
	414	0 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.

File	Edit	Move	View	Commur
	New		(	Ctrl+N
	Open.			Ctrl+O
	Close			
	Save			Ctrl+S
	Save A	s		
	Export			
	Page S	ietup		
	Print P	review		
	Print			Ctrl+P
	Exit			

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

Page Setup		<b>×</b>
Page Margin Header/Footer		
Orientation	Print Setting	ОК
Portrait	Title row/col add	Cancel
◎ L <u>a</u> ndscape		
Paper		
Page Size:	•	
Source: Automatically Se	lect 🔹	
Print Preview		]

#### • "Page" tab

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

Page Setup		<b>—</b> ×-
Page Margin Header/Footer		
Orientation	Print Setting	ОК
Portrait	Title row/col add	Cancel
⊚ L <u>a</u> ndscape		
Paper		
Page Si <u>z</u> e:	•	
Source: Automatically S	elect 🔹	
Print Preview		

• "Margin" tab

Set the paper margin and header/footer positions.

Page Setup				<b>—</b> ×-
Page Margin Hea	der/Footer			
<u>L</u> eft:	25 💼 mm	<u>Rig</u> ht:	25 💼 mm	Cancel
<u>T</u> op:	25 📩 mm	Bottom:	25 🚔 mm	
<u>H</u> eader:	15 🔺 mm			
<u>F</u> ooter:	15 💉 mm			
Print Previe <u>w</u>	Print			

• "Header/Footer" tab

Set the header/footer.

Page Setup				<b>—</b>
Page Margin Header/Footer				OK Cancel
Header: <u>H</u> eader edit Footer:		Eooter edit		
Print Preview	<u>P</u> rint			
Para In				
Select the character to the corresponding.	cter format, and click file name and click th	the font button. Place the button to move the c	he page number, tota sursor to the text box	al OK Cancel
Left	Center	۵ ۲	Right	*

# 7 Communication function between MEXE02 and applicable products

This chapter explains how to hold communication between the **MEXEO2** and an applicable product to write or read data.

## 7.1 Connection with applicable product

- Connect the PC on which the MEXEO2 has been installed and an applicable product. Read the <u>USER MANUAL</u> 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.
- 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.

Con	nmunication <u>T</u> ool <u>W</u> indow <u>H</u> elp	
	Setting of the communication	
	Data <u>r</u> eading(Product->PC) Ctrl+R	
Setti	ng of the Communication	×
s	erial Port	
C	DM1 : Communications Port	-
	0M1 : Communications Port 0M3 : ORIENTAL MOTOR/Virtual COM Port	
CC	0M4 : ORIENTAL MOTOR/Common Virtual COM Port	

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.



• 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 **MEXEO2** 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].

the [Data writing] icon in the toolbar.	
ect data to be written and click [OK].	Data writing. (PC->Product)
	Writing will be started.
	Data Range
	All
	Select     Operation Data Only
	Parameter only
	Modified Data Only
	Check the written data. (verification)
	OK Cancel
< [Yes]. writing starts	Warning 23
witting starts.	All writing will be started.
e following message is displayed, click	Warning 23
r [Yes] or [No] after checking the applicable luct	Actuator did not match.
l: Writing data will be started.	Do you want to continue?
: Writing data will be discontinued.	Yes No
r it is completed, click [OK].	Information 83
	Writing is completed

3. Click [Yes]. Data writing starts.

Note

- 4. If the following message is displayed, click either [Yes] or [No] after checking the application product. [Yes]: Writing data will be started. [No]: Writing data will be discontinued.
- 5. After it is completed, click [OK].
  - Follow the instructions in the displayed messages.



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



I 😂 I

## 7.5 Reading data from applicable product

The data saved in an applicable product can be read to the **MEXEO2**.

- 1. Click the [Data reading] icon in the toolbar.
- 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 clear and overwritten with the data to be read.

3. Click [OK]. Data reading starts.

ation	Warning		23	
e it.	Do yo	ou want to save the	changes to Untitled1?	
cleared	<u>Y</u> es	<u>N</u> o	Cancel	
Data reading. (I	Product ->PC)		×	
Reading will	be started.			
			Creat	
	•	UK	Cancel	
Information		82		4
Re Re	ading is completed.			

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 **MEXEO2**.

- 1. Click the [Data verification] icon in the toolbar.
- 2. Select the data to be verified, and then click [OK]. Data is verified.

<del>(</del>		
Data verification		
Data verification wi Data Range	II be started.	
All		
⊘ Select	<ul> <li>Operation Data Only</li> <li>Parameter only</li> </ul>	
Verify Result	OK Cancel	]

<u>0</u>K

The results are displayed after the completion of verification.

Verify Result			×
	MEXE02	Device	
Position [step] : #0	2000	0	
Operating speed [Hz] : #5	5000	1000	
		Close	

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.

	MEXE02	Device
Position [step] : #0	2000	0
Operating speed [Hz] : #5	5000	1000
		Copy Results to Clipboard

### 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.

📽 MEXE02 - [Untitled1*]											
😢 File Edit Move View Commu	inicatio	on Tool Window H	lelp								_ 8 ×
1 🗃 🔚 🕹 🕒 🛍 🖉	ን (	3	해 여기 🕅	C🔏   👥   I	<b>11 16 4</b>	🗗 🚅 🤹	S 😨				
AR StoredData [DC]     Op	peration	data Home operation	Operation Motor Ala	rm I/O Cor	mmon Coord	linates					
Data		Positioning mode	Position [step]	Operating sp	eed [Hz]	Operating mo	de	Push current [%]	C	well time [s]	Sequential posit
- Operation data	#0	INC	5000	200		Single		20.0		0.000	Disable
-1/0	Verif	Pacult				-				0.000	Disable
Motor	veni	y Nesun						Ľ		0.000	Disable
Operation				M	EXE02		Device			0.000	Disable
- Home operation	P	osition [step] : #0		5	000		0		-	0.000	Disable
Waming	0	Operating speed [Hz] : #0		2	00		1000			0.000	Disable
Coordinates		Common RUN current [%]		8	D.O		100.0			0.000	Disable
Common		lectronic gear A		1	D		1		-	0.000	Disable
I/O function(Input)		·····								0.000	Disable
										0.000	Lisable
Communication										0.000	Disable
										0.000	Disable
										0.000	Disable
									_	0.000	Disable
Operation									_	0.000	Disable
Laching, remote operation									- [	0.000	Disable
Monitor	: L									0.000	Disable
B Status I/O monitor									- I	0.000	Disable
lateraal I/O meniter								Close		0.000	Disable
	#18 ]	INC	U	100	,	Single		20.0		0.000	Disable
Warning monitor	#19	INC	0	100	)	Single		20.0		0.000	Disable
BS-485 com monitor	#20	INC	0	1000	)	Single		20.0		0.000	Disable
Waveform monitor	#21	INC	0	100	)	Single		20.0		0.000	Disable
	#22	INC	0	100	)	Single		20.0	-	0.000	Disable
lest	#23	INC	0	100	)	Single		20.0	-	0.000	Disable _ (
Test I/O									-		

#### 2. Click [Close].

📽 MEXE02 - [Untitled1*]				- • ×
😨 File Edit Move View Con	nmunication Tool Window Help			_ 8 ×
1 6 1 4	ା ବି 🖉 🏭 🔄 🖏 🖏 🕼 🕻 🕻	上 💷 😽 🖉 🚅	43 💽 😥	
— AR StoredData [DC]	Operation data Home operation Operation Motor Alarm I/O	Common Coordinates		
🚍 Data	Electronic gear A 2			
Operation data	Electronic goal // E			
Parameter	Electronic gear 5 10			
Motor	Verify Result			
Operation				
Home operation		MEXE02	Device	
Alarm	Position [step] : #0	5000	0	
Warning	Operating speed [Hz] : #0	200	1000	
Coordinates	Common RUN current [4]	80.0	100.0	
Common	Electronic gear B	10	1	
I/O function(Input)				
Communication				
Communication				
Operation				
Teaching, remote operation				
Monitor				
Fill Status I/O monitor				
			Close	
Alarm monitor				
Warning monitor				
ARS-485 com. monitor				
Waveform monitor				
Test				
Test IIO				
P	J.			

## 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.	Communication       Tool       Window       Help         Setting of the communication       Online       Online         Offline       Data reading(Product->PC)       Ctrl+R         Data writing(PC->Product)       Ctrl+W         Data verification(PC->Product)       Ctrl+W         Reset       Exect
2.	Select data that you want to reset to the factory default settings and click [OK].	Reset  Reset  Data Range  All  Select  Parameter only  Cancel  Cancel
3.	Click [Yes]. The data saved in the non-volatile memory of the applicable product will be reset to the factory default settings.	Warning     EX       All data will return to factory default.       Do you want to proceed?       Yes
4.	After it is completed, click [OK].	Information     E3       Image: Return to factory default was completed.

**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.

23

Return to factory default was completed.

<u>0</u>K

Restore the driver.

• Restarting power

Information

Executing Configuration

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

Informati	on	8				
1	Return to facto Configuration Do you want t	Return to factory default was completed. Configuration is necessary. Do you want to execute Configuration ?				
0	<u>Y</u> es	<u>N</u> o				

## 7.8 Checking the connected product

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

Tool	) Window Help				
	Device information				
	Import Waveform favorites Export Waveform favorites				
	Option				

2. Click [Check].

The check on the connected product starts.

Device Information					
	Check				
	Close				

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

De	vice Information			<b>×</b>
		<b>D I I I I I I I I I I</b>		Charle
	Product Series	Product Name(Mode)	Motor/Actuator	Спеск
	AR	AR StoredData [DC]		
				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 **MEXEO2**?
- When "Unsupported Product" is shown in the product name column.

Verify that the connected product is compatible with the **MEXEO2**.

## 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.



👻 MEXE02 - [Untitled]								
😢 Eile Edit Move View Communication Tool Window Help								
1) 🗃 🔚 😓 👘 @   쉐 쉐 쉐 쉐 쉐 쉐 🕼 🥵 😰 🗐 🔥 🚅 📲 🕵 😨								
AR StoredData [DC]	Operation	n data						
🖻 - Data		Positioning mode	Position [step]	Operating speed [Hz]	Operating mode	Push current [%]	Dwell time [s]	Sequential posit
- Parameter	#0	INC	0	1000	Single	20.0	0.000	Disable
	#1	INC	0	1000	Single	20.0	0.000	Disable
Motor	#2	INC	0	1000	Single	20.0	0.000	Disable
Operation	#3	INC	0	1000	Single	20.0	0.000	Disable
- Alam	#4	INC	0	1000	Single	20.0	0.000	Disable
Warning	#5	INC	0	1000	Single	20.0	0.000	Disable
Coordinates	#6	INC	0	1000	Single	20.0	0.000	Disable
	#7	INC	0	1000	Single	20.0	0.000	Disable
I/O function(Output)	#8	INC	0	1000	Single	20.0	0.000	Disable
I/O function(RS-485)	#9	INC	0	1000	Single	20.0	0.000	Disable
Communication	#10	INC	0	1000	Single	20.0	0.000	Disable
	#11	INC	0	1000	Single	20.0	0.000	Disable
	#12	INC	0	1000	Single	20.0	0.000	Disable
Operation	#13	INC	0	1000	Single	20.0	0.000	Disable
1 Teaching, remote operation	#14	INC	0	1000	Single	20.0	0.000	Disable
Monitor	#15	INC	0	1000	Single	20.0	0.000	Disable
Fill Status I/O associtas	#16	INC	0	1000	Single	20.0	0.000	Disable
Internal I/O monitor	#17	INC	0	1000	Single	20.0	0.000	Disable
Alarm monitor	#18	INC	0	1000	Single	20.0	0.000	Disable
Warning monitor	#19	INC	0	1000	Single	20.0	0.000	Disable
RS-485 com. monitor	#20	INC	0	1000	Single	20.0	0.000	Disable
Waveform monitor	#21	INC	0	1000	Single	20.0	0.000	Disable
Test	#22	INC	0	1000	Single	20.0	0.000	Disable
- Toat	#23	INC	0	1000	Single	20.0	0.000	Disable 🕌
Test I/O	•							•
,	,							

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.





EXE02 - [Untitled1]			
😢 File Edit Move View Com	munication <u>T</u> ool <u>W</u> indow <u>H</u> elp		_ 8 ×
🛅 💣 🔚 💊   🛰 🛝	ା ୬ 🕐 🔠 🏭 🖨 🖏 ¢	ង 🕺 🖓	🕅 Ю 🚅 4 🦝 😥
□ AR StoredData [DC]	Operation data Alarm Home operation	lotor	
Data     Operation data	Common RUN current [%]	100.0	
- Parameter	Standstill current [%]	50.0	
1/0	Position loop gain	10	
Motor	Speed loop gain	180	
Uperation	Speed loop integral time constant [ms]	100.0	
Alam	Speed filter [ms]	1	
Warning	Moving average filter time [ms]	1	
Coordinates	Filter selection	Speed filter	
I/O function(Input)	Speed difference gain 1	45	
I/O function(Output)	Speed difference gain 2	45	
- I/O function(RS-485)	Control mode	Normal mode	
Communication	Smooth drive	Enable	
Operation			
teaching, remote operation			
Monitor			
B Status I/O monitor			
Internal I/O monitor			
Alarm monitor			
Warning monitor			
RS-485 com. monitor			
Waveform monitor			
Test			
Tast 10			
- Testio			
,			

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

#### **Teaching/remote operation** 8.3

A motor can be operated using the MEXEO2. 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



4 1 -				
- 12	Feaching	. remote	operation	

The teaching/remote operation window appears.

2.	Clic	ck "Start the teaching remote	operation."					
	1	Untitled1* - Teaching_remote operation					<b>—</b>	
		Start the teaching remote operation.						
		Command Position(CPOS)	28171	[step]	T -ON	OUTPUT		
		Actual Position	28171	[step]	REE			
3.	Clic	ck [Yes].			Warning			83
	The	e teaching/remote operation is er	nabled.			The teaching rem	ote operation w	vill be started.

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].

Do you want to proceed?
Synchronization Method
Select Synchronization Method
Synchronization Method
Reading all data. (Product ->PC)
Writing all data. (PC->Product)
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>
OK Cancel

Note

3.

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 **MEXEO2**. 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.



Remote operation

The remote operation window appears.

2. Click "Start the remote operation."

Intitled1* - Remote operation					×
Start the remote operation.					
Driver Status Command Position	1000	[sten]	INPUT	OUTPUT	
	1000	[step]	C-ON		
Actual Position	1000	[step]	L] FREE	END	

 Click [Yes]. The remote operation is enabled.

synchronization method and click [OK].

Warning	83
	The remote operation will be started.
	Do you want to proceed?
$\boldsymbol{<}$	Yes No
Synchron	nization Method
Synchron Select	ization Method
Synchron Select Synch	ization Method Synchronization Method monization Method Reading all data. (Product ->PC)
Synchron Select Synch @ F () \	vization Method Synchronization Method ronization Method Reading all data. (Product ->PC) Vriting all data. (PC->Product)

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."

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

## 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.

• 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.

	] +LS ]-LS ] HOMES ] SLIT	OUTPUT OUTO OUT1 OUT2 OUT3 OUT4 OUT5
Click [Yes].	Warning	83



 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



🔣 Unit information monitor

The unit information monitor window appears.

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

Start the Unit information	on monitor.								
	M	otor		Mechanism				Driver	-
User name									
Product name									
Serial number									]
CPU	0000	Control power count		0 times	Resolutio	n		0 P/R	
Ver.	000	Main power count		0 times	Fraction	of resolu	ution	0	
PID	0000 h	Main power supply tim	ie	0 min					
SID	0000 h				ROUND	process	sing	0 (0:Disable, 1:Enable)	
Series (Mech.)	0000 h	POW-TYPE			ROUND	range	-	0 step	
Model (Mech.)	0000 h				ROUND	maximu	m	0 step	
Prameter Rev.	0000 h	SW-Mode			ROUND	minimur	n	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-M	lode		0 (0:NETC,1:Modbus)	
Comm.I/F(2nd)		DIP1(Res./IDEX)		1	RS485-II	D		0	
Comm.I/F(3rd)					RS485-B	laud		0 bps	
Mechanism type Source/	Setting/	0 (0	:Usr,1:Enc)	0 (0:End	used, 1:M	lanual)			
Mechanism type Source/	Setting/	0.0	Usr 1 Enc)	0 (0 End	used 1.M	(anual)		/ 1020 (10100 )	t.
Mechanism type Adopt/S	etting/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			
Gear B			0			0			
Motor rotation direction		0 (0:+=CCV	V, 1:+=CW)	0 (0:+	+=CCW, 1:-	+=CW)		0 (0:+=CCW, 1:+=CW)	
Mechanism lead			0			0		0	
Mechanism stroke			0	0				0	
Magnetic brake		0 (0:Nothi	ing, 1:exist)					0 (0:Nothing, 1:exist)	1
Physical reduction gear rai	tio Source/Select/	0 (0	:Usr,1:Enc)						
Physical reduction gear ra	tio		0.00	0.00	(0.00: End	: used)		0.00(0:Nothing)	1
ROUND/Init. coordinate C	Generation setting	0 (0	:Usr,1:Enc)	0 (0:End	used, 1:M	lanual)		0 (0:No settings, 1:exist)	1
Round setting		0 (0:Disable	, 1:Enable)	0 (0:Disable, 1:Enable)		nable)	le) 0 (0:Disable, 1:Enat		1
ROUND/Init. coordinate C	eneration range		0.0 rev	0.0 rev		0.0 rev	ev 0.0		1
ROUND/Init. coordinate (	eneration rate setting		0.00 %			0.00 %		0.00 %	2
ROUND/Init coordinate G	eneration offset setting		U step			Ustep		0 step	1
RIND-ZERO partition funct	lion		0			U		0	
Soft limit for Mech. Use/S	ielect/	0 (0:Disable	, 1:Enable)	0 (0:Enc us	ed, 1:nullifi	cation)			
Positive Soft limit for Mech	. (from the Forigin)	0 mm	n(0:Disable)					0 mm(0:Disable)	1
Negative Soft limit for Mec	h. (from the Forigin)	0 mm	n(0:Disable)					0 mm(0:Disable)	1
Protected parameter Use/	Select/Setting	0 (0:Disable	, 1:Enable)	0 (0:Enc us	ed, 1:nullifi	cation)		0 (0:No settings, 1:exist)	
Maximum starting speed			0 r/min				0 r/mi		
		0 r/min				0 r/min			

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

(1)-

# 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.

System of Ur	nits Customize Wizard						
$\mathbb{N}$	1EXE		2				
Overview Resolutior Mechanism	n settings	Select u Value of	unit for display data. f step will convert with your selected System of Units.				
Mechanism information Mechanism information Gear/Pulley reduction rate. Minimum Distance setting Indication setting Unit of display / Conversion Acceleration/Brake rate unit		<ul> <li>Pos</li> <li>Pos</li> <li>Pos</li> <li>Pos</li> </ul>	ssition : step / speed : Hz ssition : mm / speed : mm/s position : deg / speed : deg/s				
Þ							
		Restore	re Defaults				
		(	$ \begin{array}{c} 1 \\ 3 \\ \end{array} \qquad \qquad \begin{array}{c} 1 \\ 4 \\ 5 \\ \end{array} \begin{array}{c} 1 \\ 6 \\ 7 \\ \end{array} $				
1	List of setting ite	ems	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 Defaul	lts]	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 iter				
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 setting is completed. A warning is displayed if there is an error in the setting				
7	[Cancel]		This button is used to stop the setting in the wizard. The changed values are applied.				

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

T MEXE02 - [Unitil File Edit M re Yew So System of Units Customize Wiz System of Units Customize Wiz	mmunication Iool	2 W Idow Help C C C C C C C C C C C C C C C C C C C	C 12 18 9 Po	10 <b>4</b> 7 47 👢	<b>S Q</b>	
- AZ Pulse/RS-485	Operation data					
- Operation data		Name	Operation type	Position [mm]	Operating speed [mm/s]	Acceleration [m/s <sup>2</sup> ]
Operation I/O event	#0		INC-POS (CPOS)	0	1	1
Extended operation data	#1		INC-POS (CPOS)	0	1	1
Parameter     Page actions	#2		INC-POS (CPOS)	0	1	1
Motor & Mechanism(Coc	#3		INC-POS (CPOS)	0	1	1
ETO & Alarm & Info	#4		INC-POS (CPOS)	0	1	1
I/O action and function	#5		INC-POS (CPOS)	0	1	1
Direct-IN function	#6		INC-POS (CPOS)	0	1	1
Bemote-I/O function (BS	#7		INC-POS (CPOS)	0	1	1
	#8		INC-POS (CPOS)	0	1	1
	#9		INC-POS (CPOS)	0	1	1
					3	
1 [System of	Units	This button is u	sed to start the v	vizard with	the current set	tings applied.

1	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 **MEXEO2**.

### 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.



The status monitor window appears.

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

Start Status Monitor					
CPOS 32bit counter	6001	[step]	FBPOS 32bit counter	6001	[step]
Command Position	6001	[step]	Actual Position	6001	[step]
Command Speed	0	[Hz]	Actual Speed	0	[Hz]
Command Speed	0.00	[r/sec]	Actual Speed	0.00	[r/sec]
Command Speed	0	[r/min]	Actual Speed	0	[r/min]
Driver Temperature	37.3	[°C]	Motor temperature	30.3	[°C]
Main power volt.(DC type)	0.0	M	Inverter voltage	282.7	[V]
Operation Number	-1		Selection Number	0	
Next number	-1		Elapsed time from BOOT	4534	[ms]
Starting point of loop	-1		Count of Loop	0	[cnt]
Cumulative load	0		Overflow rotation	-0.08	[degree]
Current command(a mode)	50.0	[%]	Odometer	11.0	[x1000 rev]
forque	-3.5	[%]	Tripmeter	0.5	[x1000 rev]
Motor Load factor	7.0	[%]	Clear tri	ipmeter	
Present				Past	
				••••	
			Clear seque	ence history	

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.

Start the Starts, I/O monitor.			
Command Position		0 [step]	
Actual Position		0 [step]	
Actual Speed		0 [r/min]	
Operation Number		-1	
Selection Number		0	
Driver version		-,	
INPUT INO INO INI IN2 IN3 IN4 IN5 IN6 IN7	+LS -LS HOMES SLIT		
RS-485 Communication INPUT NET-IN0 NET-IN1 NET-IN2 NET-IN3 NET-IN4 NET-IN5 NET-IN6 NET-IN7	NET-IN8 NET-IN9 NET-IN10 NET-IN11 NET-IN12 NET-IN13 NET-IN15	OUTPUT NET-OUT0 NET-OUT1 NET-OUT2 NET-OUT3 NET-OUT5 NET-OUT6 NET-OUT7	NET-OUT8 NET-OUT9 NET-OUT10 NET-OUT11 NET-OUT12 NET-OUT13 NET-OUT14 NET-OUT15

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.



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.

Ho Untitled3 - D-I/O_R-I/O monitor	
Start the D-I/O, R-I/O monitor.	
Direct-tro           INPUT          :(CW(PLS)+)           Di8:FW-JOG          :(CW(DIS)-)           Di9:RV-JOG          :(CCW(DIR)+)           Ein:P-PRESET          :(CCW(DIR)-)           Di4:ZHOME           Vi0:NON-SIG           Di6:FREE           Di6:FREE           Di6:TOP           Di7:ALM.RST           Vi2:NON.SIG	Remote-I/O(RS-485 Communication)           INPUT           Ri0:M0         Ri8:D-SEL0           Ri1:M1         Ri9:D-SEL1           Ri2:M2         RiA:D-SEL2           Ri3:START         RiB:SSTART           Ri4:ZHOME         RiC:FW-JOG-P           Ri5:STOP         RiD:RV-JOG-P           Ri6:FREE         RiE:FWD           PI:6:FREE         RiE:FWD
OUTPUT Do0:HOME-END Do1:IN-POS Do2:PLS-RDY Do3:READY Do4:MOVE Do5:ALM-B ASG BSG	OUTPUT       Ro0:M0       Ro8:SYS-BSY         Ro1:M1       Ro9:AREA0         Ro2:M2       Ro4:AREA1         Ro3:START       RoB:AREA2         Ro4:HOME-END       RoC:TIM         Ro6:READY       Ro0:MOVE         Ro6:INFO       RoE:IN-POS         Ro7:ALM-A       RoF:TLC

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.



hternal I/O monitor

The internal I/O monitor window appears.

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

Voltitled - Internal I	/O.monitor						<b>—</b> ×
Start the Internal I/	O monitor.						
INPUT FWD RVS HOME START JSTART JOG JOG	☐ MS0 ☐ MS1 ☐ MS2 ☐ MS3 ☐ MS4 ☐ MS5	FREE C-ON STOP	M0 M1 M2 M3 M4 M5	ALM-RST P-PRESET P-CLR HMI		Generic Signal R0 R1 R2 R3 R4 R5 R6 R7	R8 R9 R10 R11 R12 R13 R14 R15
UTPUT RVS_R HOME_R START_R SSTART_R JOG_R JOG_R	MS0_R MS1_R MS2_R MS2_R MS3_R MS4_R MS5_R	FREE_R C-ON_R STOP_R	M0_R   M1_R   M2_R   M3_R   M4_R   M5_R	ALM WNG READY MOVE END HOME-P TLC TIM	AREA1 AREA2 AREA3 S-BSY	□ +LS_R □ -LS_R □ HOMES_R □ SLIT_R	

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.



Remote I/O monitor

The remote I/O monitor window appears.

 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].

Synchronization Method	×
Select Synchronization Method	
Synchronization Method	
<ul> <li>Reading all data. (Product -&gt;PC)</li> </ul>	
Writing all data. (PC->Product)	
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>	
OK Cancel	

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."

Note

# 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.





The remote register monitor window appears.

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

RWw(Master -> NET	C01-CC)	-RWr(NETC01-CC ->	Master)		
RWwn0	0000 h	RWrn0	0000 h		
RWwn1	0000 h	RWm1	0000 h	RWrn1-0	0
RWwn2	0000 h	RWrn2	0000 h		
RWwn3	0000 h	RWrn3	0000 h	RWrn3-2	0
RW/wn4	0000 h	RWrn4	0000 h		
RWwn5	0000 h	RWrn5	0000 h	RWrn5-4	0
RWwn6	0000 h	RWrn6	0000 h		
RWwn7	0000 h	RWrn7	0000 h	RWrn7-6	0
RWwn8	0000 h	RWrn8	0000 h		
RWwn9	0000 h	RWrn9	0000 h	RWrn9-8	0
R₩wnA	0000 h	RWmA	0000 h		
RWwnB	0000 h	RWmB	0000 h	RWrnB-A	0
mmand Running					
RWw(Master -> NET	C01-CC)	RWr(NETC01-CC ->	Master)		
RWwnC	0000 h	RWrnC	0000 h		
RWwnD	0000 h	RWmD	0000 h		
RWwnE	0000 h	RWrnE	0000 h		
RWwnF	0000 h	RWmF	0000 h		

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.





The RS-485 status monitor window appears.

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

485 Untitled4* - RS485 s	tatus monitor		
Start RS-485 State	us Monitor		
RS-485 Communic	ation Scan Time	101.4 [ms]	
RS-485 communicat	tion status		
	Request	Reply	
Axis #0			
Axis #1			
Axis #2			
Axis #3			
Axis #4			
Axis #5			
Axis #6			
Axis #7			
Axis #8			
Axis #9			
Axis #10			
Axis #11			

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].

Synchronization Method
Select Synchronization Method
Synchronization Method
Reading all data. (Product ->PC)
Writing all data. (PC->Product)
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>
OK Cancel

**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.



Remote monitor

The remote monitor window appears.

2. Click "Start remote monitor."

The remote monitor starts.

Janre	mote monito								
		Command		Response			Command		Response
Mon 0:	AXIS	00 h	AXIS_R	00 h	Mon 8:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	0000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 1:	AXIS	00 h	AXIS_R	00 h	Mon 9:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	00000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 2:	AXIS	00 h	AXIS_R	00 h	Mon A:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	0000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 3:	AXIS	00 h	AXIS_R	00 h	Mon B:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	00000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 4:	AXIS	00 h	AXIS_R	00 h	Mon C:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	00000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 5:	AXIS	00 h	AXIS_R	00 h	Mon D:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	00000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 6:	AXIS	00 h	AXIS_R	00 h	Mon E:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	00000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00
Mon 7:	AXIS	00 h	AXIS_R	00 h	Mon F:	AXIS	00 h	AXIS_R	00
	CMD	0000 h	CMD_R	0000 h		CMD	0000 h	CMD_R	0000
			DATA_R	0000000 h				DATA_R	0000000
	TRIG	00 h	STATUS	00 h		TRIG	00 h	STATUS	00

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].

Synchronization Method	×
Select Synchronization Method	
Synchronization Method	
<ul> <li>Reading all data. (Product -&gt;PC)</li> </ul>	
Writing all data. (PC->Product)	
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>	

### 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 **MEXEO2**.

## 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].

Synchronization Method
Select Synchronization Method
Synchronization Method
Reading all data. (Product ->PC)
Writing all data. (PC->Product)
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>
OK Cancel

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].

Note

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.



🗶 Waveform monitor

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].

Synchronization Method	×
Select Synchronization Method	
Synchronization Method	
<ul> <li>Reading all data. (Product -&gt;PC)</li> </ul>	
Writing all data. (PC->Product)	
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>	
OK Cancel	

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.

CH1       Inv.       CH5       Inv.       CH9       Inv.         Pos.       Command Speed       Pos.       TIM       Pos.       TIM       Pos.         Scale       100       r/min / div       4       A       A       A       A         MOVE       0       r/min       f       5       MOVE       Pos.       TIM       Imv.         Pos.       0       r/min       f       5       MOVE       Pos.       TLC       N         Pos.       Actual Speed       r/min       CH6       Inv.       Pos.       TLC       Pos.       TLC       N         Pos.       100       r/min       div       A       <	🚰 сн	l Settings		
Pos.       Command Speed       P       MOVE       Pos.       TIM       IM         Image: Scale       100       r/min / div       4       +       +       +       +         Image: Scale       0       r/min       -       5       Image: Scale       100       nv.         Pos.       Actual Speed       Image: Scale       0       r/min / div       +       +       +         MOVE       Pos.       Image: Scale       100       r/min / div       +       +       +         MOVE       Pos.       Image: Scale       100       r/min / div       +       +       +       +         MOVE       Pos.       Image: Scale       100       r/min       Image: Scale       100       +	CH1	Inv.	CH5 Inv.	CH9 Inv.
Scale       100       r/min / div       4 <ul> <li>Offset</li> <li>r/min</li> <li>f</li> </ul> <ul> <li>Actual Speed</li> <li>Readul Speed</li> <li>Scale</li> <li>OO</li> <li>r/min</li> <li>f</li> </ul> CH6         Inv.              Pos.              TLC <ul> <li>Pos.</li> <li>Actual Speed</li> <li>Scale</li> <li>OO</li> <li>r/min</li> <li>div</li> <li>f</li> <li>Scale</li> <li>OO</li> <li>r/min</li> <li>CH7</li> <li>Inv.</li> </ul> <ul> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>READY</li> <li>Pos.</li> <li>FREE</li> <li>FREE</li> <li>Ready</li> <li>Fresent CPOS</li> <li>Step / div</li> <li>Scale</li> <li>OO</li> <li>step</li> </ul> <li>CH8&lt; Inv.</li> <li>Pos.</li> <li>FREE</li> <li>Fresent FBPOS</li> <li>Scale</li> <li>Scale</li> <li>GB0</li> <li>deg. / div</li> <li>Scale in thet thet thet thet thet thet thet the</li>	Pos.	Command Speed <	P 3 MOVE -	Pos. TIM
▼       Offset       0       ▼ r/min       ✓       5         CH2       Inv.       Pos.       Inv.       Pos.       CH10       Inv.         Pos.       Actual Speed       ▼       Pos.       ILC       ▼         ▲       Scale       100       ▼ r/min / div       Actual Speed       ▼       ∞         ▲       Scale       100       ▼ r/min       ∞       ∞       ∞       ∞       ∞         ▲       Offset       0       ▼ r/min       ∞       ∞       ∞       ∞       ∞       ∞       ∞         CH3       Inv.       Pos.       CH7       Inv.       Pos.       FREE       ∞	<u> </u>	Scale 100 🔹 r/min / div 🗲	(4)	<u>^</u>
CH2       Inv.       CH6       Inv.       Pos.       CH10       Inv.         Pos.       Actual Speed <ul> <li>N-POS</li> <li>Scale</li> <li>Offset</li> <li>r/min</li> <li>CH3</li> <li>Inv.</li> <li>Pos.</li> <li>r/min</li> <li>CH7</li> <li>Inv.</li> <li>Pos.</li> <li>READY</li> <li>Pos.</li> <li>FREE</li> <li>READY</li> <li>Pos.</li> <li>SYS-BSY</li> <li>Pos.</li> <li>SYS-BSY</li> <li>Pos.</li> <li>SYS-BSY</li> <li>Pos.</li> <li< th=""><th>×</th><th>Offset 0 🖨 r/min &lt;</th><th>-(5)</th><th>×</th></li<></ul>	×	Offset 0 🖨 r/min <	-(5)	×
Pos.       Actual Speed <ul> <li>Pos.</li> <li>IN-POS</li> <li>Pos.</li> <li>IN-POS</li> <li>Pos.</li> <li>IN-POS</li> <li>Pos.</li> <li>ILC</li> <li>Pos.</li> <li>ILC</li> <li>Reserved</li> <li>Pos.</li> <li>IN-POS</li> <li>Pos.</li> <li>ILC</li> <li>Pos.</li> <li>Inv.</li> </ul> <li>Pos.</li> <li>FREE</li> <li>Pos.</li> <li>FREE</li> <li>Inv.</li> <li>Pos.</li> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>MOVE</li> <li>Pos.</li> <li>Sys-Bsy</li> <li>Pos.</li> <li>Sys-Bsy</li> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>Pos.</li> <li>Inv.</li> <li>Pos.</li> <li>Sys-Bsy</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li>	CH2	Inv.	CH6 Inv.	CH10 Inv.
Image: Scale indication of the second of	Pos.	Actual Speed 🗸	Pos. IN-POS 🔻	Pos. TLC -
▼       0       ↑       r/min       ▼         CH3       Inv.       ∞       CH1       Inv.         Pos.       Present CPOS       ▼       ∞       Pos.       FREE       ▼         ▲       Scale       1000       • step / div       ∞       ∞       ∞       ∞       ∞         ▲       0       • step       ∞       ∞       ∞       ∞       ∞       ∞         CH4       Inv.       Pos.       Present FBPOS       ∞       ∞       ∞       ∞       ∞         ▲       Scale       360       deg. / div       ∞       ∞       ∞       ∞       ∞         ●       0       ∞       ∞       ∞       ∞       ∞       ∞       ∞         ●       0       ∞       0       ∞       ∞       ∞       ∞       ∞       ∞       ∞         ●       0       ∞       0       ∞	×	Scale 100 v r/min / div	<u>~</u>	×
CH3       Inv.         Pos.       Present CPOS         ×       Scale         1000       • step / div         ×       Scale         0       • step / div         ×       •         ×<	+		*	*
CH3       Inv.         Pos.       Present CPOS         A       Scale         1000       •         step / div         CH4         Inv.         Pos.         READY         Pos.         FREE         •         •         •         •         •         •         •         •         •         •         •         •         •         •          •     <	¥	onser o r/min	×	×
Pos.       Present CPOS <ul> <li>Pos.</li> <li>READY</li> <li>Pos.</li> <li>READY</li> <li>Pos.</li> <li>FREE</li> <li>Pos.</li> <li>FREE</li> <li>Ready</li> </ul> <ul> <li>Pos.</li> <li>READY</li> <li>Pos.</li> <li>FREE</li> <li>Pos.</li> <li>FREE</li> <li>Pos.</li> <li>FREE</li> <li>Ready</li> </ul> <ul> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> <li>Pos.</li> </ul> <ul> <li>Pos.</li>             &lt;</ul>	CH3	Inv.	CH7 Inv.	CH11 Inv.
Image: Scale inv.       1000 • step / div         Image: Scale inv.       0 · step         CH4       Inv.         Pos.       Present FBPOS • F         Image: Scale inv.       CH8         Image: Scale inv.       Pos.         MOVE • F       Image: Star inv.         Pos.       Pos.         Image: Scale inv.       Pos.         Image: Scale inv.       Pos.         Image: Scale inv.       Image: Star inv.         Image: Scale inv.       Image: Sta	Pos.	Present CPOS	Pos. READY	Pos. FREE
CH4   Inv.   Pos.   Present FBPOS   Scale   360   deg. / div     CH8   Inv.     Pos.   MOVE     Pos.   Sys-Bsy     Scale     360   deg. / div	×	Scale 1000 - step / div	<u>×</u>	×
CH4     Inv.       Pos.     Present FBPOS       Scale     360       •     •	+		*	+
CH4 Inv. Pos. Present FBPOS	¥	Unset U step		
Pos. Present FBPOS   Pos. MOVE  Pos. SYS-BSY    SYS-BSY	CH4	Inv.	CH8 Inv.	CH12 Inv.
➤         Scale         360         deg. / div         ▲           ▼         0% ct         0	Pos.	Present FBPOS	Pos. MOVE	Pos. SYS-BSY -
	×	Scale 360 V deg. / div	×	*
	-		-	-

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.

- 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.



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].

Sy	nchronization Method	×
	Select Synchronization Method	
	Synchronization Method	
	Reading all data. (Product ->PC)	
	Writing all data. (PC->Product)	
	O Difference data writing. (PC->Product)	
	OK Cancel	

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 $\bigcirc$ 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.

- 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.



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.

Alarm Condition		42:Initial sensor error	42:Initial sensor error			
Narm Hist	orv	Position E	Alarm Neset			
	Code	Alarm message	Cause			
#1	42	Initial sensor error	Abnormality of the sensor was detected when			
#2	00	No Alarm	the power was turned on.			
#3	00	No Alarm				
#4	00	No Alarm				
#5	00	No Alarm				
#6	00	No Alarm	Measure			
#7	00	No Alarm	Tum off the power, and check the connection			
#8	00	No Alarm	of the motor cable. Turn on the main power again.			
#9	00	No Alarm				
#10	00	No Alarm				
•			•			

#### 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.

Alarm Condition 67:Software overtravel								
					Alam	n Reset		
Alarm hist	orv						_	
	Code	Alarm message	Sub code	Driver Temperature	Motor temperature	Inverter volt.	Direct-I/O Input	NET
#1	67	Software overtravel	01	0	26	0.0	0000	
#2	67	Software overtravel	01	29	30	283.0	0000	
#3	00	Alarm not present	00	0	0	0.0	0000	
#4	00	Alarm not present	00	0	0	0.0	0000	
#5	00	Alarm not present	00	0	0	0.0	0000	
#6	00	Alarm not present	00	0	0	0.0	0000	
#7	00	Alarm not present	00	0	0	0.0	0000	
#8	00	Alarm not present	00	0	0	0.0	0000	
#9	00	Alarm not present	00	0	0	0.0	0000	
#10	00	Alarm not present	00	0	0	0.0	0000	
•								
D: 11					Cause			
	/O input			NET-OUT8 NET-OUT9	The motor reached a soft is overtravel "parameter was	mit position when t set to "Alarming".	the "Software	^
				NET-OUT11 NET-OUT12	Measure			Ŧ
		VIR-IN1		NET-OUT13 NET-OUT14 NET-OUT15	Check to see if the operati Escape from the softlimit po	on data exceeds th osition.	ne softlimit value.	*

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].

Synchronization Method
Select Synchronization Method
Synchronization Method
Reading all data. (Product ->PC)
Writing all data. (PC->Product)
<ul> <li>Difference data writing. (PC-&gt;Product)</li> </ul>
OK Cancel

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.



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.

//arning (	condition	23:Main power warning		
Vaming H	listory			
	Code	The warning message	Cause	
#1	23	Main power warning	C-ON signal was input while the main power is	*
#2	00	No warning	оп.	
#3	00	No warning		
#4	00	No warning		
#5	00	No warning		Ŧ
#6	00	No warning	Measure	
#7	00	No warning	*Do not turn on the C-ON signal while the main	
#8	00	No warning	power is off. *Check the logic of C-ON signal.	
#9	00	No warning		
#10	00	No warning		

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.



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.

COM Error Condition 00:No communica		00:No communication error	
ommunio	Code	The communication error message	Cause
#1	00	No communication error	
#2	00	No communication error	
#3	00	No communication error	
#4	00	No communication error	
#5	00	No communication error	
#6	00	No communication error	Measure
#7	00	No communication error	
#8	00	No communication error	
#9	00	No communication error	
#10	00	No communication error	

#### For the $\boldsymbol{\mathsf{AZ}}$ 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.

01101100	211031	0000000	[32][33][34][35]	0000000	
)41105110	611071	0000000	[36][37][38][39]	0000000	
0810911	01[11]	0000000	[40][41][42][43]	0000000	
21[13][1	41[15]	0000000	[44][45][46][47]	0000000	
61[17][1	81[19]	0000000	[48][49][50][51]	0000000	
201121112	21[23]	0000000	[52][53][54][55]	0000000	
24][25][2	6][27]	0000000	[56][57][58][59]	0000000	
28][29][3/	0][31]	0000000	[60][61][62][63]	0000000	
ommunic #1	ation Error Code 00	History The communication error message Communication error not present	Cause		*
ommunic	ation Error Code	History The communication error message	Cause		
ommunic #1	ation Error Code 00	History The communication error message Communication error not present	Cause		*
2 mmunic #1 #2	ation Error Code 00 00	History The communication error message Communication error not present Communication error not present	Cause		*
mmunic #1 #2 #3	Code 00 00 00	History The communication error message Communication error not present Communication error not present Communication error not present	Cause		*
mmunic #1 #2 #3 #4	ation Error Code 00 00 00 00	History The communication error message Communication error not present Communication error not present Communication error not present Communication error not present	Cause		A
mmunic #1 #2 #3 #4 #5	ation Error Code 00 00 00 00 00 00 00	History The communication error message Communication error not present	Cause		A 
#1 #2 #3 #4 #5 #6	ation Error Code 00 00 00 00 00 00 00 00	History The communication error message Communication error not present Communication error no	Cause Cause Cause Cause		*
#1 #2 #3 #4 #5 #6 #7	ation Error Code 00 00 00 00 00 00 00 00 00 00	History The communication error message Communication error not present	Cause Cause Measure .		•
#1 #2 #3 #4 #5 #6 #7 #8	ation Error Code 00 00 00 00 00 00 00 00 00 00 00 00 00	History The communication error message Communication error not present	Cause Cause Measure .		•
#1 #2 #3 #4 #5 #6 #7 #8 #9	ation Error Code 00 00 00 00 00 00 00 00 00 00 00 00 00	History The communication error message Communication error not present	Cause Cause Measure		•
#1 #2 #3 #4 #5 #6 #7 #8 #9 #10	ation Error Code 00 00 00 00 00 00 00 00 00 00 00 00 00	History The communication error message Communication error not present	Cause Cause Measure		•

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.



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.

I/O(C   Over   Drive   Motor   Over   Unde   Over	Customize) flow rotation r Temperature r temperature voltage r voltage load time	Speed Operation start failed ZHOME start failed Preset request Electronic gear setting error Round setting error RS-485 Comm-error	Prohibition for FWD operation Prohibition for RVS operation Cumulative load0 excess Cumulative load1 excess Excessive TRIP Excessive ODO	Operation start limit mode U/O test mode Configuration request Reflect Reboot request
formation	n History	Elanged time from boot	Information contents	
#1	10010000	00p10p59.006p		
#1	10010000	00-10-46 652-	I/O(Customize)	Speed
#2	1000000	00-10-27.949-	Driver Temperature	Operation start failed     ZHOME start failed
#3	1000000	00-10-29 721-	Motor temperature	Preset request
#4	0000000	00-00-00	Overvoltage	_
#0	0000000	00-00-00	Under voltage	Electronic gear setting error
#0	0000000	000000000000000000000000000000000000000		RS-485 Comm-error
#/	0000000	000000000000000000000000000000000000000		_
#0	0000000	00-00-00		
#3	0000000		Prohibition for FWD operation	1
#10	0000000	00-00-000	Cumulative load0 excess	
#11	0000000	00500000	Cumulative load1 excess	
#12	0000000		Excessive TRIP	Operation start limit mode
#13	0000000		Excessive ODO	0 test mode
#14	0000000			Reflect Reboot request
#15	0000000			
1110		00h00m00.000s		

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

### **Maintenance function** 12

This chapter explains how to conduct maintenance of an applicable product using the MEXEO2.

#### 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 [Communic menu.

1. Click [HMI-CLR] from the [Communication]	Communication Tool Window Help
menu.	Setting of the communication
	O <u>n</u> line O <u>f</u> fline
	Data reading(Product->PC)Ctrl+ RData writing(PC->Product)Ctrl+ W
	Data verification(PC<->Product) Reset
	<u>H</u> MI-CLR <u>C</u> onfiguration
<ol> <li>Enter the clear key (numbers shown under the input field) and click [HMI-CLR]</li> </ol>	HMI-CLR
3. Click [Yes]. The HMI input is cleared.	Warning     E3       Image: Model     HMI-CLR will be executed.       Do you want to proceed?       Image: Model
4. After it is completed, click [OK].	Information E3 HMI-CLR key is transmitted.

- 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 Tool Window Help [Communication] menu. Setting of the communication... O<u>n</u>line Offline Data reading(Product->PC)... Ctrl+R Data writing(PC->Product)... Ctrl+W Data verification(PC<->Product)... R<u>e</u>set... HMI-CLR... Configuration... 2. Click [Yes]. 23 Warning Configuration is executed. Configuration will be started. Do you want to proceed? <u>Y</u>es <u>N</u>o 3. After it is completed, click [OK]. Information 23 Complete Configuration is completed. <u>0</u>K

### 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.

Communication Tool Window Help	
Setting of the communication	
<b>Online</b> Offline	
Data reading(Product->PC) Data writing(PC->Product) Data verification(PC<->Product)	Ctrl+R Ctrl+W
Reset	
HMI-CLR Configuration	
Position preset clear ZSG preset clear Latch information	
Mechanism information copy Gear information copy Coordinate information copy Recommended Macro Operation copy	
Electronic damper custom setting	
Copy the ABZO (fixed) information to the driver in a lump	
Restore (Backup area -> User memory area)	
Backup (User memory area -> Back up area)	

- 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]	Comm	nunication Tool Window Help	
	menu.	S	etting of the communication	
		0	Inline	
		0	)ffline	
		D	ata reading(Product->PC)	Ctrl+R
		D	Data writing(PC->Product)	Ctrl+W
		D	Pata verification(PC<->Product)	
		R	eset	
		н	IMI-CLR	
		С	Configuration	
		P	osition preset clear	
		2	atch information	
		M	lechanism information conv	
		G	Gear information copy	
		С	Coordinate information copy	
		R	ecommended Macro Operation copy	
		E	lectronic damper custom setting	
		С	copy the ABZO (fixed) information to the driver in a lump	
		R	estore (Backup area -> User memory area)	
		В	ackup (User memory area -> Back up area)	
2.	Enter the access key (numbers	restore		
	snown under the input field) and click	Acce	ssKev 20519253	
			20519253 C Enter these nu	mbers.

Cancel

Restoration

- 3. Click [Yes]. The restoration starts.
- Warning
   £3

   Restoration will be started.
   Do you want to proceed?

   Yes
   No

   Information
   £3

   Restoration is completed.

   Restore the driver.

   QK
- 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 Tool Window Help [Communication] menu. Setting of the communication... O<u>n</u>line O<u>f</u>fline Ctrl+R Data <u>r</u>eading(Product->PC)... Data writing(PC->Product)... Ctrl+W Data verification(PC<->Product)... Reset... HMI-CLR ... Configuration... Position preset clear... ZSG preset clear... Latch information... Mechanism information copy... Gear information copy... Coordinate information copy... Recommended Macro Operation copy... 2. Click [Yes]. Warning 53 The mechanism information parameters are Mechanism information copy will be executed copied to the user parameters. Do you want to proceed? Yes No 3. After it is completed, click [OK]. Information 23 Mechanism information copy is completed. Restore the driver. <u>0</u>K
- 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 Tool Window Help [Communication] menu. Setting of the communication... Online O<u>f</u>fline Data reading(Product->PC)... Ctrl+R Data writing(PC->Product)... Ctrl+W Data verification(PC<->Product)... Reset.. HMI-CLR... Configuration... Position preset clear... ZSG preset clear... Latch information.. Mechanism information copy... Gear information copy... Coordinate information copy... Recommended Macro Operation copy... 2. Click [Yes]. Warning 23 The gear information parameters are Gear information copy will be started. copied to the user parameters. Do you want to proceed? Yes <u>N</u>o 3. After it is completed, click [OK]. Information 23 Gear information copy is completed. Restore the driver. 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.

<u>Communication</u> <u>T</u> ool <u>W</u> indow <u>H</u> elp					
Setting of the communication					
O <u>n</u> line					
O <u>f</u> fline					
Data <u>r</u> eading(Product->PC)	Ctrl+R				
Data writing(PC->Product)	Ctrl+W				
Data verification(PC<->Product)					
R <u>e</u> set					
HMI-CLR					
<u>C</u> onfiguration					
Position preset clear					
ZSG preset clear					
Latch information					
Mechanism information copy					
Gear information copy					
Coordinate information copy					
Recommended Macro Operation copy					

- 2. Click [Yes]. Warning 83 The coordinate information parameters Coordinate information copy will be executed. are copied to the user parameters. Do you want to proceed? <u>Y</u>es <u>N</u>o 3. After it is completed, click [OK]. Information 23 Coordinate information copy is completed. Restore the driver. <u>O</u>K
- 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	Communication Iool Window Help			
	copy] from the [Communication] menu.	Setting of the communication			
		0 <u>n</u> line			
			Offline		
			Data <u>r</u> eading(Product->PC) Ctrl+R		
			Data writing(PC->Product) Ctrl+W		
			Data verification(PC<->Product)		
			R <u>e</u> set		
			HMI-CLR		
			<u>C</u> onfiguration		
		Position preset clear			
			ZSG preset clear		
			Latch information		
			Mechan <u>i</u> sm information copy		
			<u>G</u> ear information copy		
			Coordinate information copy		
			Recommended Macro Operation copy		
2.	Click [Yes].	War	ning 🛛 🕅		
	The recommended macro operation		The Recommended Macro Operation copy will be started.		
	parameters are copied to the user parameters.		Do you want to proceed?		
			Yes No		
3.	After it is completed, click [OK].	Information 🛛 🕅			
			The Recommended Macro Operation copy is completed.		
			Restore the driver.		

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	Communication Tool Window Help			
	the driver in a lump] from the [Communication] menu.	Setting of the communication			
		Online Offline			
		Data reading(Product->PC) Ctrl+R			
		Data writing(PC->Product) Ctrl+W			
		Data verification(PC<->Product)			
		Reset			
		HMI-CLR Configuration			
		Position preset clear			
		ZSG preset clear			
		Latch information			
		Mechanism information copy			
		Coordinate information copy			
		Recommended Macro Operation copy			
		Electronic damper custom setting			
		Copy the ABZO (fixed) information to the driver in a lump			
		Restore (Backup area -> User memory area)			
		Backup (User memory area -> Back up area)			
2.	Click [Yes]. The batch copy is executed.	Warning 83			
		ABZO (fixed) will be copied to driver in a lump.			
		*Connect the ABZO sensor to the driver.			
		Do you want to proceed?			
3.	After it is completed, click [OK].	Information 🔯			
		ABZO (fixed) copy in a lump is completed.			
		Restore the driver.			

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

2. Click [Yes].

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

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



# 12.12 Latch information clear

The latched information of an applicable product can be cleared.

1. Click [Latch information] from the Communication Tool Window Help [Communication] menu. Setting of the communication... O<u>n</u>line O<u>f</u>fline Data reading(Product->PC)... Ctrl+R Data writing(PC->Product)... Ctrl+W Data verification(PC<->Product)... R<u>e</u>set... HMI-CLR... Configuration... Position preset clear... ZSG preset clear... Latch information... 2. Click [Yes]. Warning 23 The latch information clear is executed. The latch information clear will be executed 1 Do you want to proceed? <u>Y</u>es <u>N</u>o 3. After it is completed, click [OK]. 23 Information Ĩ The latch information clear is completed. ОК

# 12.13 Electronic damper

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

C		logi t godo	Chaok onde
nport from an external file	C - Code 0	0000000	Check code
-	C - Code 1	0000000	00
	C - Code 2	0000000	00
Import ABZO (fixed)	C Code 2	0000000	00
	C Code 3	0000000	00
	C - Code 4	0000000	00
	C - Code S	0000000	00
Import custom code	C - Code 7	0000000	00
=	Madel pumber		
-	Specification voltage	-	
-	Series	0	
-	Mode	0	
	Active	Custom code (C - Code )	ABZO (fixed)
State	ABZO enable	C - Code disable	
C - Code 0	003001CC	0000000	0000000
C - Code 1	49A61400	0000000	0000000
C - Code 2	A614001E	0000000	0000000
C - Code 3	4D004242	0000000	0000000
C - Code 4	C64D00C6	0000000	0000000
C - Code 5	00C64D00	0000000	0000000
C - Code 6	0000000	0000000	0000000
C - Code 7	2E020100	0000000	0000000
Model number	46	-	-
Specification voltage	48	0	0
Series	2	0	0
Mode	1	0	0
Update information		Custom code Clear	Copy Custom code <- ABZO
or electronic dumper			Close
## 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 **MEXEO2**. 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.
- Click the [Teaching, remote operation] icon in the toolbar or click the [Teaching, remote operation] shortcut button.



The teaching/remote operation window appears.

3. Click "Start the teaching remote operation."

	Driver Status Command Position(CPOS) Actual Position	1000 [step]	INPUT	OUTPUT N ALM E MOVE P	
Clicl The	k [Yes]. teaching/remote operation is en	abled.	<b>W</b>	Varning The teaching Do you want t	remote operation will be started.
The data data sync	teaching/remote operation requ under editing and the data of ar is not synchronized, the follow hronization method and click [	ires synchronization of th a applicable product. Whe ing window appears. Sele OK].	ne s en the ect a	ynchronization Method Select Synchronization I Synchronization Method @ Reading all data. ( @ Writing all data. ( Difference data wi	Method (Product ->PC) PC->Product) riting. (PC->Product) K Cancel

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.

Operation Data # 0	
Start positioning operation.	
Warning	23
Positioning operation will be starte Do you want to proceed?	ed.
Yes No	
Driving	x
Driving	
Stop	

#### Return-to-home operation

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

ł	Home Operation	
Warning		83
<u>^</u>	Home operation will be st	arted.
_	Do you want to proceed?	
$\subset$	Yes No	
Home Op	erating	×
Home	Operating	
	Stop	

#### ZHOME operation

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

Click [Stop] to stop the operation before completion.

Click [Stop] to stop the operation before completion.

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

2	ZHOME operation					
Warning	83					
	The ZHOME operation will be started.					
-	Do you want to proceed?					
	Yes No					
ZHOME	driving 💽					
ZHOME driving						
Stop						

#### 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

JOG

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.

	👥 Untitled1 - Teaching, remote operation			×
	Start the teaching remote operation.			
	Driver Status			
	Command Position(CPOS)	1000 [step]	INPUT OUTPUT	
	Actual Position	1000 [step]		
	Actual Speed	0 [r/min]		
	Alarm Condition	Alarm Reset	Position Lost Alarm Reset	
	00:No Alam			
	Operation			
	Operation Data # 0	Positioning mode Position [step]		INC 0
		Operating speed [Hz]		1000
	Start positioning operation.	Acceleration [ms/kHz] or [s]		1.000
		Deceleration [ms/kHz] or [s]		1.000
	Home Operation			
	Teaching			
	Operation Data # 0			
	ABS	Position Set	Reflecting on the driver.	
JOG operation buttons	> 4	-++		
	Minimum Dista	nce 1 🚖 [step]		
	Negative soft limit Home	Positiv	e soft limit	
	-8388608 [step]		8388607 [step]	
	Brenet	Position Preset	Preset	
	(CPOS-1)		(CPOS+1)	
		Preset positioning		
	Initialize	Both limits initialize	Initialize	
l				

#### 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.

	Untitled1 - Teaching, remote operation			<b>—</b> ×-
	Start the teaching remote operation.			
	Driver Status			
	Command Position(CPOS)	6000 [step]		OUTPUT
	Actual Position	6000 [step]	FREE	ALM-A
	Actual Speed	0 [Hz]		MOVE
	Alarm Condition	Alarm Reset	ETO control	ETO release
	00:Alarm not present			
	Operation			
	Operation Data # 0	Mode Position [step]		Inc positioning (CPOS)
	Start positioning operation.	Speed [Hz] Acc/Dec rate [kHz/s] Brake rate [kHz/s]		1000 1000000 1000000
		Current ratio [%]		100.0
	Home Operation	ZHOME operation		
	Teaching			
	Operation Data # 0	Position Set	Reflectin	g on the driver.
	Abs positioning			
JOG operation			·	FREE control
	Minimum Distance	s [step]	o ooft limit	FREE:OFF
	-2147483648 [step]		2147483647 [step]	
		Position Preset		ZSG control
	Preset		Preset	ZSG
	(CPOS-1)	eset positioning	(CPOS+1)	
	Initialize Bot	and h limits initialize	Initialize	Preset

2. Select an operation data number at "Operation Data #" in "Teaching."

 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.

Teaching		
Operation Data # 0 Position Set	R	eflecting on the driver.
Click [Reflecting on the driver] to set the teaching data to the applicable product.	Refle	ecting on the driver.
Click [Yes].	Warning	X
The data is written to the applicable product.		Modified data will be written. Do you want to proceed? Yes <u>No</u>

- 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).

4.

5.

## 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.

<u>. 10</u> (	Untitled1 - Teaching, remote operat	ion		×
-5	Start the teaching remote operation.			
	Driver Status			
	Command Position(CPOS)	1000 [step]		OUTPUT
	Actual Position	1000 [step]	FREE	MOVE
	Actual Speed	0 [r/mir	1] 	
	Alarm Condition	Alarm Reset	Position Lost Al	arm Reset
	00:No Alarm			
	Operation			
	Operation Data # 0	Positioning mode		INC
		Operating speed [Hz]		1000
	Start positioning operation.	Push current[%]		20.0
		Acceleration [ms/kHz] or [s	8]	1.000
		Deceleration [ms/kHz] or [s	s]	1.000
	Home Operation			
	Teaching			
	Operation Data # 0	Parities Cat	Deflet	Concern the difference
	ABS	▼ Position Set	Reflec	ting on the driver.
JOG operation				
	Negative soft limit	Home P	opj	
	-8388608 [step]		8388607 [step]	
	000000 [0:00]	Position Preset	Concert [eveb]	
	Preset	rosition reset	Preset	
	(CPOS-1)		(CPOS+1)	
		Preset positioning		
	Initialize	Both limits initialize	Initialize	

#### 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.

	👥 Untitled1 - Teaching, remote operation			
	Start the teaching remote operation.			
	Driver Status			
	Command Position(CPOS)	6000 [step]		
	Actual Position	6000 [step]	C-ON CRNT	
	Actual Speed	0 [Hz]		
	Alarm Condition	Alarm Reset	ETO control	
	00:Alarm not present			
	Operation	[		
	Operation Data # 0	Mode Resilies [step]	Inc positioning (CPOS)	
		Speed [Hz]	1000	
	Start positioning operation.	Acc/Dec rate [kHz/s]	1000000	
		Brake rate [kHz/s]	1000000	
		Current ratio [%]	100.0	
	Home Operation	ZHOME operation		
	Teaching			
	Operation Data # 0			
	Abs positioning	Position Set	Reflecting on the driver.	
JOG operation — buttons			FREE control FREE:ON	
	Negative soft limit	Positive	soft limit FREE:OFF	
	-2147483648 [step]		2147483647 [step]	
	P	osition Preset	ZSG control	
	Preset		Preset ZSG	
	(CPOS-1)		(CPOS+1)	
	Pre	and	Preset	
	Initialize Both	limits initialize	Initialize	

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.

Negative soft limit -2147483648 [step]	Home	Positive soft limit 2147483647 [step]
Preset (CPOS-1)	Position Preset	Preset (CPOS+1)
Initialize	Preset positioning and Both limits initialize	Initialize

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.



- X 🛃 Untitled4\* - Waveform monitor Start Waveform Monitor rigger Time = 233164ms ∞ <u>چ</u> CH1 CH2 CH3 CH4 CH4 CH5 CH6 CH6 СН1-> CH7 CH8 CH8 CH9 СН9 CH10 CH11 CH12 M ALL **₽** ALL L ALL TRIGGER: CH=CH1 LEVEL=100 r/min EDGE= A TIME SCALE=20 ms/div ΔT=82 ms ΔV=300 r/min : CH=CH1 Trigger Level Measure 🔽 ΔΤ Edge Scale 1/4 • div СН ▼ ◎ ▲ CH1 V Signal name **ν**ΔV CH1 RUN Mode NORMAL 

  NORMAL Time scale ¥ **,** CH Settings 2 <u>j</u> κ ▶▲ ○ K Pos. 20 🔹 ms / div
- 2. Select "CH1" in "Measure," and select the  $\Delta V$  check box. The result shows the peak value of CH1 at around 300 r/min.

#### 3. Click [CH Settings].

The CH settings window appears.

🚰 сн	Settings			
CH1	Inv.	CH5	Inv.	CH9 Inv.
Pos.	Actual Speed	Pos.	START -	Pos. TIM
<u> </u>	Scale 500 v r/min / div	~		<u>~</u>
*		*		*
Y	r/min	¥		
CH2	Inv.	CH6	Inv.	CH10 Inv.
Pos.	Command Speed	Pos.	IN-POS 🔻	Pos. TLC •
<u>^</u>	Scale 500 🗸 r/min / div	<u>^</u>		<u>^</u>
T T	Offset 0 🔄 r/min	×		T I
CH3	Inv.	CH7	Inv.	CH11 Inv.
Pos.	Present CPOS	Pos.	READY	Pos. FREE
*	Scale 1000 🔹 step / div	*		▲
× V	Offset 0 🚖 step	×		7 2
-CH4-	Inv.	CH8	Inv.	CH12 Inv.
Pos.	Driver Temperature	Pos.	MOVE	Pos. SYS-BSY
×	Scale 100 👻 °C / div	<u>^</u>		▲
- -	Offset 0 🚔 °C	- -		T I

In "Offset" of CH1, enter a center value onto which you want to zoom in.
 In this axample, enter 300 (r/min), the measurement result of

In this example, enter 300 (r/min), the measurement result of Step 2, to zoom in on around the peak value.

🚰 сн	Settings				
CH1	Inv.				
Pos.	Actual Sp	eed			•
_	Scale		500	•	r/min / div
×	Offset	$\boldsymbol{\zeta}$	300		r/min

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

-					
CH Settings					
CH1	Inv.				
Pos.	Actual Spe	ed	•		
~	Casla		l elevie ( dive		
÷	Scale	5000	min / div		
¥	Offset	2000	r/min		
CH2	Inv.	500			
Pos.	Command	200 100			
≍	Command	50 20	<b>•</b>		

S Untitled4\* - Waveform monitor × Start Waveform Monito Trigger Time = 233164ms ۲ 2 CH1 CH2 П СН3 CH4 CH4 CH5 CH5 CH6 CH6 CH7 CH8 🕅 СН9 CH10 CH11 CH12 **M** ALL **.** ALL ALL TRIGGER: CH=CH1 LEVEL=310 r/min EDGE= A ΔT=82 ms ΔV=30 r/min : CH=CH1 Trigger Level CH5-12 Measure 🔽 ΔΤ Edge Scale 1/4 - div 🗖 СН CH1 ۵ 🛦 -V Signal name **ν**ΔV CH1 -RUN NORMAL - OV Mode ¥ Time scale Þ CH Settings • <u>i</u> Ð Pos K < V 🛛 🖌 🔹 20 👻 ms / div

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



- 2. Click the CHs that you want to move simultaneously.
- 3. Drag the waveform curves in the window to move them vertically.

The selected CHs are moved simultaneously.

CH1
CH2
CH3
CH4
CH5

#### 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.

Save favorites da	a	×
.You can save in You can also cr	formation with desired name which was set to measure the waveform. eate directory, and manage them as each group.	
AR Sto	edData [DC]	
Data name	Untitled1 Save	
Comment	Adjust the Acceleration.	

#### Loading saved setting conditions

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

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



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

Load favorites data	3		×			
The saved waveform measurement data in favorites can be Load. Select items and click the right when you rename or operate existing data.						
AR Store	dData [DC]	Untitled 1				
Data name	Untitled1	Open	$\geq$			
Comment	Adjust the Acceleration.	Cancel				

#### 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.

Save As							X
U Libraries	Documents			<b>- 4</b> ∳ 5	Search Documents		Q
Organize 🔻 New fold	er				ł	≣ ▼	0
쑦 Favorites 📃 Desktop	Documents library Includes: 2 locations				Arrange by:	Folder 🔻	
🐞 Downloads 똂 Recent Places	Name 🔷	Date modified 7/22/2008 11:16 AM	Type Bitmap image	Size 1,172 KB			
Computer Compu							
File <u>n</u> ame: Wave	eformData						-
Save as type: Bitma	ap format (*.bmp)						_
Hide Folders					Save	Cancel	

#### 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.

Save As						×
Ubraries	Documents			<b>▼ 4</b> 9	Search Documents	٩
Organize 👻 New folde	r				I	- <b>0</b>
ጵ Favorites 📰 Desktop	Documents library Includes: 2 locations				Arrange by:	Folder 🔻
🗼 Downloads 📃 Recent Places	Name	Date modified	Туре	Size		
🕞 Libraries		No items ma	atch your search.			
Documents						
🁌 Music						
Pictures						
Videos 🗧						
🖳 Computer						
🚢 Local Disk (C:)						
👝 OS Backup (D:)						
👝 Server (H:)						
🗣 Network						
File name: Untitle	:d1					-
Save as type: csv for	mat (*.csv)					•
Hide Folders					Save	Cancel

## 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.



• 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.



The test I/O window appears.

2. Click "Start I/O Test."

Untitled1 - Test I/O			<b>X</b>
INPUT IN0 IN1 IN2 IN3 IN4 IN5 IN6 IN7	☐ +LS ☐ -LS ☐ HOMES ☐ SLIT	OUTPUT OUT0 OUT1 OUT2 OUT3 OUT4 OUT5	

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

Warning	8
<u> </u>	The I/O test function will be enabled. Do you want to proceed?
	Yes No

 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 **MEXEO2** data to the applicable product, setting the user name can prevent from overwriting the data to a wrong product.

WEXE02 - [Untitled1*]     Image: Communication Tool Window Help       File Edit Move View Communication Tool Window Help     Image: Communication Tool Window Help					
) 🌔 🚰 🔚 😓 🐘 🎒 🥐 🤊	🗉 (제 제 대) 대 🕼 👥 📖 🖬 🕅	ìo ilò 🚅 🗳 🤹 💽 😨			
System of Units Customize Wizard un	nit of display 💿 step 🔵 mm 🔘 deg				
AZ Pulse/RS-485 / Standard/gear Motor	Operation data Base setting				
- Data	Motor user name	Axis - 16			
Operation data	Driver user name	Axis - 16			
Extended operation data setting	1		Motor user name RANCE: May 16 characters		
- Parameter	Drive simulation mode	Use real moto	Reflected:Immediately		
Base settings					
Motor & Mechanism(coordinates/3)	Base current [%]	100.0			
I/O action and function	Base-current setting source(only pulse-I/F type)	Current setting sv	witch		
Direct-IN function	Stop Current [%]	50.0			
Direct-OUT function Remote-I/O function(RS-485)	Command filter type	LPF			
	Command filter time [ms]	1			
	Command filter setting source(only pulse-I/F type)	Current setting si	witch		
Operation	Smooth drive function	Enable			
Teaching, remote operation	Current control mode	Follow the CCM in	nput.		
Monitor	Servo emulation (SVE) ratio [%]	100.0			
🔣 Unit information monitor	Servo emulation (SVE) position loop gain	10			
Status monitor	Servo emulation (SVE) speed loop gain	180			
D-I/O, R-I/O monitor	Servo emulation (SVE) speed loop integral time constant [ms]	100.0			
No Internal I/O monitor	Automatic current cutback function	Enable			
🚅 Alarm monitor	Automatic current cutback switching time [ms]	100			
📲 Information monitor	Operating current ramp up rate [ms/100%]	0			
As RS-485 com. monitor	Operating current ramp down rate [ms/100%]	0			
Se Waveform monitor	Electronic damper function	Enable			
Test	Resonance suppression control frequency [Hz]	1000			
🚯 Test I/O	Resonance suppression control gain	0	•		
[	< [		•		

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



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

Option			<b>—</b> ×
Communication parame	ter		
When communication	ation time-out errors are	frequent, please check it.	
When a motor sto	ps without intending duri	ing motor driving, please (	check it.
Monitor update inter Short	val Rather short	Standard	Long
	I	Ó	
Warning for writing da	ata.		
	user name .		
Compare the Dri	ver user name .		
Warning for actuator	difference.		
Warn you if the a	ctuator is different when	initiating a connection.	
		ОК	Cancel

#### When writing data

When writing data, if the user name is not same between the **MEXEO2** 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.

Warning	8
<u>^</u>	In checking at the time of writing, the following difference have been identified. Motor user name MEKE02 : Axis = 16 * Driver : "Axis = 0 Do you want to continue?
	<u>Y</u> es <u>N</u> o

# 14 Troubleshooting

## 14.1 Checking error message

If the **MEXEO2** 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.

Error [188C1600 : 0C0411AF]	Error [188C1600 : 0C0411AF]  Reading failed. A communication timeout error occurred. Check the below. The communication cable is not connected. The communication Dis not cornect at the port to which the communication cable is connected. The communication Dis not correct The communication cable in not connected correctly.  Measures Measures Check the connection, check if there is an influence of noise.		
Reading failed. A communication timeout error occurred. The oriver power is not turned on. The communication port setting does not match the port to which the communication cable is connected. The communication I is not correct! The communication cable in not connected correctly.	Reading failed. A communication timeout error occurred. Check the below. Pithe driver power is not turned on. The communication pot setting does not match the port to which the communication cable is connected. The communication D is not correct. The communication cable in not connected correctly. Measures Measures Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.	Error [188C1600:0C0411AF]	8
Measures Check the connection with the driver. When no problem was found in the  connection, check if there is an influence of noise.	Measures Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.	Reading failed. A communication timeo Check the below. The driver power is no The communication po The communication po The communication po The communication ca	ut error occurred. t turned on. ble is not connected. it setting does not match the port to which the communication cable is connected. is not correct. ble in not connected correctly. <u>OK</u>
Measures Check the connection with the driver. When no problem was found in the  connection, check if there is an influence of noise.	Measures Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.		V
Measures Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.	Measures Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.		Measures
Check the connection with the driver. When no problem was found in the  connection, check if there is an influence of noise.	Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.		Measures
L Close			Check the connection with the driver. When no problem was found in the connection, check if there is an influence of noise.

### 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

Error	[ 042B0A80 : 0C0111B5 ]
8	Reading failed. Check the following items. Other applications are executing. There are a lot of residing applications. The processing speed of PC is insufficient.
	<u>Measures &gt;&gt;</u>
	<u>O</u> K

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].

Option			×
Communication parame	ster		
General			
When communic	ation time-out errors are	frequent, please check it.	
/hen a motor sto	ops without intending dur	ing motor driving, please (	check it.
- Monitor update inte	rval Rather short	Standard	Long
Shore	Natilei short	Standard	Long
		0	
Warning for writing d Compare the mol Compare the driv Warning for actuator Warn you if the a	ata. tor user name. ver user name. difference. ctuator is different when	initiating a connection.	
		ОК	Cancel

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 <b>MEXE02</b> 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	<ul> <li>Take the measures 1 and 2 above.</li> <li>Refer to p.12 and check that your PC satisfies the system requirements.</li> </ul>

#### 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.

WEXE02 - [Untitled1*]			
👻 File Edit Move View Communication Tool Window Help			
🎦 💣 🔚   🌺   🖿 🛍	96	Device information	
- AR StoredData [DC]	Operation da	Teaching, remote operation	
Data		Status,I/O monitor	
⊡Parameter	#0	Internal I/O monitor	
I/O	#1	<u>A</u> larm monitor	
Motor	#2	War <u>n</u> ing monitor	
Operation	#3	RS-485 <u>c</u> om. monitor	
- Alam	#4	Waveform monitor	
Warning	#5	Test I/ <u>O</u>	
Coordinates	#6		
I/O function(Input)	#7	Import waveform favorites	
I/O function(Output)	#8	Export waveform favorites	
I/O function(RS-485)	#9	Option	

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

Communication parameter General Communication time-out errors are frequent, please check it. Communication time-out errors are frequent, please check it. Communication time-out errors are frequent, please check it. Monitor update interval Short Rather short Standard Long Compare the interval Compare the "Motor user name". Compare the "Driver user n	ption			<u> </u>
General	Communication para	meter		
Warning for actuator difference.   Warn you if the actuator is different when initiating a connection.	General			
When a motor stops without intending during motor driving, please check it.         Monitor update interval         Short       Rather short         Standard       Long	when commun	ication time-out errors are	frequent, please check it.	
Worken a motor stops without intending during motor driving, please check it.         Monitor update interval         Short       Rather short         Standard       Long         .       .				a ha a ha in
Monitor update interval       Standard       Long         Short       Rather short       Standard       Long         '       '       '       '         Warning for writing data.       Compare the "Motor user name".       '       '         Compare the "Driver user name".       Compare the "Driver user name".       '         Warning for actuator difference.       Warn you if the actuator is different when initiating a connection.	vvnen a motor	stops without intending dur	ing motor driving, please	Check It.
Warning for writing data.       Compare the "Motor user name".       Compare the "Driver user name".       Warning for actuator difference.       Warn you if the actuator is different when initiating a connection.	Monitor update in Short	Rather short	Standard	Long
Warning for writing data.  Compare the "Motor user name".  Compare the "Driver user name".  Warning for actuator difference.  Warn you if the actuator is different when initiating a connection.  Cancel	- Short	Hauler short	Standard	Long
Warning for writing data.  Compare the "Motor user name".  Compare the "Driver user name".  Warning for actuator difference.  Warn you if the actuator is different when initiating a connection.  Cancel			0	
Warning for writing data.  Compare the "Motor user name". Compare the "Driver user name". Warning for actuator difference. Warn you if the actuator is different when initiating a connection. Cancel				
Warning for writing data.  Compare the "Motor user name".  Compare the "Driver user name".  Warning for actuator difference.  Warn you if the actuator is different when initiating a connection.  Cancel	147 · 7 · 11			
Compare the "Motor user name".  Compare the "Driver user name".  Warning for actuator difference.  Warn you if the actuator is different when initiating a connection.  Cancel	Varning for writing	j data.		
Compare the "Driver user name".  Warning for actuator difference.  Warn you if the actuator is different when initiating a connection.  OK Cancel	Compare the "	Motor user name".		
Warning for actuator difference.	Compare the "	Driver user name".		
Warning for actuator difference.				
Warn you if the actuator is different when initiating a connection.	Warning for actual	tor difference.		
	Warn you if the	actuator is different when	initiating a connection	
OK Cancel				
OK Cancel				
			ОК	Cancel

#### 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

Error [19	9871616 : 198416A8 ] 🛛 🛛 🕅
8	Online failed. Other window is communicating.
	<u><u>O</u>K</u>

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.



## Editing cannot perform in communication

If it is, click the [Offline] icon in the toolbar to clear the

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

Error [08	2110B0 ] 🛛 🕅 🕅
$\bigotimes$	Could not edit during the operation. Execute it after shutting communication.
	<u>O</u> K

communication.

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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