



# **Data setting software MEXE02**

## **CRK Series Built-in Controller**

### **(RS-485 communication function)**

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## **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.

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# 1 Synchronization with the driver

In order to verify the status of a driver using the monitor function or test function, the **MEXE02** data and the driver data must be synchronized. A window to select a synchronization method will be displayed when the monitor function or test function is selected without synchronizing the data. Once synchronization is completed, the synchronization will be valid until communication with the **MEXE02** is severed or the data on the **MEXE02** is changed.

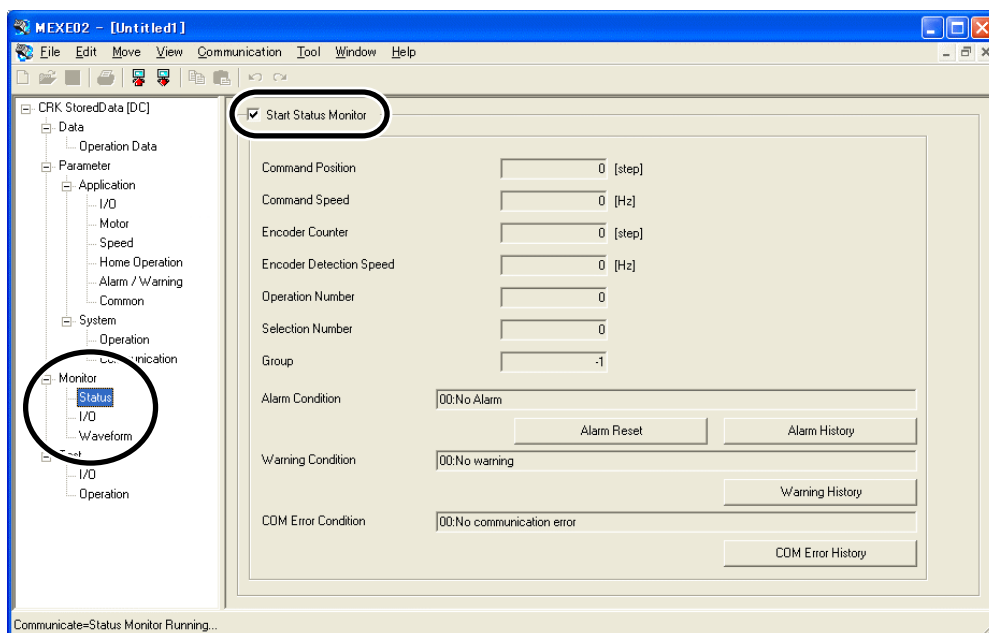
Also, when the **MEXE02** data is edited after synchronization, “Download Modified Data Only” is enabled to be selected, which allows downloading only the data that has been edited to the driver.

## Note

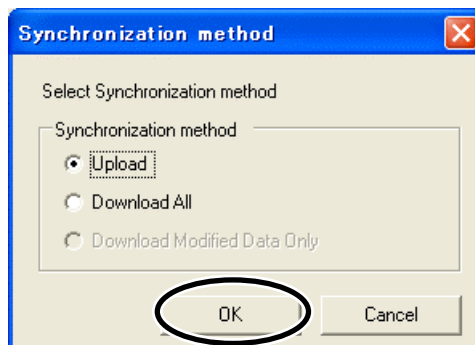
- Administrator privilege is required to use **MEXE02**.
- Once synchronization is complete, the **MEXE02** or driver data will be changed. Which data is changed depends on the synchronization method.

1. Select monitor function or test function from the window selection area.
2. Select the “Start...” check box near the center of the screen.

The figure below is an example when the status monitor is selected. Please select “Start Status Monitor” in this case.



3. Select the synchronization method.
4. Click [OK].  
The **MEXE02** data and the driver data will be synchronized.
5. Once synchronization is complete, clear the check box in Step 2 if you wish to proceed to another function.



## 2 Monitor function

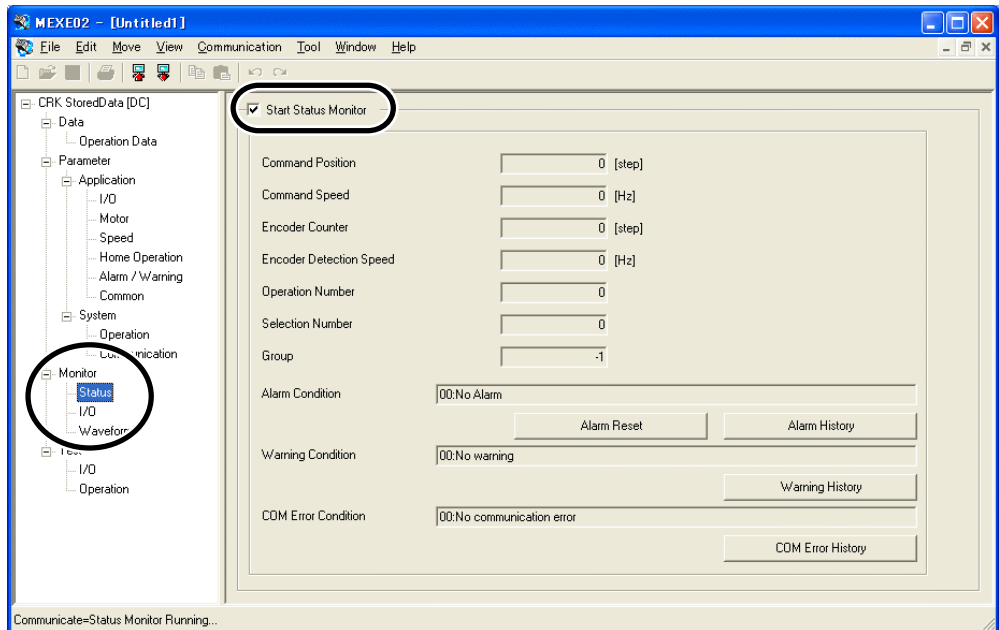
You can monitor the motor operating status, alarm condition and I/O signals. In the waveform monitor, operating speeds of motor and I/O signal switching statuses can be checked in a waveform.

**Note** Administrator privilege is required to use **MEXE02**.

### 2.1 Status monitor

You can monitor the operation status and alarm condition.

1. In the window selection area, click [Status] under [Monitor].  
The status monitor window appears.
2. Select "Start Status Monitor".  
Status monitor starts.

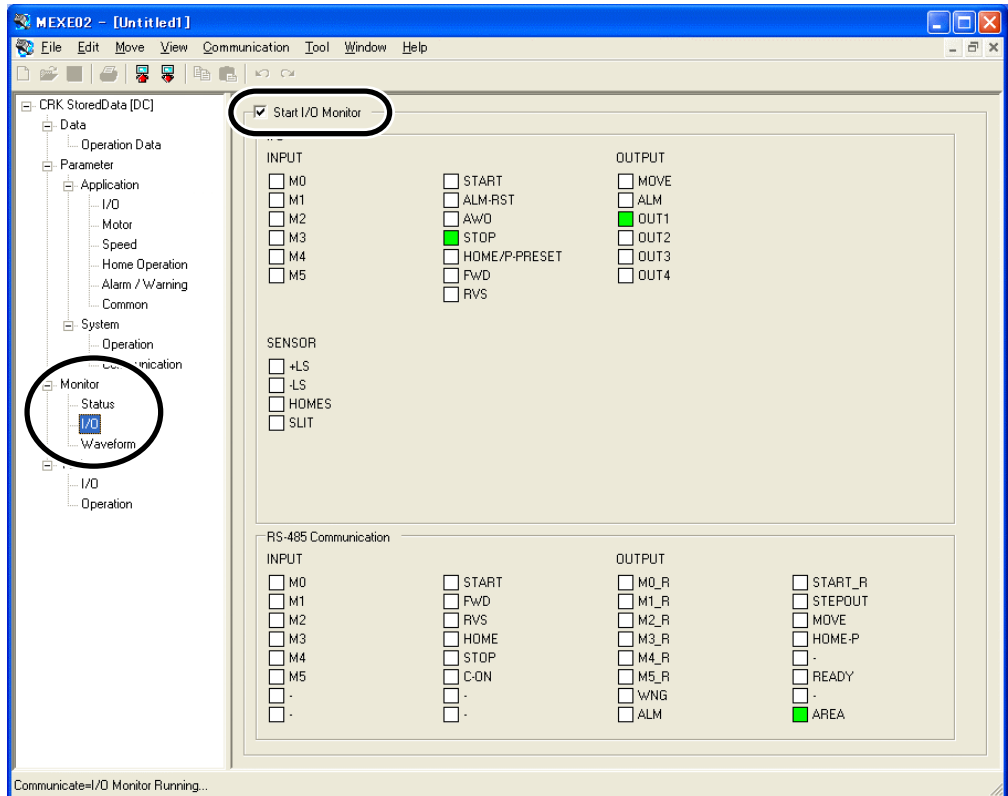


3. To end status monitor, unselect "Start Status Monitor".

## 2.2 I/O monitor

You can monitor the I/O statuses of the driver.

1. In the window selection area, click [I/O] under [Monitor].  
The I/O monitor window appears.
2. Select “Start I/O Monitor”.  
I/O monitor starts.



Each signal is shown in green if ON, and in white if OFF.

Display	Normally open I/O signal	Normally closed I/O signal
ON (green)	Conducting	Non-conducting
OFF (white)	Non-conducting	Conducting

3. To end I/O monitor, unselect “Start I/O Monitor”.

## 2.3 Waveform monitor

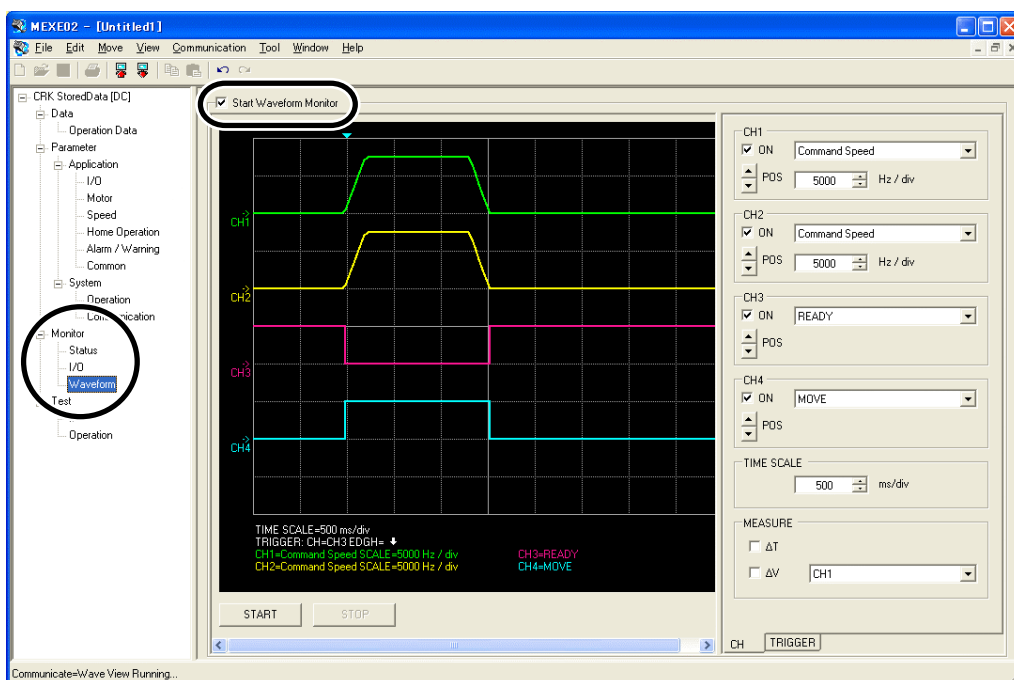
The operating speeds and I/O signal switching statuses can be checked in a waveform. Four sets of waveforms (four channels) can be shown in the window simultaneously.

1. In the window selection area, click [Waveform] under [Monitor].

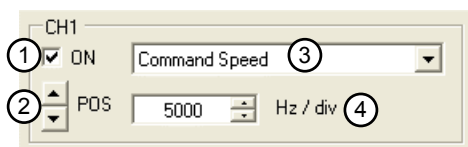
The waveform monitor window appears.

2. Select "Start Waveform Monitor".

Waveform monitor starts.



3. Set the required items for each channel.



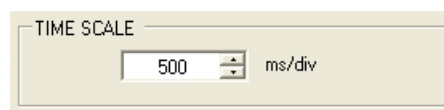
No.	Item	Description
1	ON	Selecting this check box specifies that the applicable channel will be displayed.
2	POS	Set the position in the window where you want to show the channel. ▲ : moves the channel position up ▼ : moves the channel position down.
3	Measurement item	Select the speed or signal you want to measure.
4	Measurement range	Set the scale for each tick mark on the vertical axis. (This item can be set only for CH1 and CH2.)

4. Set the time scale.

The time for each tick mark on the horizontal scale will be set.

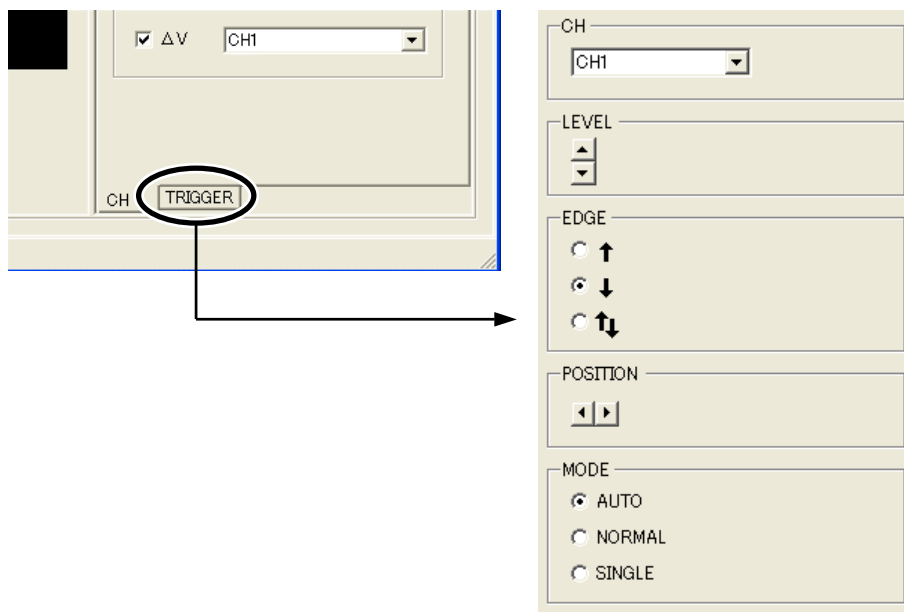
▲ : Time will become longer.

▼ : Time will become shorter.



## 5. Click on the [TRIGGER] tab on the lower right of the screen and set the triggers.

Trigger is a function for automatically measuring waveform when the motor speed or I/O signal ON/OFF status satisfies a specific condition.

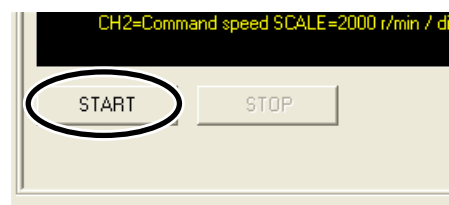


CH	Select the channel you want to set a trigger for.
LEVEL	This item is shown when you have selected CH1 or CH2 under "CH". Click the up/down arrows to set the trigger level of speed.
EDGE	Set the trigger detection condition. ↑ : For CH1 and CH2, when the value changes from a value below what is set for "LEVEL" to a value at or above what is set for "LEVEL." For CH3 and CH4, measurement will be triggered when the I/O signal status changes from OFF to ON. ↓ : For CH1 or CH2, when the value changes from a value at or above what is set for "LEVEL" to a value below what is set for "LEVEL." For CH3 and CH4, measurement will be triggered when the I/O signal status changes from ON to OFF. ↑ ↓ : This item sets both ↑ and ↓ as conditions.
POSITION	Set the trigger position in the screen. ◀ : Moves the trigger position to left. ▶ : Moves the trigger position to right.
MODE	Select when to display waveforms. AUTO: Waveforms are constantly updated until waveform measurement is stopped. NORMAL: Waveforms are updated every time a trigger is detected. SINGLE: Waveforms are updated when a trigger is detected, after which waveform monitor will end automatically.

## 6. Click [START].

Waveform measurement starts.

## 7. Click [STOP] to stop the measurement.

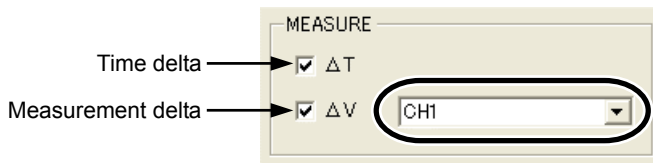


## ■ Measurement function

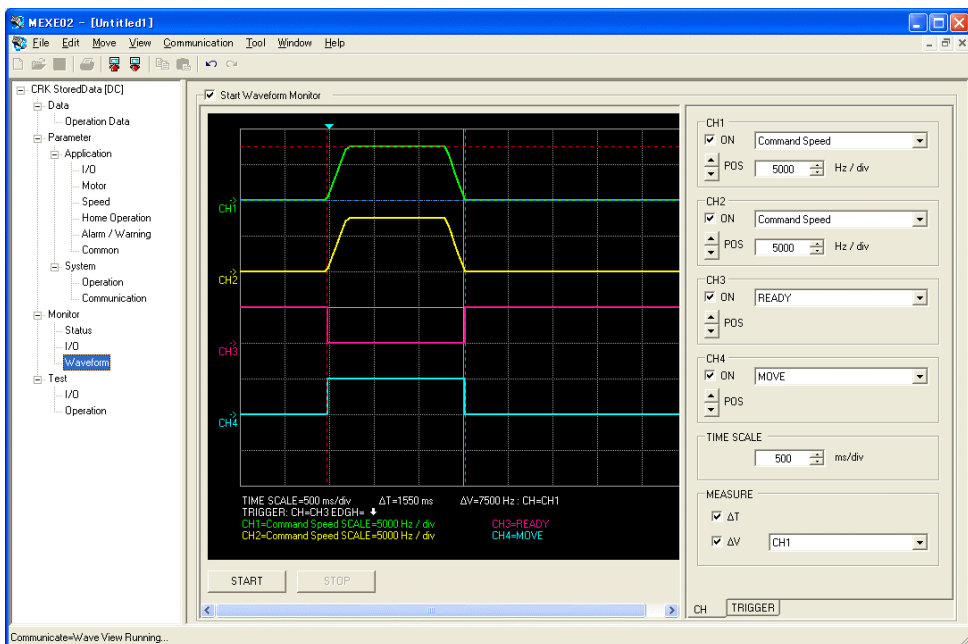
You can measure the time delta and measurement delta in the window based on measurement results. The time delta indicates the difference between T1 and T2, while the measurement delta indicates the difference between V1 and V2.

This function is useful when you wish to verify the time or space in between signals when the I/O time is ON or to verify the difference between the measured value of the items selected for CH1 and CH2.

1. Under “MEASURE” on the right side of the window, select the channel you want to measure.



2. To measure the time delta, select “ΔT.” To measure the measurement delta, select “ΔV”. If ΔT has been selected, two vertical lines appear. If ΔV has been selected, two horizontal lines appear. The red line shows the T1 time or V1 measurement. The blue line shows the T2 time or V2 measurement.



3. Drag the vertical or horizontal lines with the mouse to desired measurement positions. The time delta or measurement delta is shown below the graph.

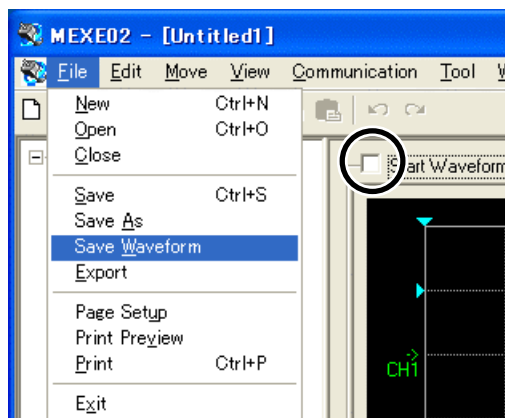
TIME SCALE=500 ms/div    ΔT=1550 ms    ΔV=7500 Hz : CH=CH1  
 TRIGGER: CH=CH3 EDGH= ↓  
 CH1=Command Speed SCALE=5000 Hz / div    CH3=READY  
 CH2=Command Speed SCALE=5000 Hz / div    CH4=MOVE

← Display the time delta or measurement delta

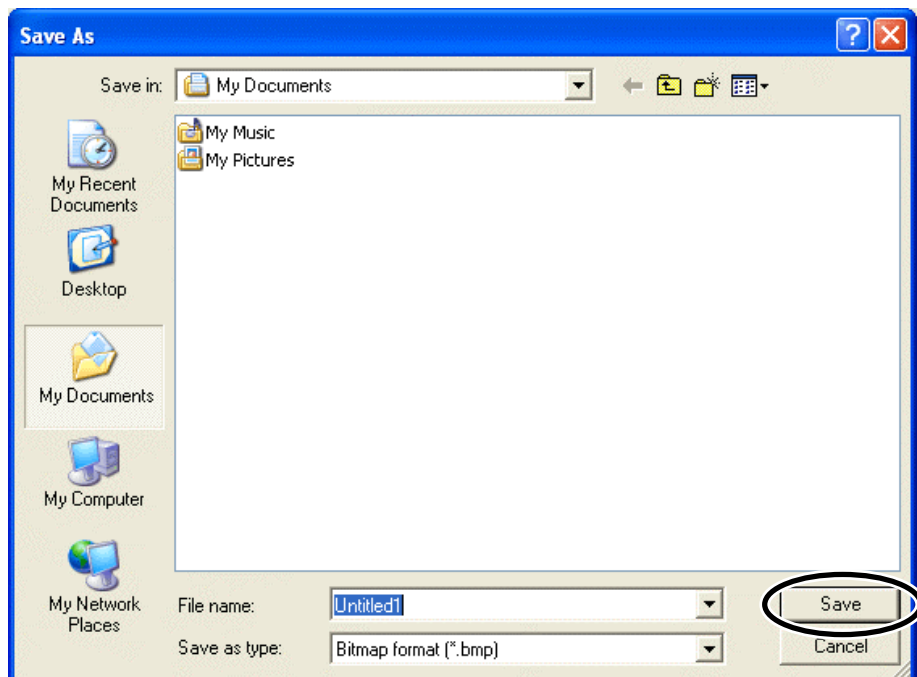
## 2.4 Saving a waveform

Saves the waveform on the waveform monitor screen as a BMP file.

1. Unselect "Start Waveform Monitor."
2. Click [Save Waveform] from the [File] menu.



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



## 3 Test function

You can perform I/O signal test and test operation.

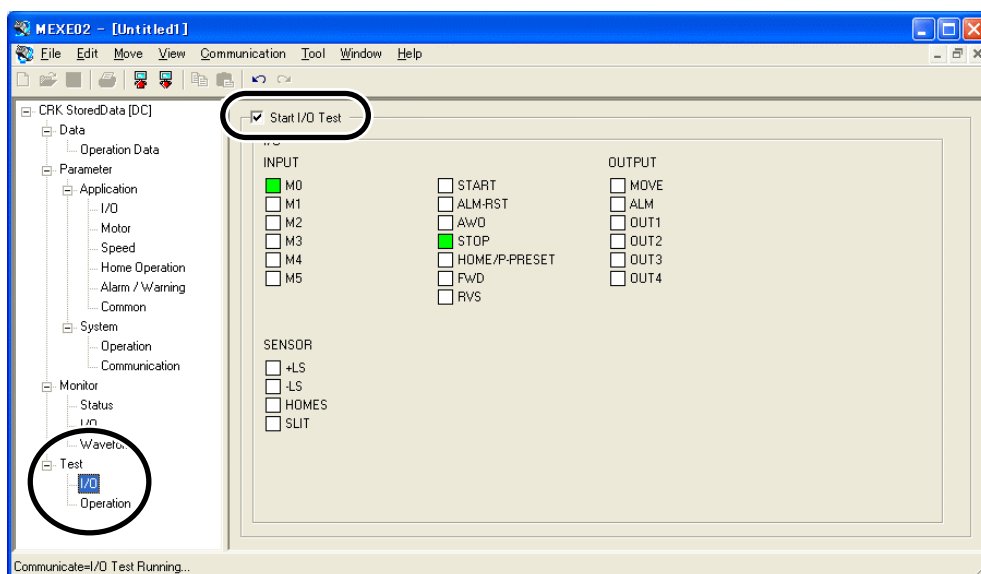
**Note** Administrator privilege is required to use **MEXE02**.

### 3.1 I/O test

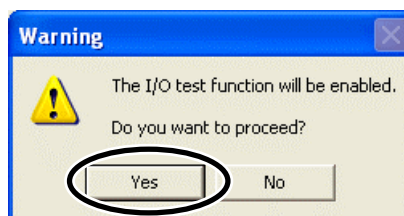
You can monitor input signals and cause output signals to forcibly output. This function is convenient if you want to check the wiring condition.

**Note** I/O signals will maintain the condition they had before the I/O test. Any changes to the I/O signal from the outside during the I/O test will be invalid.

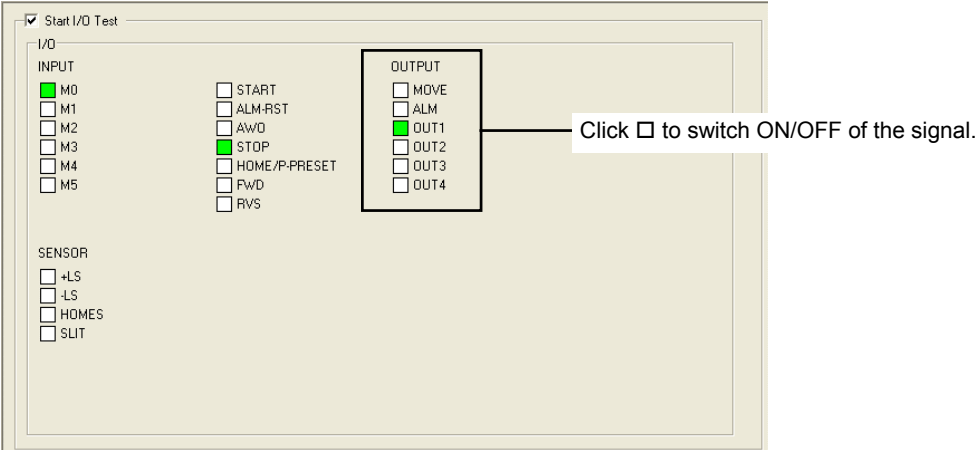
1. In the window selection area, click [I/O] under [Test].  
The I/O test window appears.
2. Select "Start I/O Test".



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



3 Test function



You can monitor the ON/OFF statuses of the signals under “INPUT”.  
For the signals under “OUTPUT”, the ON/OFF status switches every time ☐ is clicked.  
Each signal is shown in green if ON, and in white if OFF.

Display	Normally open I/O signal	Normally closed I/O signal
ON (green)	Conducting	Non-conducting
OFF (white)	Non-conducting	Conducting

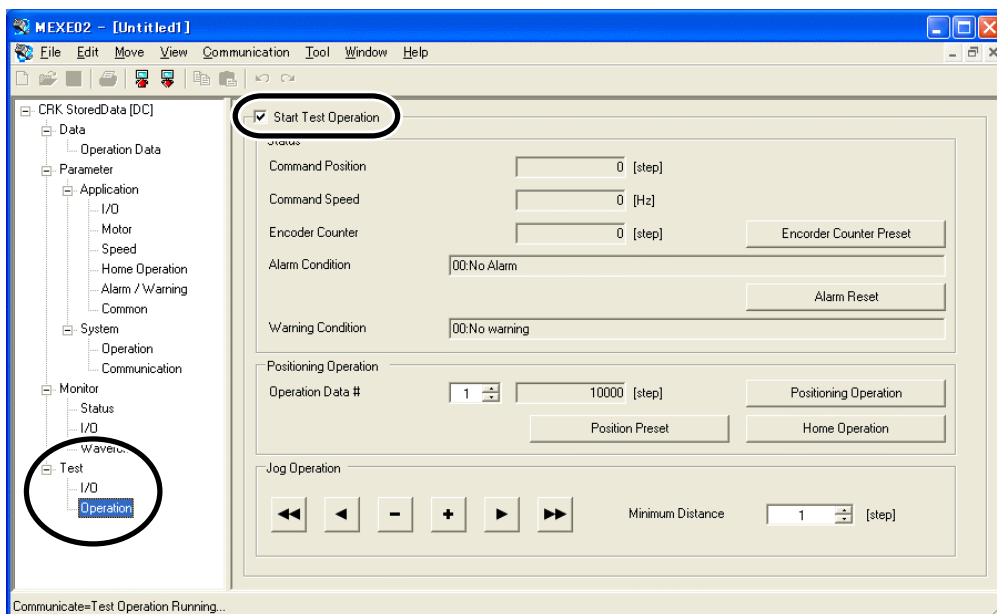
4. To end the I/O test, unselect “Start I/O Test.”  
The signals under “OUTPUT” (output signals) return to the statuses they had before the I/O test.

## 3.2 Test operation

You can operate a motor from **MEXE02**. This function lets you check how a motor will operate before actually connecting it to a host controller.

**Note** During test operation, the motor rotates at the specified operating speed while each operation button is pressed. Before commencing test operation, consider the status of the equipment and condition of its surroundings to confirm thoroughly that motor rotation will not cause any dangerous situation.

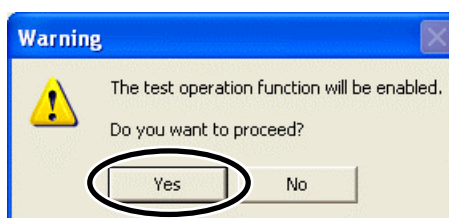
1. In the window selection area, click [Operation] under [Test].  
The test operation window appears.
2. Select "Start Test Operation".



- ◀◀ : Move the motor in the negative direction at the JOG operating speed.\*
- ◀ : Move the motor in the negative direction at one-tenth the JOG operation speed.\*
- : Move the motor in the negative direction by the minimum travel.
- + : Move the motor in the positive direction by the minimum travel.
- ▶ : Move the motor in the positive direction at one-tenth the JOG operation speed.\*
- ▶▶ : Move the motor in the positive direction at the JOG operating speed.\*

\* The unit will operate at the JOG operation startup speed if the JOG operation speed is less than the JOG operation startup speed.

3. Click [Yes].  
You can now perform test operation.



4. To end the test operation, unselect "Start Test Operation".

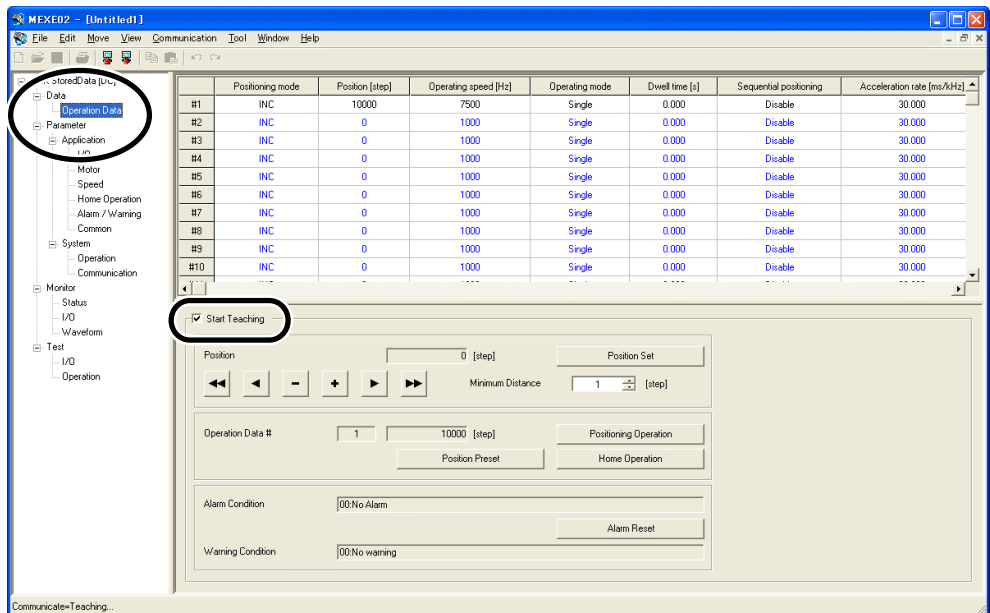
# 4 Teaching

You can perform teaching using **MEXE02**. The traveled position is reflected in the operating data. The operation mode for the position data that has been set up via teaching is the absolute mode.

## Note

- Administrator privilege is required to use **MEXE02**.
- During teaching, the motor rotates at the specified operating speed while each operation button is pressed. Before commencing teaching, consider the status of the equipment and condition of its surroundings to confirm thoroughly that motor rotation will not cause any dangerous situation.

1. In the window selection area, click [Operation Data] under [Data].
2. Select “Start Teaching”.

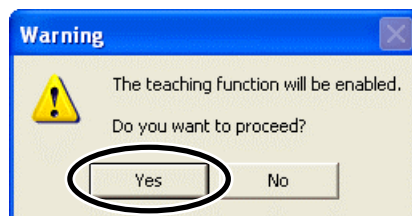


- ◀◀ : Move the motor in the negative direction at the JOG operating speed.\*
- ◀ : Move the motor in the negative direction at one-tenth the JOG operation speed.\*
- : Move the motor in the negative direction by the minimum travel.
- + : Move the motor in the positive direction by the minimum travel.
- ▶ : Move the motor in the positive direction at one-tenth the JOG operation speed.\*
- ▶▶ : Move the motor in the positive direction at the JOG operating speed.\*

\* The unit will operate at the JOG operation startup speed if the JOG operation speed is less than the JOG operation startup speed.

3. Click [Yes].

You can now perform teaching.



4. To end the teaching, unselect “Start Teaching”.

# 5 Error message list

If **MEXE02** has encountered a problem while running, a corresponding error message is shown in the window.

**Note** Administrator privilege is required to use **MEXE02**.

## ■ Error message at data editing screen

### • File operation

Error message	Cause	Action
Can not open the file. The file type is not supported.	The file format of the file specified from the file open dialog was not supported.	Select a dedicated file format for <b>MEXE02</b> . If a file error occurs using a dedicated file format for <b>MEXE02</b> , the file is corrupted.
Can not open the file. The file can not be opened. The file is being used.	Tried to open the file but it was being used by another application.	Check if the file is being used in another application.
Can not open the file. The file can not be read.	A disk error occurred in the drive with the file to be read.	Open the file again. If the same error occurs again, there is a possibility that the PC has a problem. Provide a countermeasure to ensure the PC is in normal operation.

### • File saving

Error message	Cause	Action
The file can not be saved. The file type is not supported.	The specified file format was not supported.	Select a dedicated file format for <b>MEXE02</b> . If a file error occurs using a dedicated file format for <b>MEXE02</b> , the file is corrupted.
Failed to export the file. The file type is not supported.		Select a file with CSV format. If a file error occurs using a CSV-format file, the file is corrupted.
The file can not be saved. The file can not be opened. The file is being used.	The file was being used by another application.	Check if the file is being used in another application.
Failed to export the file. The file can not be opened. The file is being used.		
The file can not be saved. The data can not be written on the file.	A disk error occurred in the destination drive.	Use a different drive or format the disk.
Failed to export the file. The data can not be written on the file.		

### • Print

Error message	Cause	Action
Failed to print. Failed to create the printing data.	Failed to create the printing data.	Use a different printer. If the same error occurs again, reinstall <b>MEXE02</b> .
Failed to open the print preview dialog. Failed to create the print data.		
Failed to open the print dialog box. No printer is installed.	There was no printer installed.	Install a printer.
Failed to open the page settings dialog. No printer is installed.		
Failed to open the print preview dialog. No printer is installed.		

## • Screen operation

Error message	Cause	Action
The screen can not be switched.	An attempt was made to switch the screen during the execution of the following function: Waveform monitor, I/O monitor, I/O test, status monitor, test operation, teaching	Stop the function, and then switch the screen.
Failed to paste. The selected range to be pasted is invalid.	Data could not be pasted because the copy range is different from the paste range.	Check the shape of the area to be copied. Select an appropriate range and paste again.
Failed to paste. Invalid data.	The data to be pasted contains invalid values.	Paste data that can be set. Select an appropriate cell and paste.

## • Teaching

Error message	Cause	Action
Can not enable the gain tuning. The model did not match.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and the series name of the driver, and perform teaching.
Can not enable the gain tuning. The upload was cancelled.	The operation was cancelled by the user.	Perform teaching again.
Can not enable the gain tuning. The download was cancelled.		
Can not enable the gain tuning. Can not download during the operation.	Download of the synchronization process was performed during the motor operation.	Stop the motor, and then perform teaching.
Can not enable the gain tuning. Can not enable the teaching.	Teaching was started during the motor operation.	
Can not enable the gain tuning. Application error has occurred. Reinstall the application.	There was an error during teaching.	Perform the teaching again. If the same error occurs again, uninstall <b>MEXE02</b> and reinstall.
Can not enable the gain tuning. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.	The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
The teaching function was disabled. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.		
An error occurred while disabling the teaching. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.		
Can not enable the gain tuning. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The teaching function was disabled. The error occurred on communication device.		
An error occurred while disabling the teaching. The error occurred on communication device.		

Error message	Cause	Action
Can not enable the gain tuning. The communication data is invalid.	There was an error in the communication data.	
The teaching function was disabled. The communication data is invalid.		
An error occurred while disabling the teaching. The communication data is invalid.		
Can not enable the gain tuning. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected.	There was no response from the driver for more than a certain period of time.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
The teaching function was disabled. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected.		
An error occurred while disabling the teaching. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected.		

## ■ Error messages related to communication

### • Upload

Error message	Cause	Action
The upload failed.	An attempt was made to upload the data during the execution of the following function: Waveform monitor, I/O monitor, I/O test, status monitor, test operation, teaching	Stop the function, and then upload.
The upload failed. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The upload failed. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.

### • Download

Error message	Cause	Action
The download failed.	An attempt was made to download the data during the execution of the following function: Waveform monitor, I/O monitor, I/O test, status monitor, test operation, teaching	Stop the function, and then download.
The download failed. The model did not match.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and download.
The download failed. Downloading of the modified data can not be executed because the data is not synchronized with the driver.	The data in the PC and the data in the driver were not synchronized.	Select "All" for the download range and perform download.
The download failed. The differences were found from the verification result. Do you want to display the result?	There was a data mismatch during the verification after downloading.	Perform the download again. If the same error occurs again, there is a possibility that the NV memory on the driver is damaged.
An error occurred during the cancellation of the download. Restore the driver.	There was a communication error.	Cycle the power of the driver.
The download failed. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The download failed. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.

### • Verification

Error message	Cause	Action
The verification failed.	An attempt was made to verify the data during the execution of the following function: Waveform monitor, I/O monitor, I/O test, status monitor, test operation, teaching	Stop the function, and then verify.
The verification failed. The model did not match.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and verify.
The verification failed. Application error has occurred. Reinstall the application.	There was an error during verification.	Perform the verification again. If the same error occurs again, uninstall <b>MEXE02</b> and reinstall.
The verification failed. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The verification failed. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.

## • Initialization

Error message	Cause	Action
The initialization failed.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and initialize.
The initialization failed.	An attempt was made to initialize the data during the execution of the following function: Waveform monitor, I/O monitor, I/O test, status monitor, test operation, teaching	Stop the function, and then initialize.
The initialization failed. Application error has occurred. Reinstall the application.	There was an error during initialization.	Perform the initialization again. If the same error occurs again, uninstall <b>MEXE02</b> and reinstall.
The initialization failed. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The initialization failed. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.

## • Identify the product

Error message	Cause	Action
Failed to identify the product.	The information of the connected product was checked during the execution of the following function: Waveform monitor, I/O monitor, I/O test, status monitor, test operation, teaching	Stop the function, and then check.
Failed to identify the product. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Failed to identify the product. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.

## ■ Error messages related to status monitor

### • Status monitor

Error message	Cause	Action
Can not enable the status monitor.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and monitor the status.
Can not enable the status monitor. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Status monitor is disabled. The error occurred on communication device.		
An error occurred while disabling the status monitor. The error occurred on communication device.		
Can not enable the status monitor. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Status monitor is disabled. The communication data is invalid.		
An error occurred while disabling the status monitor. The communication data is invalid.		

### • Alarm

Error message	Cause	Action
The alarm history can not be updated. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The alarm history can not be cleared. The error occurred on communication device.		
Failed to reset the alarm. The error occurred on communication device.		
The alarm history can not be updated. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
The alarm history can not be cleared. The communication data is invalid.		
Failed to reset the alarm. The communication data is invalid.		

### • Warning

Error message	Cause	Action
Failed to update the warning history. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Failed to clear the warning history. The error occurred on communication device.		
Failed to update the warning history. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failed to clear the warning history. The communication data is invalid.		

### • Communication error

Error message	Cause	Action
The communication error history can not be updated. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.	The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
The communication error history can not be cleared. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.		
The communication error history can not be updated. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The communication error history can not be cleared. The error occurred on communication device.		
The communication error history can not be updated. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
The communication error history can not be cleared. The communication data is invalid.		

Error message	Cause	Action
<p>The communication error history can not be updated. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>	<p>There was no response from the driver for more than a certain period of time.</p>	<p>Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.</p>
<p>The communication error history can not be cleared. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>		

## ■ Error messages related to I/O monitor

Error message	Cause	Action
Can not enable the I/O monitor.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and monitor the I/O.
Can not enable the I/O monitor. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
I/O monitor is disabled. The error occurred on communication device.		
An error occurred while disabling the I/O monitor. The error occurred on communication device.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Can not enable the I/O monitor. The communication data is invalid.		
I/O monitor is disabled. The communication data is invalid.		
An error occurred while disabling the I/O monitor. The communication data is invalid.		

## ■ Error messages related to waveform monitor

### • Waveform monitor

Error message	Cause	Action
Failed to save the waveform. The file type is not supported.	The specified file format was not supported.	Select a file with BMP format. If a file error occurs using a BMP-format file, the file is corrupted.
Failed to save the waveform. The file can not be opened. The file is being used.	The file was being used by another application.	Check if the file is being used in another application.
Failed to save the waveform. The data can not be written on the file.	A disk error occurred in the destination drive.	Use a different drive or format the disk.
Can not enable the wave monitor.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and monitor the waveform.

Error message	Cause	Action
Can not enable the wave monitor. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Wave monitor was disabled. The error occurred on communication device		
An error occurred while disabling the wave monitor. The error occurred on communication device.		
Can not enable the wave monitor. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Wave monitor was disabled. The communication data is invalid.		
An error occurred while disabling the wave monitor. The communication data is invalid.		

#### • Waveform measurement

Error message	Cause	Action
The waveform measurement can not be started. Invalid trigger channel.	The selected channel in the trigger CH was set to "not displayed."	Display the CH before performing waveform measurement.
The waveform measurement can not be started. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Failure of wave measurement. The error occurred on communication device.		
The waveform measurement can not be started. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failure of wave measurement. The communication data is invalid.		

### ■ Error messages related to I/O test

Error message	Cause	Action
Can not enable the I/O test.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and test the I/O.
Can not enable the I/O test. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The I/O test function was disabled. The error occurred on communication device.		
An error occurred while disabling the I/O test. The error occurred on communication device.		
Failure of test output. The error occurred on communication device.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Can not enable the I/O test. The communication data is invalid.		
The I/O test function was disabled. The communication data is invalid.		
An error occurred while disabling the I/O test. The communication data is invalid.		
Failure of test output. The communication data is invalid.		

## ■ Error messages related to test operation

### • Start test operation

Error message	Cause	Action
Can not enable the test operation.	The series name selected in <b>MEXE02</b> and the series name of the driver didn't match.	Make sure it matches with the series name selected in <b>MEXE02</b> and perform test operation.
Can not enable the test operation. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
The test operation function was disabled. The error occurred on communication device.		
An error occurred while disabling the test operation. The error occurred on communication device.		
Can not enable the test operation. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
The test operation function was disabled. The communication data is invalid.		
An error occurred while disabling the test operation. The communication data is invalid.		

### • Encoder counter preset

Error message	Cause	Action
Failure of encoder counter preset. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.	The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
Failure of encoder counter preset. Check the following items. · Alarm is on	The alarm was on.	Remove the cause of the alarm, and then perform the operation.
Failure of encoder counter preset. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Failure of encoder counter preset. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failure of encoder counter preset. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected	There was no response from the driver for more than a certain period of time.	

## • JOG operation (+direction)

Error message	Cause	Action
Failure of high speed operation in +direction. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.	The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
Failure of low speed operation in +direction. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.		
Failure of minimum distance operation in +direction. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.		
Failure of high speed operation in +direction. Check the following items. · Current is not set to on. · STOP is set to on. · Alarm is on.	The operation was performed when the alarm was on or the current is not set to on.	<ul style="list-style-type: none"> <li>• Remove the cause of the alarm if the alarm is on, and then perform the operation.</li> <li>• If STOP is set to on, set it to off.</li> <li>• Set the current to on if it is not set to on, and then perform the operation.</li> </ul>
Failure of low speed operation in +direction. Check the following items. · Current is not set to on. · STOP is set to on. · Alarm is on.		
Failure of minimum distance operation in +direction. Check the following items. · Current is not set to on. · STOP is set to on. · Alarm is on.		
Failure of high speed operation in +direction. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Failure of low speed operation in +direction. The error occurred on communication device.		
Failure of minimum distance operation in +direction. The error occurred on communication device.		
Failure of 1 pulse operation in +direction. The error occurred on communication device.		
Failure of high speed operation in +direction. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failure of low speed operation in +direction. The communication data is invalid.		
Failure of minimum distance operation in +direction. The communication data is invalid.		
Failure of 1 pulse operation in +direction. The communication data is invalid.		

Error message	Cause	Action
<p>Failure of high speed operation in +direction. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>	<p>There was no response from the driver for more than a certain period of time.</p>	<p>Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.</p>
<p>Failure of low speed operation in +direction. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>		
<p>Failure of minimum distance operation in +direction. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>		

• JOG operation (–direction)

Error message	Cause	Action
<p>Failure of high speed operation in –direction. Fail to open the communication port. Check the possible causes listed below.</p> <ul style="list-style-type: none"> <li>· Wrong communication setting is used.</li> <li>· It is used by other applications.</li> </ul>	<p>The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.</p>	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
<p>Failure of low speed operation in –direction. Fail to open the communication port. Check the possible causes listed below.</p> <ul style="list-style-type: none"> <li>· Wrong communication setting is used.</li> <li>· It is used by other applications.</li> </ul>		
<p>Failure of minimum distance operation in –direction. Fail to open the communication port. Check the possible causes listed below.</p> <ul style="list-style-type: none"> <li>· Wrong communication setting is used.</li> <li>· It is used by other applications.</li> </ul>		

## 5 Error message list

Error message	Cause	Action
<p>Failure of high speed operation in -direction. Check the following items.</p> <p>Current is not set to on.</p> <ul style="list-style-type: none"> <li>· STOP is set to on.</li> <li>· Alarm is on.</li> </ul>	<p>The operation was performed when the alarm was on or the current is not set to on.</p>	<ul style="list-style-type: none"> <li>• Remove the cause of the alarm if the alarm is on, and then perform the operation.</li> <li>• If STOP is set to on, set it to off.</li> <li>• Set the current to on if it is not set to on, and then perform the operation.</li> </ul>
<p>Failure of low speed operation in -direction. Check the following items.</p> <p>Current is not set to on.</p> <ul style="list-style-type: none"> <li>· STOP is set to on.</li> <li>· Alarm is on.</li> </ul>		
<p>Failure of minimum distance operation in -direction. Check the following items.</p> <p>Current is not set to on.</p> <ul style="list-style-type: none"> <li>· STOP is set to on.</li> <li>· Alarm is on.</li> </ul>		
<p>Failure of high speed operation in -direction. The error occurred on communication device.</p>	<p>There was an error in the communication device.</p>	<p>Check if the communication program (dll) for Windows isn't damaged.</p>
<p>Failure of low speed operation in -direction. The error occurred on communication device.</p>		
<p>Failure of minimum distance operation in -direction. The error occurred on communication device.</p>		
<p>Failure of 1 pulse operation in -direction. The error occurred on communication device.</p>		
<p>Failed to stop Jog operation. The error occurred on communication device.</p>	<p>There was an error in the communication data.</p>	<p>Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.</p>
<p>Failure of high speed operation in -direction. The communication data is invalid.</p>		
<p>Failure of low speed operation in -direction. The communication data is invalid.</p>		
<p>Failure of minimum distance operation in -direction. The communication data is invalid.</p>		
<p>Failure of 1 pulse operation in -direction. The communication data is invalid.</p>		
<p>Failed to stop Jog operation. The communication data is invalid.</p>		

Error message	Cause	Action
<p>Failure of high speed operation in –direction. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>	<p>There was no response from the driver for more than a certain period of time.</p>	<p>Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.</p>
<p>Failure of low speed operation in –direction. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>		
<p>Failure of minimum distance operation in –direction. A communication timeout error occurred. Check the possible causes listed below:</p> <ul style="list-style-type: none"> <li>· The driver power is not turned on.</li> <li>· The communication cable is not connected.</li> <li>· The communication port setting does not match the port to which the communication cable is connected</li> </ul>		

### • Positioning operation

Error message	Cause	Action
<p>Failure of positioning. Fail to open the communication port. Check the possible causes listed below.</p> <ul style="list-style-type: none"> <li>· Wrong communication setting is used.</li> <li>· It is used by other applications.</li> </ul>	<p>The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.</p>	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
<p>Failure of positioning. Check the following items.</p> <ul style="list-style-type: none"> <li>· Current is not set to on.</li> <li>· STOP is set to on.</li> <li>· Alarm is on.</li> </ul>	<p>The operation was performed when the alarm was on or the current is not set to on.</p>	<ul style="list-style-type: none"> <li>• Remove the cause of the alarm if the alarm is on, and then perform the operation.</li> <li>• If STOP is set to on, set it to off.</li> <li>• Set the current to on if it is not set to on, and then perform the operation.</li> </ul>
<p>Failure of positioning. Check the following items.</p> <ul style="list-style-type: none"> <li>· Other applications are executing.</li> <li>· There are a lot of residing applications.</li> <li>· The processing speed of PC is insufficient.</li> </ul>	<p>The operation was performed when there was a higher load on the PC.</p>	<ul style="list-style-type: none"> <li>• End other applications.</li> <li>• End the residing applications.</li> <li>• Use a different PC.</li> </ul>
<p>Failure of positioning. Failed to stop operation.</p>	<p>There was a communication error.</p>	<p>Check if the communication program (dll) for Windows isn't damaged.</p>
<p>Failure of position preset. The error occurred on communication device.</p>	<p>There was an error in the communication device.</p>	

Error message	Cause	Action
Failure of positioning. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failure of positioning. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected	There was no response from the driver for more than a certain period of time.	

#### • Position preset

Error message	Cause	Action
Failure of position preset. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.	The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
Failure of position preset. Check the following items. · Alarm is on	The alarm was on.	Remove the cause of the alarm, and then perform the operation.
Failure of position preset. The error occurred on communication device.	There was an error in the communication device.	Check if the communication program (dll) for Windows isn't damaged.
Failure of position preset. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failure of position preset. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected	There was no response from the driver for more than a certain period of time.	

#### • Home operation

Error message	Cause	Action
Failure of home operation. Fail to open the communication port. Check the possible causes listed below. · Wrong communication setting is used. · It is used by other applications.	The communication port could not be opened because the wrong communication setting is used or it is being used by other applications.	<ul style="list-style-type: none"> <li>• Check the communication port setting.</li> <li>• Check to make sure that the communication port is not being used by other applications.</li> </ul>
Failure of home operation. Check the following items. · Current is not set to on. · STOP is set to on. · Alarm is on.	The operation was performed when the alarm was on or the current is not set to on.	<ul style="list-style-type: none"> <li>• Remove the cause of the alarm if the alarm is on, and then perform the operation.</li> <li>• If STOP is set to on, set it to off.</li> <li>• Set the current to on if it is not set to on, and then perform the operation.</li> </ul>
Failure of home operation. Check the following items. · Other applications are executing. · There are a lot of residing applications. · The processing speed of PC is insufficient.	The operation was performed when there was a higher load on the PC.	<ul style="list-style-type: none"> <li>• End other applications.</li> <li>• End the residing applications.</li> <li>• Use a different PC.</li> </ul>

Error message	Cause	Action
Failure of home operation. Failed to stop operation.	There was a communication error.	Check if the communication program (dll) for Windows isn't damaged.
Failure of home operation. The error occurred on communication device.	There was an error in the communication device.	
Failure of home operation. The communication data is invalid.	There was an error in the communication data.	Check the connection with the driver. If no problem was found for the connection, check if any effect due to noise exists.
Failure of home operation. A communication timeout error occurred. Check the possible causes listed below: · The driver power is not turned on. · The communication cable is not connected. · The communication port setting does not match the port to which the communication cable is connected	There was no response from the driver for more than a certain period of time.	

• Other error message

Error message	Cause	Action
An error occurred while executing.	The operation was performed when there was a higher load on the PC.	<ul style="list-style-type: none"> <li>• End other applications.</li> <li>• End the residing applications.</li> <li>• Use a different PC.</li> </ul>

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