No. DOC1072912-4

Operation Manual

PRODUCT NAME

Controller setting software for JXD1-M Manifold controller (*ACT-Connected setting software*)

MODEL / Series / Product Number

JXD1-M Series

SMC Corporation

Contents

1. Safety precautions 4
2. Product description 6
2.1 Product Specifications 6
3. Software and driver installation instructions 7
3.1 Before installation 7
3.2 Installation procedure 7
3.3 Uninstallation procedure 8
4. Configuration procedure 9
4.1 When connecting an actuator to the controller for the first time 9
4.2 When initialising the parameters of an actuator which is already registered in the controller 9
4.3 When changing an actuator which is already registered in the controller 9
4.4 When replacing an actuator which is already registered in the controller 9
5. Starting the ACT-Connected 10
5.1 Procedure for starting the ACT-Connected 10
5.2 Communication port selection window 11
6. Setup 12
6.1 Default parameter setting of the connected actuator 12
6.2 Pairing 18
6.2.1 Pairing ID Update 18
6.2.2 Pairing ID Reset 20
6.3 Changing registration parameters of the axis in changing the Mounting Position 22
7. Main screen 24
7.1 Main screen 24
7.2 Menu bar 24
7.3 Easy operation bar 26
7.3.1 Alarm information 27
7.4 Connections list/Tree 29
7.5 Reference window 30
8. Gateway unit screen 31
8.1 Communication Settings Tab 31
8.2 Parameter Tab 32
8.3 Register Monitor Tab 33
8.4 Information Tab 33
8.5 Alarm Tab 34
9. Actuator axis screen 35
9.1 Step Data Tab 35
9.1.1 Step Data 35

9.1.2 Step data registration procedure 36
9.1.3 Status 37
9.1.4 Trial driving 38
9.1.4.1 Teaching driving (JOG and Inching) 38
9.1.4.2 Teaching driving (JOG and Inching) method 38
9.1.4.3 Test Drive 39
9.1.4.4 Test Drive method 39
9.2 Parameter Tab 40
9.3 Waveform Monitor Tab 41
9.4 Alarm Tab 42
9.5 Maintenance Tab 43
9.6 Axis activation 44
10. Offline 45
11. Option Window 46
11.1 Basic Settings 46
11.2 Message display 47
11.3 Snapshot 47
12. Help 48
12.1 Help 48
12.2 Version Information 49
12.2.1 Product Information 49
12.2.2 License Information 50
13. Troubleshooting 51

ACT-Connected / Setting software
1. Safety precautions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of **"Caution," "Warning"** or **"Danger."** They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC)*1), and other safety regulations.

*1) ISO 4414: Pneumatic fluid power -- General rules relating to systems
ISO 4413: Hydraulic fluid power -- General rules relating to systems
IEC 60204-1: Safety of machinery -- Electrical equipment of machines (Part 1: General requirements)
ISO 10218: Manipulating industrial robots -- Safety

⚠ **Danger**	**Danger** indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
⚠ **Warning**	**Warning** indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
⚠ **Caution**	**Caution** indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

⚠Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results.

The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product.

This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly.

The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.

(1)The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.

(2)When the product is to be removed, confirm that the safety measures as mentioned above are Implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.

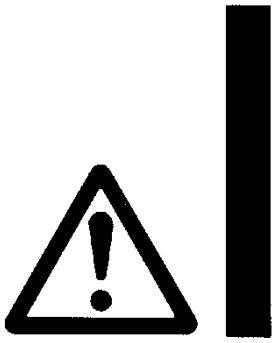
(3) Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

4. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.

(1) Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.

(2)Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalog.

(3)Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.



ACT-Connected/ Setting software
1. Safety precautions

⚠Caution

We develop, design, and manufacture our products to be used for automatic control equipment, and provide them for peaceful use in manufacturing industries.
Use in non-manufacturing industries is not covered.
Products we manufacture and sell cannot be used for the purpose of transactions or certification specified in the Measurement Act.
The new Measurement Act prohibits use of any unit other than SI units in Japan.

Disclaimer

The following “Disclaimer” shall apply when using the configuration software: ACT Controller (hereinafter referred to as “the Software”) the following “Disclaimer” shall apply.
Please read and agree to the following terms before using this software.
By storing this software on your computer, you agree to be bound by the following disclaimers.
If you do not agree to the following disclaimer, you may not use or copy this software.

"Disclaimer"

1. License Agreement
(1) You may use the Software solely for the purpose of writing data to SMC's electric actuator controllers on a non-exclusive basis in accordance with the terms of this Agreement.
(2) You may record and store the Software in your computer only when you use it for the purpose described in the preceding paragraph.

2. Prohibited items
(1) You may not reproduce the Software, except in the case of paragraph 1, (2).
(2) You may not transfer or lend the Software, in whole or in part, to any third party, whether for a fee or free of charge.
(3) You may not modify, adapt, translate, reverse engineer, or reverse compile the Software.

3. Precautions
(1) When using a product registered with this software, be sure to read the “Safety Precautions” , “Common Precautions”, “Product Specific Precautions” and “Product Specifications” described in each catalog of the product concerned.
(2) SMC reserves the right to change the contents of the Software or the specifications of the registered products without notice.

4. Immunity
SMC shall not be liable for any damages arising from the use of this software.

5. Termination of the contract
(1) This Agreement will be terminated if you breach this Agreement or if SMC deems it appropriate to terminate this Agreement.
(2) Upon termination of this Agreement, you must destroy the Software and any copies.

6. Rights related to this software
The copyright and all other rights to this software are owned by SMC and protected by copyright laws and other laws and international treaties.

2. Product description

This software is a PC setup software for the JXD1-M series (manifold controller). This manual provides instructions based on the English version of the software. Hereafter abbreviated as ACT-Connected.

The setting range and contents vary depending on the specifications of the electric actuator to be used in combination. When making settings, please refer to the operation manual and technical data of the controller and actuators. Regarding the latest information on the operation manuals, technical documents, and e-Act setup tool, you can download from SMC website.

2.1 Product Specifications

- ACT-Connected is supported by the following OS:

  Windows® 10 (64bit) (Version 1607 or higher) Resolution of 1920×1080 dpi or higher recommended.
  Windows® 11 (64bit) Resolution of 1920×1080 dpi or higher recommended.

  * The recommended display resolution is '1920×1080 dpi or higher'.
    The recommended display scale for text and other items is '100%'.

- Supported communication cables:

  Data-transferable Type-C USB cable (USB 2.0 or higher compatible)

- ACT-Connected can be downloaded from the following:

  SMC website(**https://www.smcworld.com/**)
  * Always use the latest version of the ACT-Connected setting software.
    The latest version and update information can be found on SMC website (**https://www.smcworld.com/**).

- The following controllers/drivers are supported by ACT-Connected:

  JXD1-M* series (manifold controller)

- Main functions of ACT-Connected:

  ・Set-up functions (e.g. parameter setting of connected actuators)
  ・Editing parameters of gateway units and driver units.
  ・Setting of step data for driver units.
  ・Alarms and product status checks
  ・Waveform monitor function of the connecting axis.

3. Software and driver installation instructions

3.1 Before installation

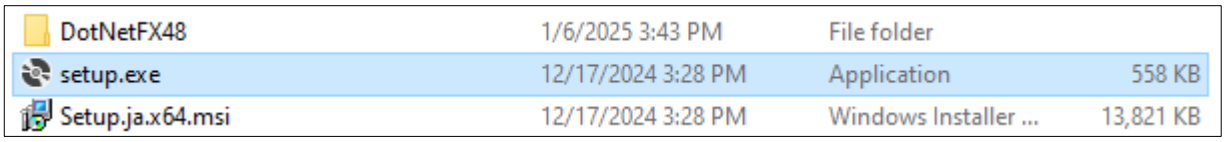
Download the installer folder for the ACT-Connected from the SMC website. Extract (unzip) the downloaded installer folder on the computer you will be using.

This installer contains ACT-Connected, Microsoft.NET Framework® 4.8, and FTDI CDM Drivers, and can be installed all at once. If your computer has Microsoft.NET Framework® 4.8 and/or FTDI CDM Drivers installed already, these will be automatically skipped and not re-installed, and ACT-Connected will be upgraded to the latest version.

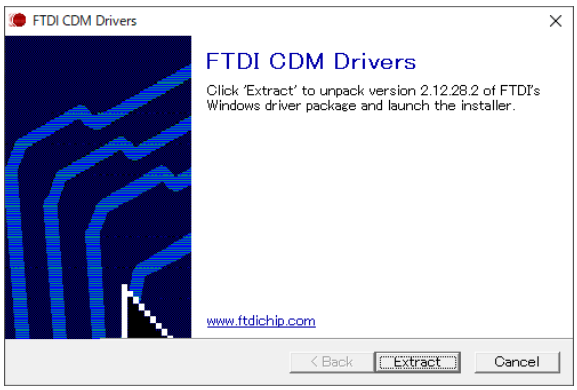
The "Application data folder" created after installation contains the product default parameter data.
Application data folder:
C:\Users\(user name)\AppData\Local\SMC_Corporation\ACT-Connected
If the version of the default parameters when ACT-Connected was installed is newer than the default parameters remaining in the folder, the default parameter data will be updated.

3.2 Installation procedure

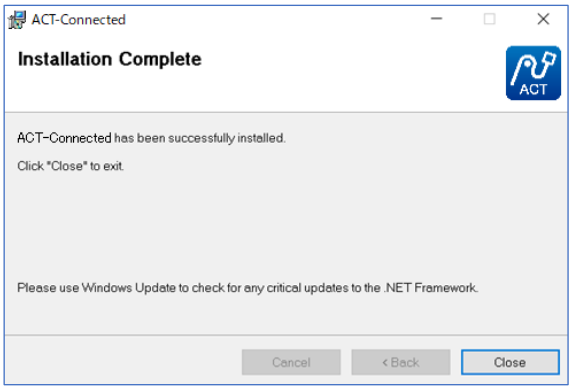
Step1: Double-click "setup.exe" in the installer folder to start the installation process.



Step2: Follow the instructions on the screen to install the software.
Note that during the installation, the following FTDI CDM Drivers confirmation window will appear. The FTDI CDM Driver is the driver for the USB cable, so please install it. If the driver has already been installed on your computer, the following procedure will be skipped automatically.

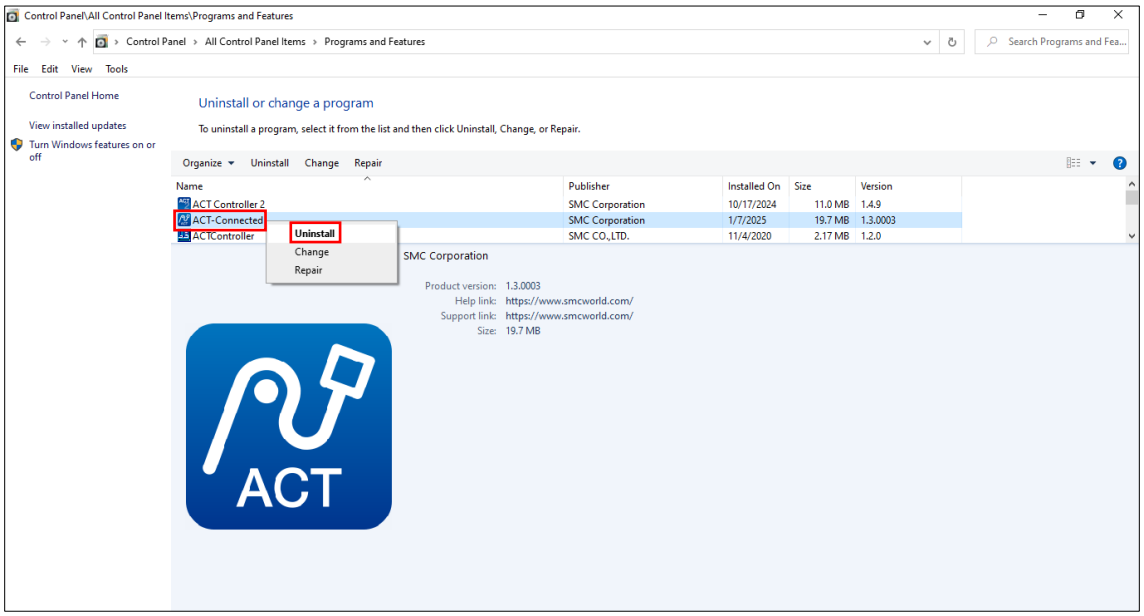


Step3: When the installation is completed correctly, the following message will be displayed. Also, the ACT-Connected icon will automatically appear on the desktop and start-up.



3.3 Uninstallation procedure

As an example, the procedure for uninstalling from the "Control Panel" is shown below.
Step 1: Type "Control Panel" in the search box on the taskbar and select from the list of results.
Step 2: Select "Programs" and then "Programs and Features".
Step 3: Right-click "ACT-Connected" and select "Uninstall".



If ACT-Connected is to be removed completely, the following folders will need to be deleted manually.

- User configuration folder:
  C:\Users\(user name)\AppData\Local\SMC_Corporation\ACT-Connected.exe_Url_□□□ *1)

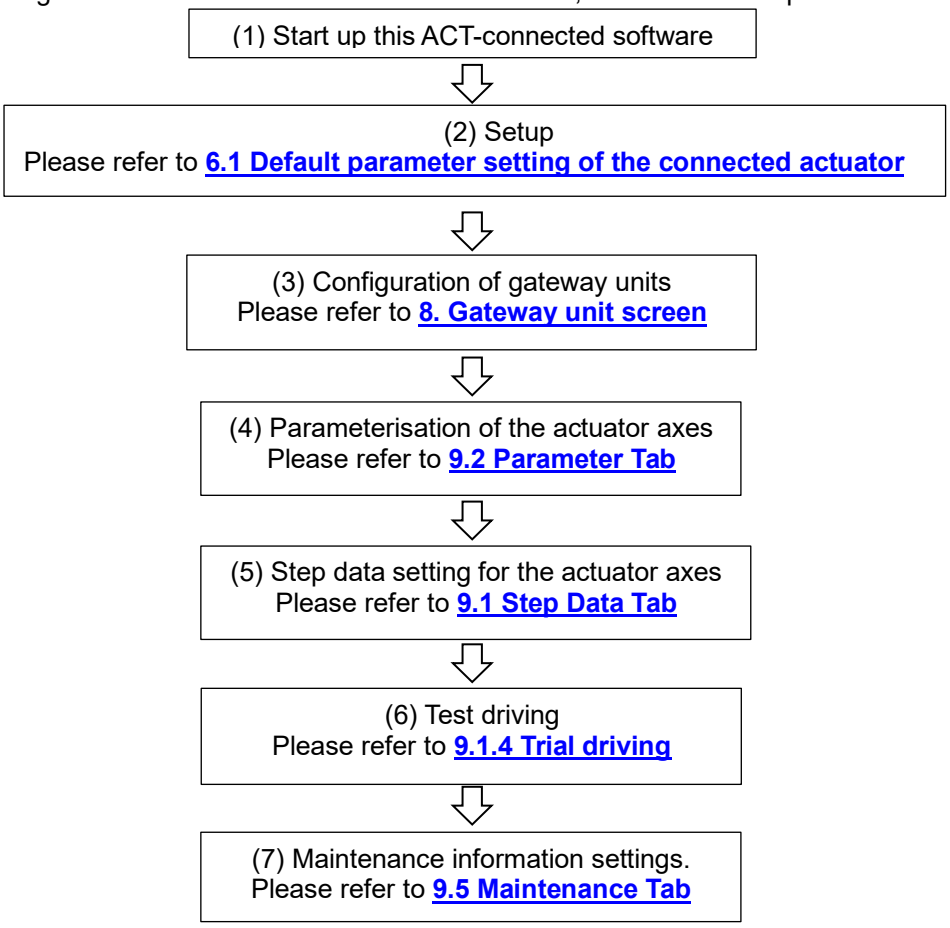
  *1) The symbols (□□□) depend on the installation folder and version of this software.

- Application data folder:
  C:\Users\(user name)\AppData\Local\SMC_Corporation\ACT-Connected

4. Configuration procedure

4.1 When connecting an actuator to the controller for the first time

When connecting an actuator to the controller for the first time, follow the below procedure for configuration.



∗1. The items (1) to (3), operation is required.
∗2: The items (4) to (7) should be operated as necessary.

4.2 When initialising the parameters of an actuator which is already registered in the controller

When initialising the parameters of an actuator which is already registered in the controller, please refer to **4.1 When connecting an actuator to the controller for the first time.**
However, be sure to set the step data, as the step data already registered in the controller will not be changed even if setup is carried out.

4.3 When changing an actuator which is already registered in the controller

When changing an actuator which is registered in the controller to a different part number one, please refer to **4.1 When connecting an actuator to the controller for the first time.**
However, be sure to set the step data, as the step data already registered in the controller will not be changed even if setup is carried out.

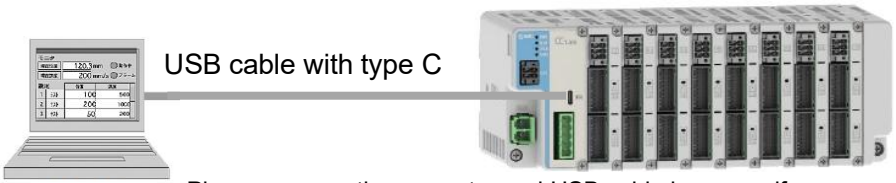
4.4 When replacing an actuator which is already registered in the controller

When replacing an actuator which is registered in the controller with an actuator of the same part number, follow **6.2.1 Pairing ID Update** to transfer the registered data (Step data and modified parameters).
If the data (Step data and modified parameters) transfer is not necessary, please follow the same procedure as shown in **4.1 When connecting an actuator to the controller for the first time.**

5. Starting the ACT-Connected

5.1 Procedure for starting the ACT-Connected

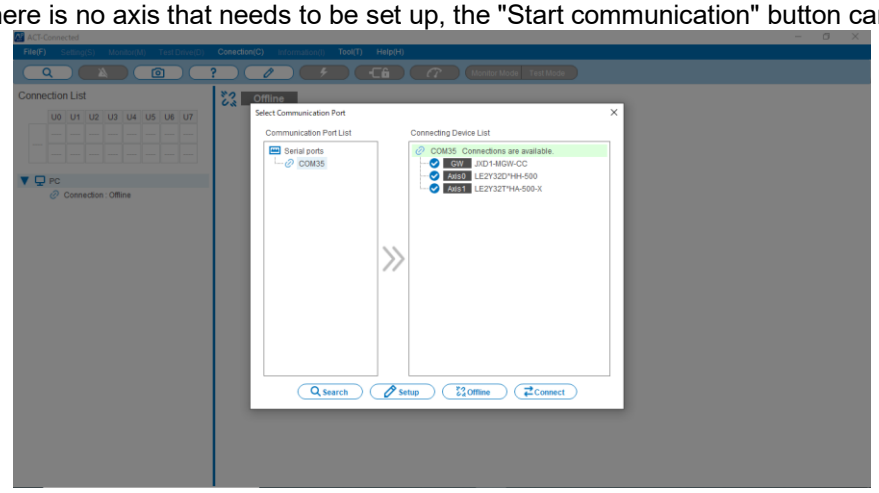
(1) Connect the controller to the PC with the Type-C USB cable while the controller is switched off as shown below.



∗Please prepare the computer and USB cable by yourself.
∗Please use a Type-C USB cable capable of data transfer.

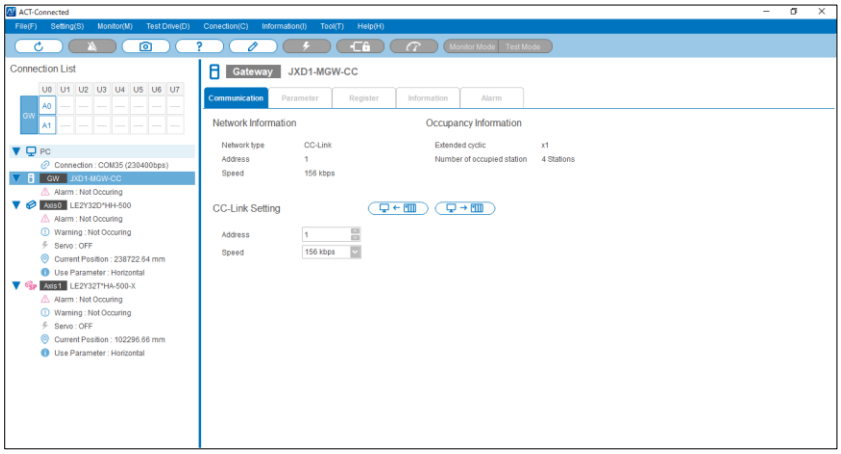
(2) Switch on the power of the controller and start the ACT-Connected software.

(3) After starting the setting software, a check of the connected actuator axes starts automatically as shown below. For details on the communication port selection window, see **5.2 Communication port selection window**. If there is no axis that needs to be set up, the "Start communication" button can be pressed.



∗If there are any axes that require setup, then the “Connect” button is disabled for selection. So be sure to perform the setup.
∗Setup is required when a new actuator is connected to the controller. Please refer to **6. Setup** for details.

(4) After pressing the "Start communication" button, the main screen appears as shown below when the check of the connection axis is completed. From then on, follow the screen display and perform the appropriate operations according to the purpose of the operation.

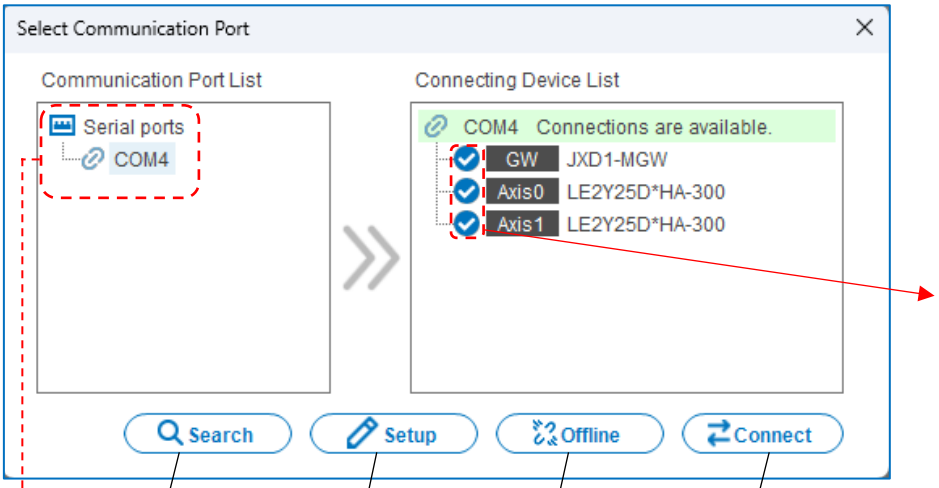


If the controller is not connected to a PC or if the controller is switched off, this configuration software will only be available in offline mode.

⚠ Caution

When using the controller for the first time, please refer to the relevant controller operation manual to install, wire, set up and operate.

5.2 Communication port selection window



Icon	Contents
	Normally connected
	Invalid axis *Please refer to **9.6 Axis activation** for settings of invalid axis.
	Parameters have not been set for axis. Or ID mismatch with registered axis. *Setup is required.
	Actuator not connected

Select when starting the connection

Select for offline to use
Please refer to **10. Offline** for details.

Select when performing the setup
Please refer to **6. Setup** for details.

Select to perform a re-search.

The available serial ports for communication are automatically searched and displayed. Please select the port number which you want to confirm and set.
If the “No connection point” is displayed, please refer to **13. Troubleshooting** to check the causes and countermeasures.

⚠ Caution

If there is at least one axis that needs to be setup, it is not possible to proceed to the main screen. Be sure to carry out the setup first.

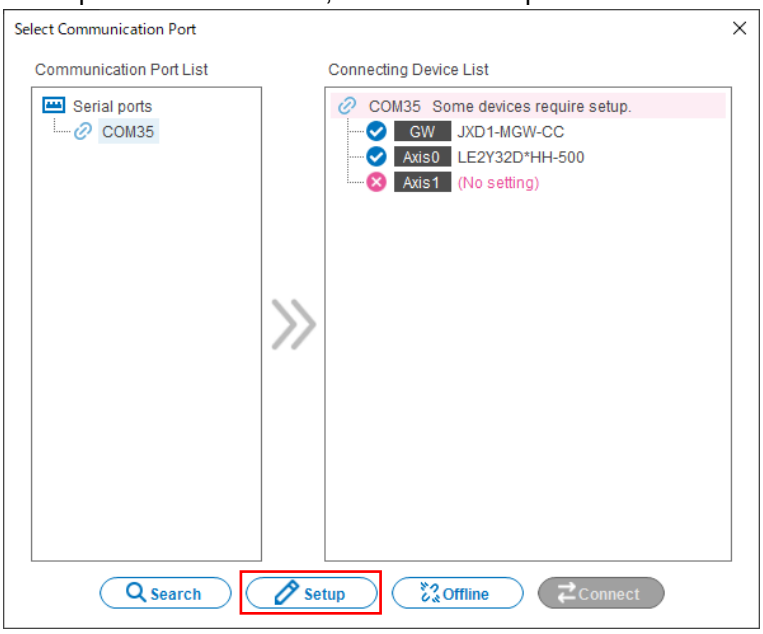
6. Setup

6.1 Default parameter setting of the connected actuator

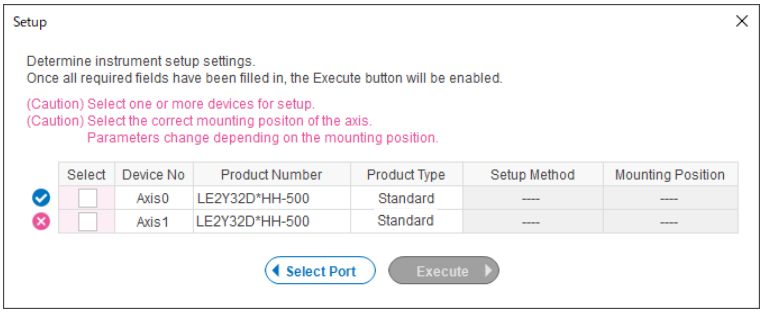
Please be sure to setup the axes when connecting the actuator to the controller for the first time or when changing the actuator registered in the controller to one with a different part number.
*The default values of the gateway unit have been set at the time of shipment, so setup is not required.

■Default parameter setting procedure:

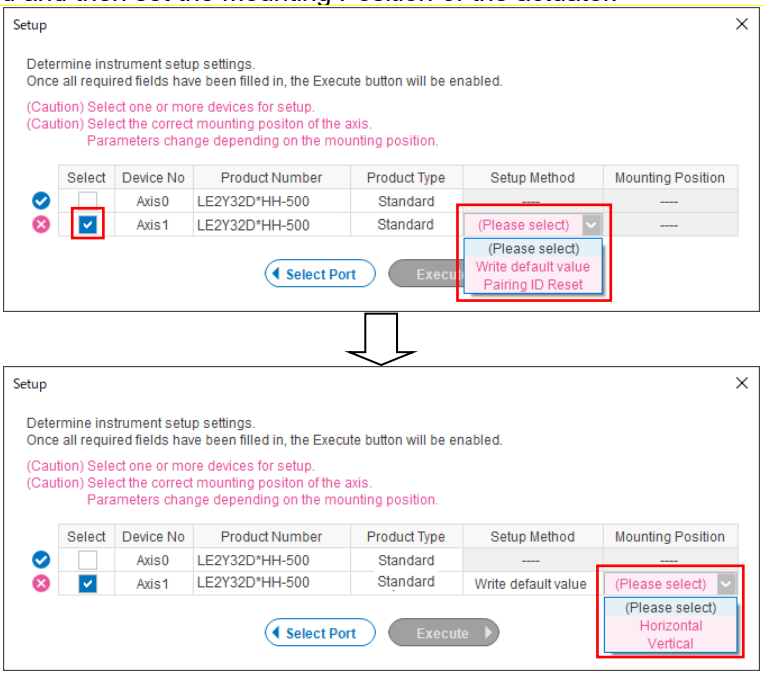
(1) In the communication port selection screen, select the ”Setup” button.



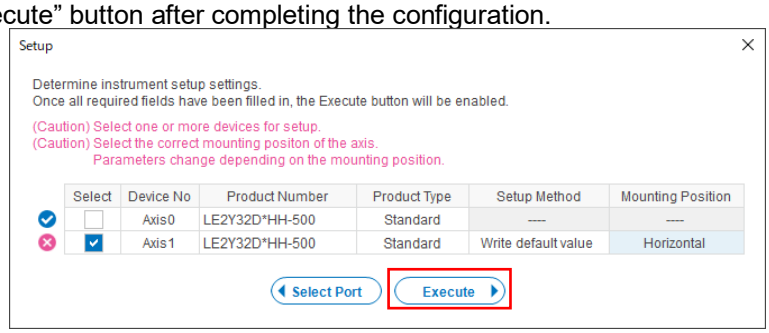
(2) Once the connection is completed, the setup window appears as shown below.



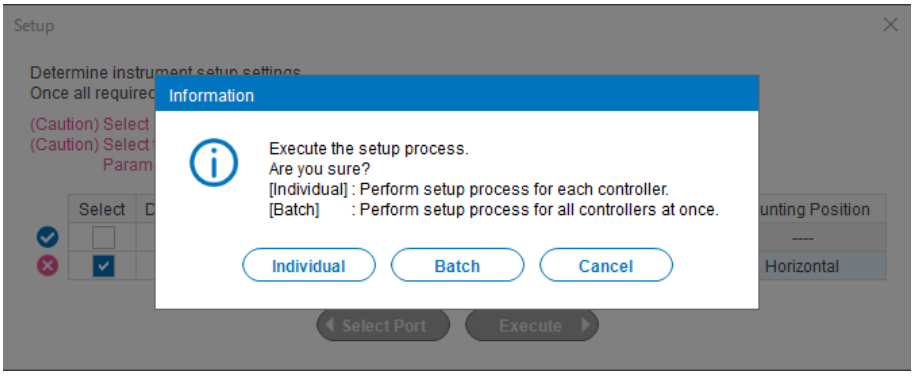
(3) Configure the setup.
Select the axis number for which the default parameter is to be set, then select “Write default value” from the Setup method and then set the Mounting Position of the actuator.



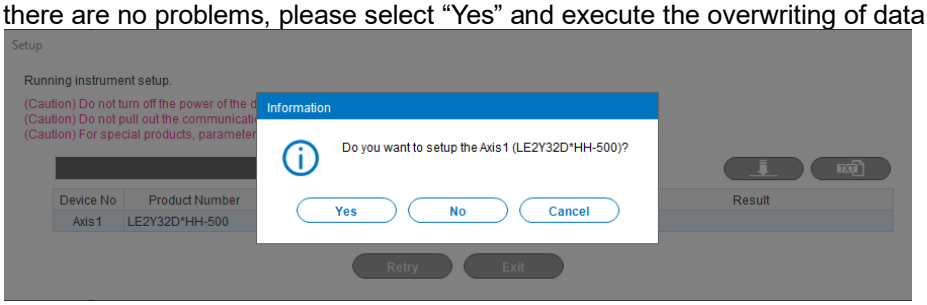
(4) Select the “Execute” button after completing the configuration.



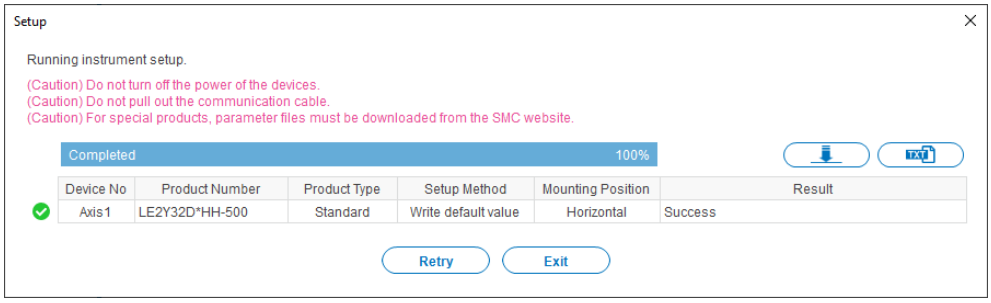
(5) After selecting the “Execute” button, a confirmation message appears as follows.
“Individual” confirms that it is OK to execute the setup for each selected axis.
“Batch” confirms that it is OK to execute the setup for all selected axes.
“Cancel" returns to the previous screen.



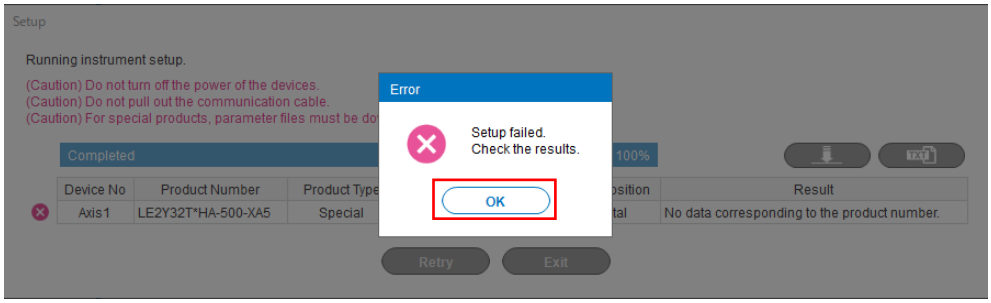
(6) A final confirmation message for the execution of the setup according to the selection made above will appear. If there are no problems, please select “Yes” and execute the overwriting of data.



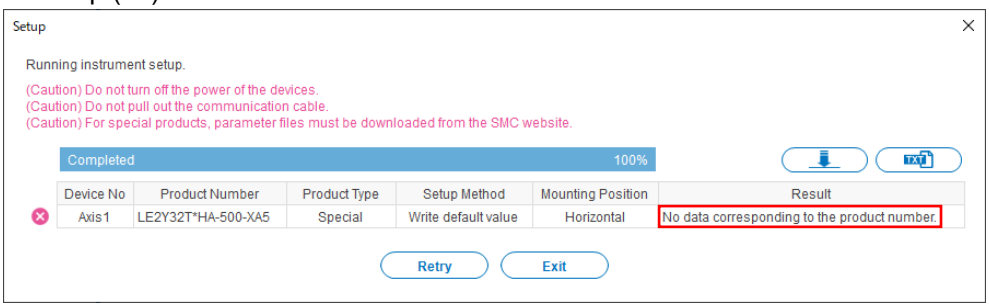
(7) After the setup is completed, the display will appear as follows.
To complete the setup, select the "Exit" button and then proceed with the settings from step (18).
If you want to do the setup again, please select the “Retry” button.



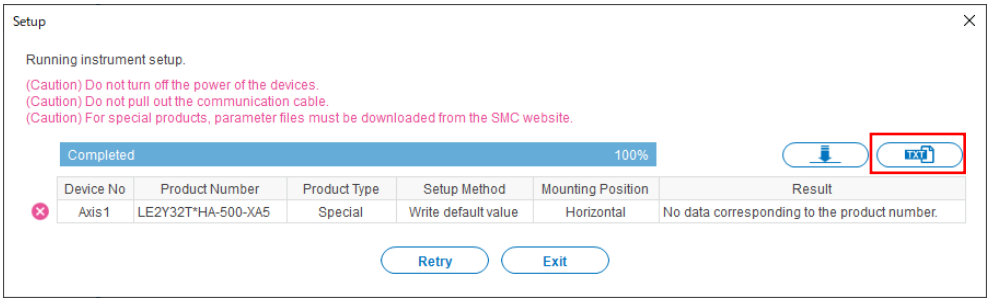
If the following error screen is displayed, select the "OK" button.



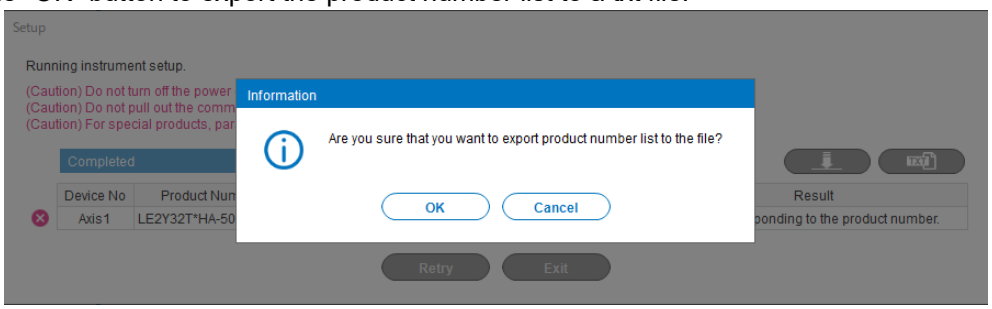
(8) If "No data corresponding to the product number." is displayed, the product information of the connected actuator is not registered in this application.
Download the product information (zip file) for the connected actuator from the SMC website (**https://www.smcworld.com/**) and register it in this application.
If the product information (zip file) has already been saved in a folder of your choice, proceed with the settings from step (12).



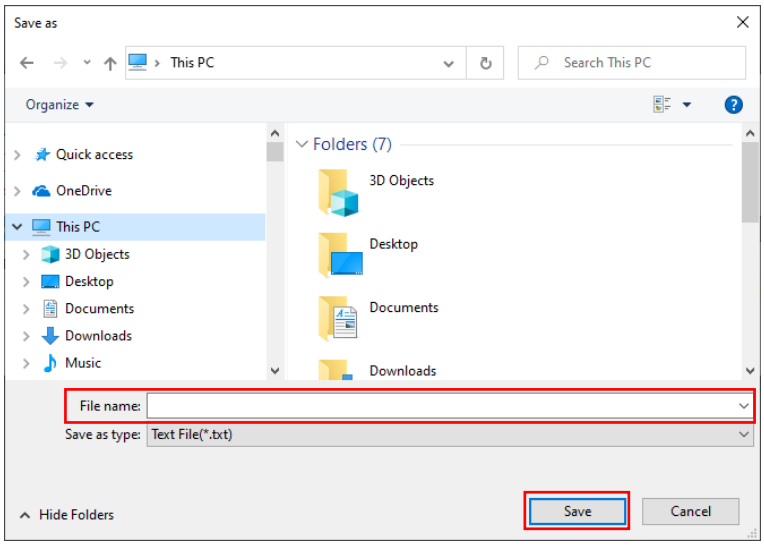
(9) Check the product number to register the product information of the connected actuator.
The "Export product number list" button outputs the product number list of all actuators currently connected to a txt file.



The following information is displayed after selecting the "Export product number list" button.
Select the "OK" button to export the product number list to a txt file.

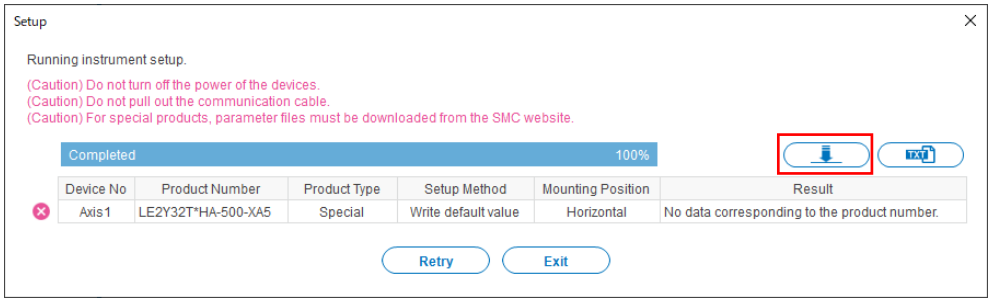


(10) On the "Save as" screen, enter a "File name" and select the "Save location", then select the "Save" button.

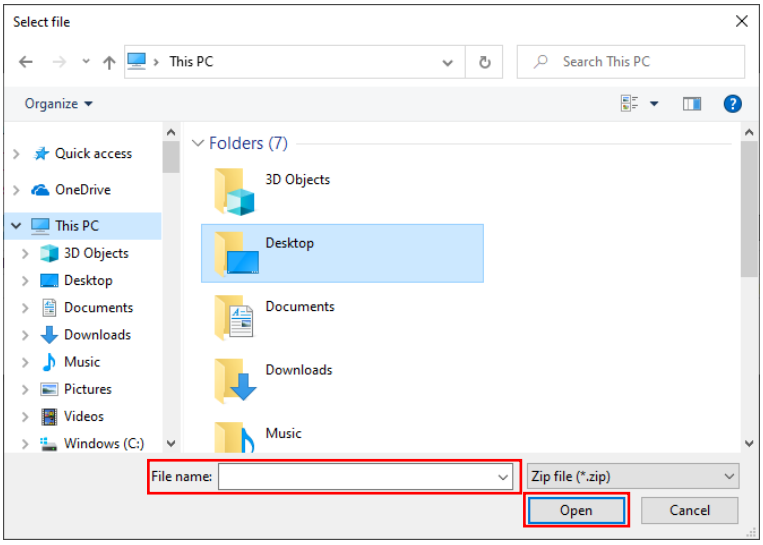


(11) Open the txt file of the part number list and check the relevant product number for the product number for which the setup window displays "No data corresponding to the product number."
Download the product information (zip file) from the SMC website for the product numbers on the confirmed product number list.

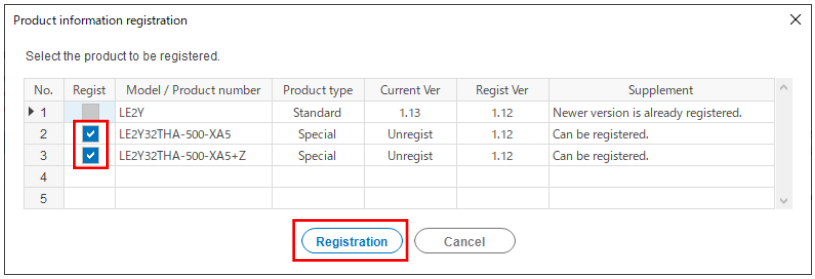
(12) Register the downloaded product information (zip file) in this application.
Select the "Product registration" button.
Select the "OK" button to register the product information.



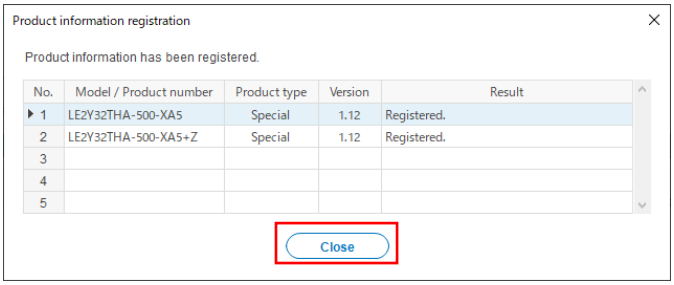
Select the product information (zip file) in the "Select file" screen and then select the "Open" button.



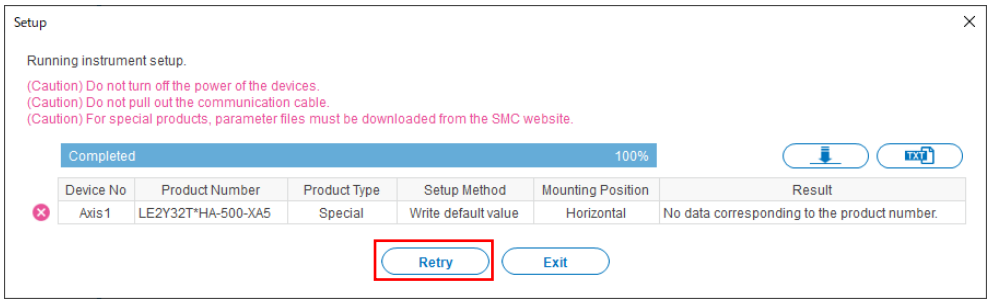
(13) The selected product information is displayed on the "Product information registration" screen.
Check the product you wish to register and select the "Registration" button.



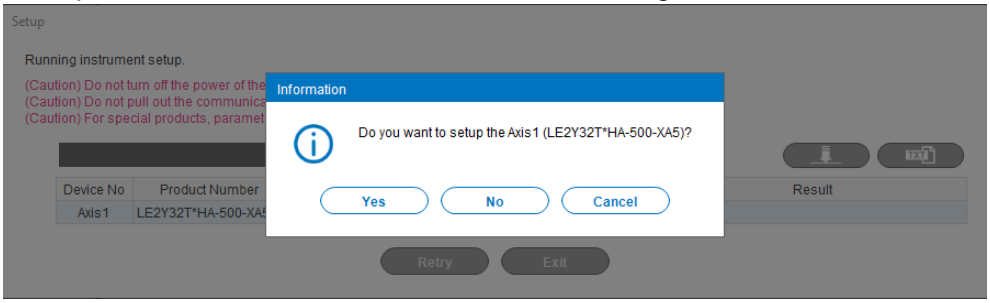
(14) The registered product information is displayed on the "Product information registration" screen.
Select the "Close" button to close the "Product information registration" screen.



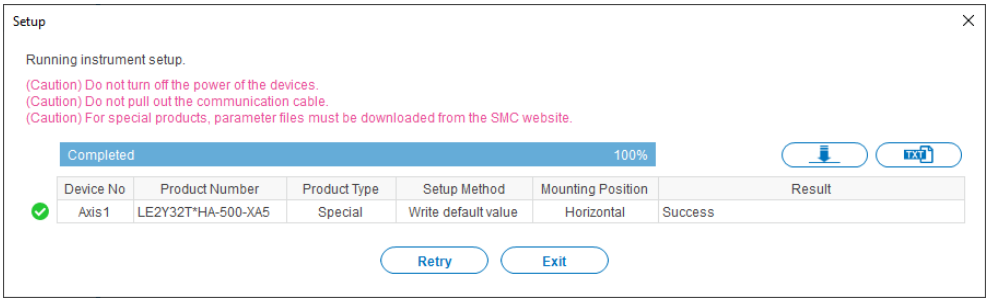
(15) Set the default parameters of the connected actuator according to the registered product information.
Select the "Retry" button.



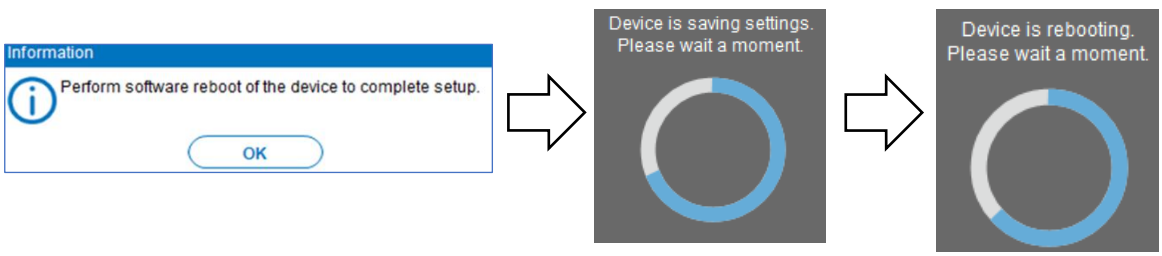
(16) A final confirmation message for the execution of the setup will appear.
If there are no problems, select “Yes” and execute the overwriting of the data.



(17) After the setup is completed, the display will appear as follows. To complete the setup, select the “Exit” button. If the setup is to be carried out again, select the “Retry” button.



(18) After selecting the “Exit” button, a message is displayed stating that the controller will reboot automatically, so select the “OK” button.
After that, the EERPROM saving symbol appears then the reboot symbol will appear as shown below.
Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed or PWR (green) on the controller LED is flashing. The data may not be written correctly.
*The operation symbols may operate for up to 60s while the EEPROM is being written.



EERROM saving symbol

Reboot symbol

⚠Caution

-Do not perform the setup while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.
-With this software Ver 1.1.0.0 or later, it is not necessary to activate the data by re-power the controller.

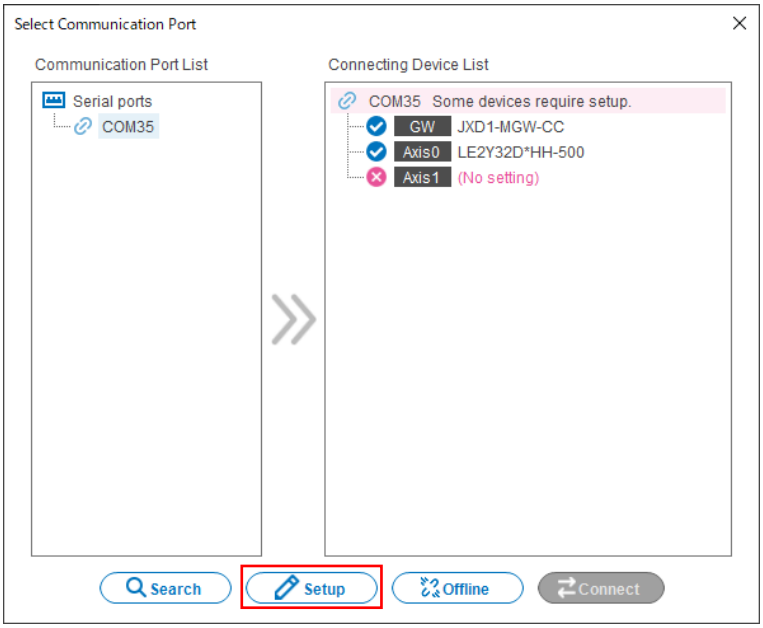
6.2 Pairing

6.2.1 Pairing ID Update

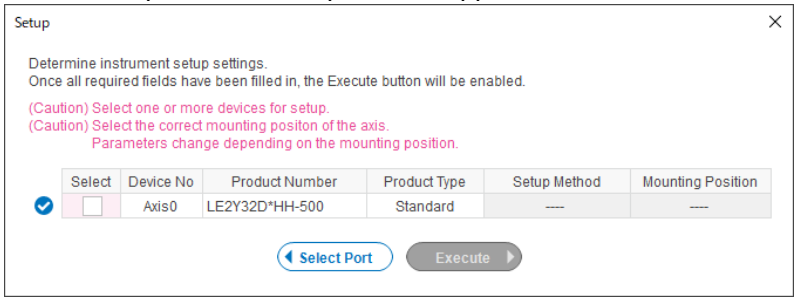
When replacing an actuator with the same model number as the actuator registered in the controller, if the same parameters and step data already registered are to be used, the pairing ID will need to be updated. If necessary, reset the maintenance of the axis and edit the step data. For more information, refer to **9.1 Step Data Tab** and **9.5 Maintenance Tab**.

■Pairing ID Update procedure:

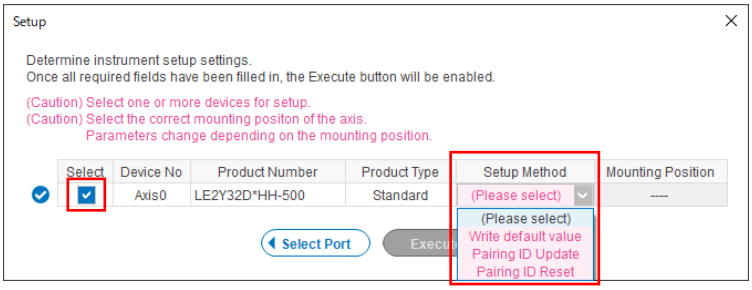
(1) On the “Select Communication Port” window, select the “Setup” button.



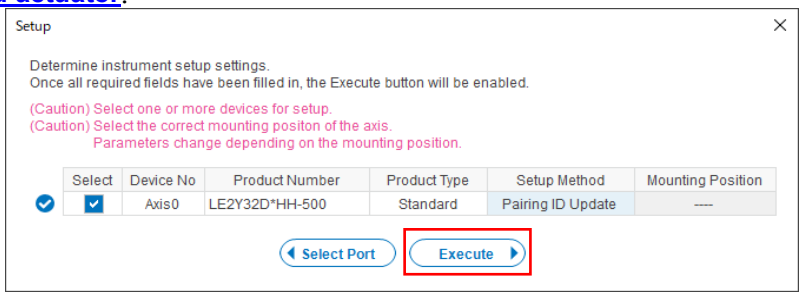
(2) Once the connection is completed, the setup window appears as shown below.



(3) Select the axis number for which the pairing ID is to be updated, then select "Pairing ID Update" from the Setup Method.



(4) Select the "Execute" button after completing the configuration.
For the procedure after selecting the “Execute” button, refer to (5) in **6.1 Default parameter setting of the connected actuator**.



⚠ Caution

-If the part number of the actuator registered in the controller and the connected actuator are different, the "Pairing ID Update" option will not be displayed in the "Setup method".
-Do not perform the setup while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.

6.2.2 Pairing ID Reset

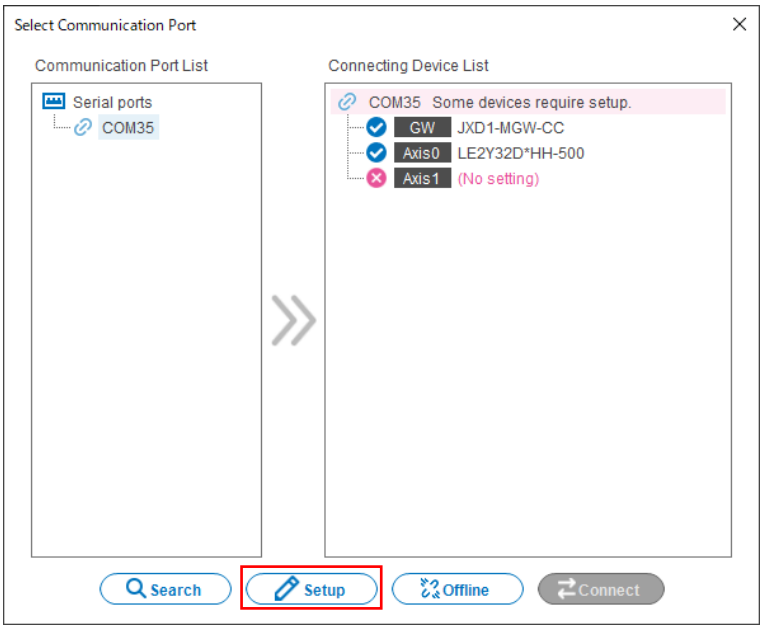
Pairing ID Reset is a function that resets the actuator information (name, product number and serial number) registered in the controller and sets the axis settings to a pseudo-unconfigured state.
If the pairing ID is reset, the product name will be "(No setting)".

However, the following data already registered will not be deleted.

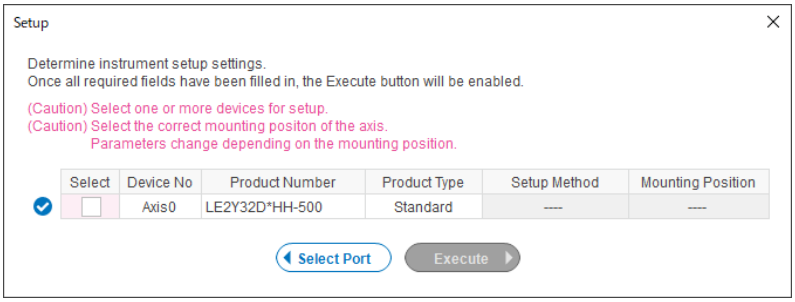
- Parameter
- Step data
- Alarm Information
- "Operating conditions" in Maintenance.

■Pairing ID Reset procedure:

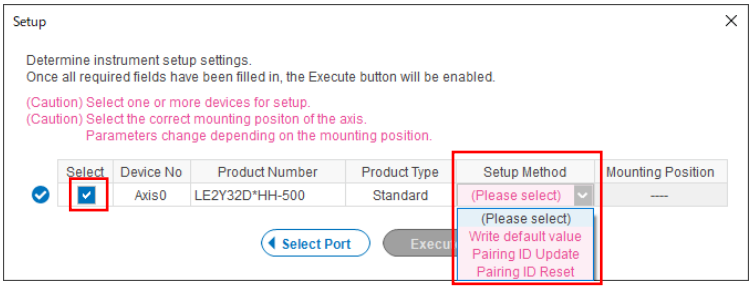
(1) On the “Select Communication Port” window, select the “Setup” button.



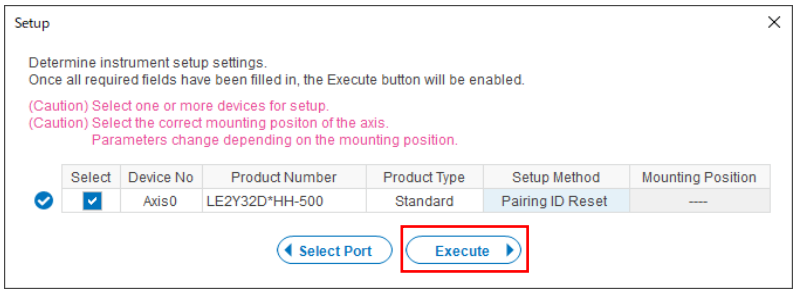
(2) Once the connection is completed, the setup window appears as shown below.



(3) Select the axis number for which the pairing ID is to be reset, select "Pairing ID Reset" from the Setup Method.



(4) Select the "Execute" button after completing the configuration. For the procedure after selecting the “Execute” button, refer to (5) in **6.1 Default parameter setting of the connected actuator**.



⚠ Caution

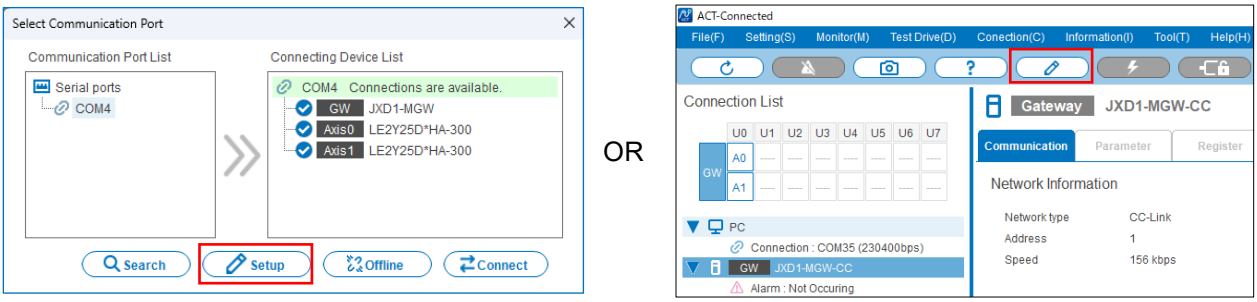
-Do not perform the setup while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.

6.3 Changing registration parameters of the axis in changing the Mounting Position

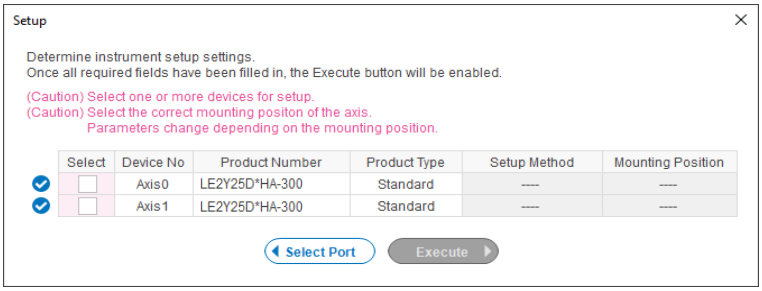
When changing the mounting position (horizontal/vertical) of the actuator, the mounting posture of the actuator parameters must be changed as well, so be sure to perform the Setup.
If necessary, please edit the step data. For details, please refer to 9.1 Step Data Tab.

■Procedure for changing the Mounting Position:

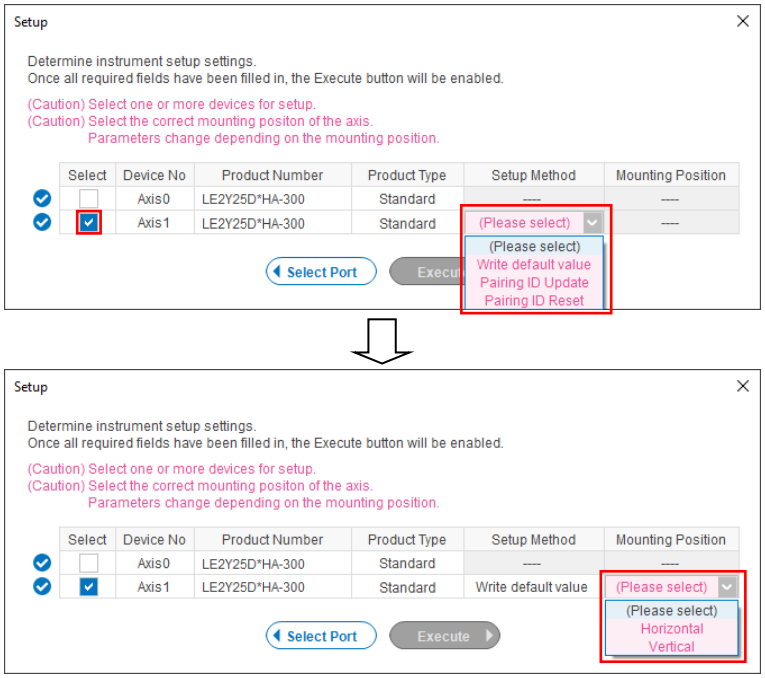
(1) Please select the “Setup” button on the communication port selection screen or the “ Setup” button on the easy operation bar of the main screen.



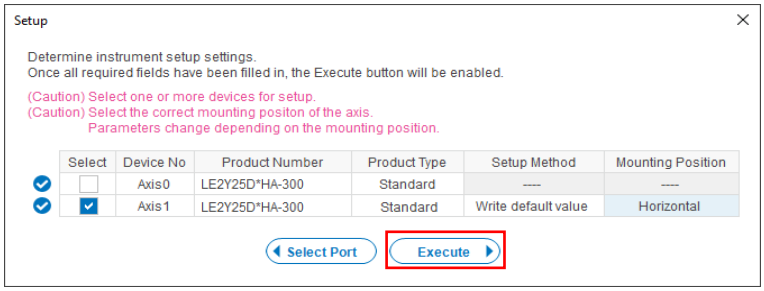
(2) Once connected, the setup window appears as shown below.



(3) Select the axis number for which the default parameter is to be set, then select "Write default value" from the Setup Method and then set the Mounting Position.



(4) Select the "Execute" button after completing the configuration.



(5) For the procedure after selecting the “Execute” button, refer to (5) in **6.1 Default parameter setting of the connected actuator**.

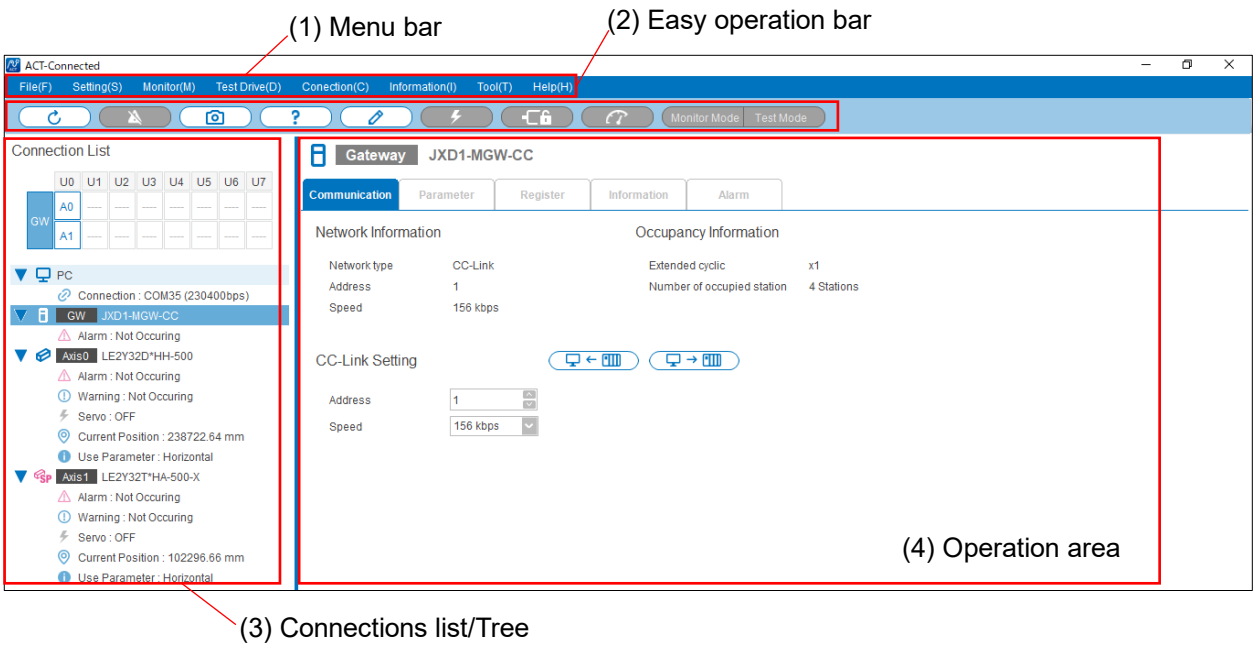
⚠ Caution

-Do not perform the setup while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.

7. Main screen

7.1 Main screen

The main screen is divided into four main parts.
(1) Menu bar: Access to various setting tabs and monitor tabs, display the option window, etc.
(2) Easy operation bar: Easy operation instruction for the main functions.
(3) Connections list/Tree: Displays information on the connected gateway unit and actuators, etc.
(4) Operation area: Detailed information displayed for setting various functions and monitoring.

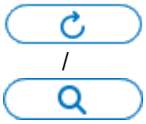
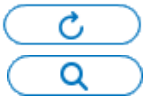


7.2 Menu bar

Menu name	Function	Selection item	Function description
File(F)	Open	Edit Gateway Parameter	Moves to the Parameter tab of the gateway unit.
		Edit Axis parameter	Moves to the Parameter tab of the selected axis.
		Edit step data	Moves to the Step data tab of the selected axis.
	Exit	-	Exit the ACT-Connected setting software.
Setting(S)	Gateway unit	Communication	Moves to the Communication Settings tab of the gateway unit.
		Parameter	Moves to the Parameter tab of the gateway unit.
	Axis	Step data	Moves to the Step data tab of the selected axis.
		Parameter	Moves to the Parameter tab of the selected axis.
		Activation	Moves to the Activation Settings screen of the selected axis.
Monitor(M)	Gateway unit	Register	Moves to the Register monitor tab of the gateway unit.
		Information	Moves to the Information tab of the gateway unit.
		Alarm	Moves to the Alarm monitor tab of the gateway unit.
	Axis	Status	Moves to the Step data tab (including the Status monitor) of the selected axis.
		Waveform	Moves to the Waveform monitor tab of the selected axis.
		Alarm	Moves to the Alarm monitor tab of the selected axis.

Menu name	Function	Selection item	Function description
Test Drive(D)	-	-	Moves to the Step data tab (including the Test Drive screen) of the selected axis.
Communication(C)	Connection	-	Communication connection.
	Disconnect	-	Cancels the current communication connection.
Information(T)	Axis	Maintenance	Moves to the Maintenance information tab of the selected axis.
Tool(M)	Snapshot	-	Snapshotting.
	Option	-	Moves to the Option window.
Help(H)	Help	-	Moves to the Help window (access to the SMC homepage).
	Version information	-	Displays the ACT-Connected software version information, product information and license information.

7.3 Easy operation bar

Icon	Function	Function description
	Reconnection / Connection	 : For online. Reconnect with the connecting controller. The connected com port will not change. : For offline. Searches for COM ports that can be used for communication and makes a communication connection.
	Alarm information	Displays all alarm information occurring in the gateway unit and driver unit.
	Snapshot	Saves the display screen. It is possible to switch between saving to a BMP file or to the clipboard in the option settings.
	Help	Moves to the Help window and You will find the access QR code to our website. It is possible to open the operation manual PDF file included with this application.
	Setup	Moves to the Setup window. Used to return the parameters to the default values or to change the mounting position.
	Servo ON/OFF	This button is only valid in test mode. Servo ON/OFF can be switched for each axis of the connected actuator.
	Lock Release	This button is only valid in test mode. Lock release can be set in each axis of the connected actuator.
	Safe Speed Limit	This button is only valid in test mode. Safe speed limits can be set in each axis during test operation.
	Mode Switching	Switches between test mode and monitor mode. ***When a transition is made to the test mode, all actuator axes are forced to servo ON. Do not click while the actuator is in operation.**

Regarding the Monitor Mode and Test Mode:

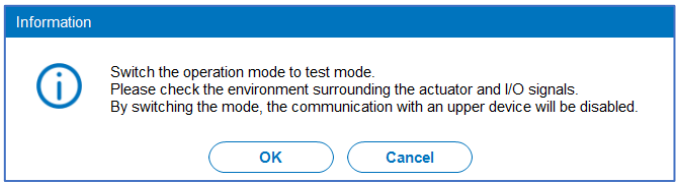
<Monitor mode>

This mode allows to check the status of the Gateway unit, connecting axis. Alarm, status, etc. can be checked.

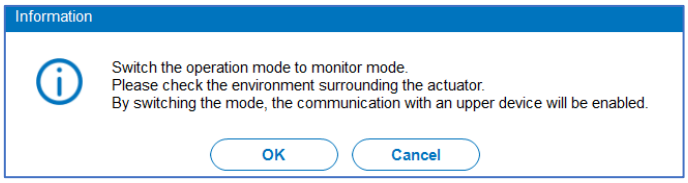
<Test mode>

This mode allows to do test drive. In this mode the servo is forced to be turned on for all actuators.

The following message will appear when the mode is switched from monitor mode to test mode. Communication with the controller's upper device is disabled, and the controller enters the servo-on (hold) state.



The following message will appear when the mode is switched from test mode to monitor mode. Note that communication with the controller's upper device is enabled.

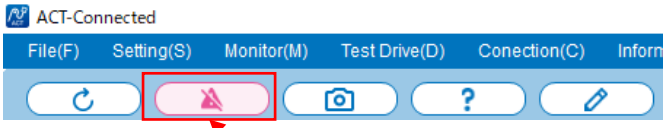


⚠Caution

- Do not touch the actuator while it is operating.
- Ensure that the stop (EMG) terminal of the controller can be shut off immediately.
- In test mode, commands from the upper device are not accepted.

7.3.1 Alarm information

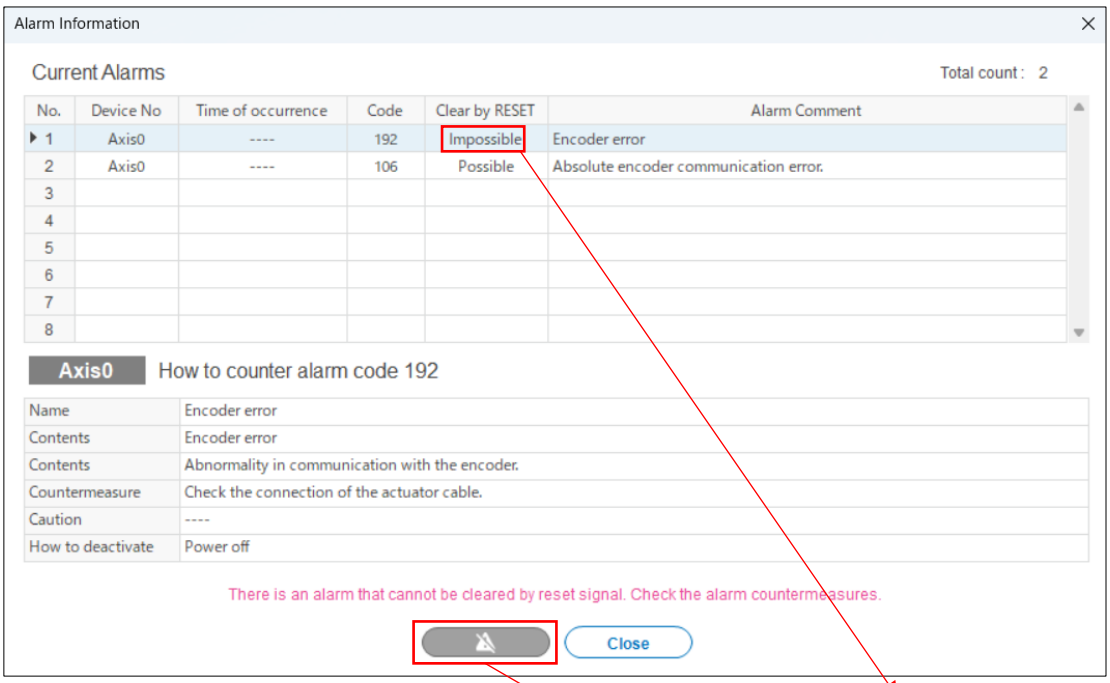
The "Alarm information" icon on the easy operation bar is enabled and flashes when an alarm occurs on the gateway unit or driver unit.



"Alarm Information" icon when an alarm occurs

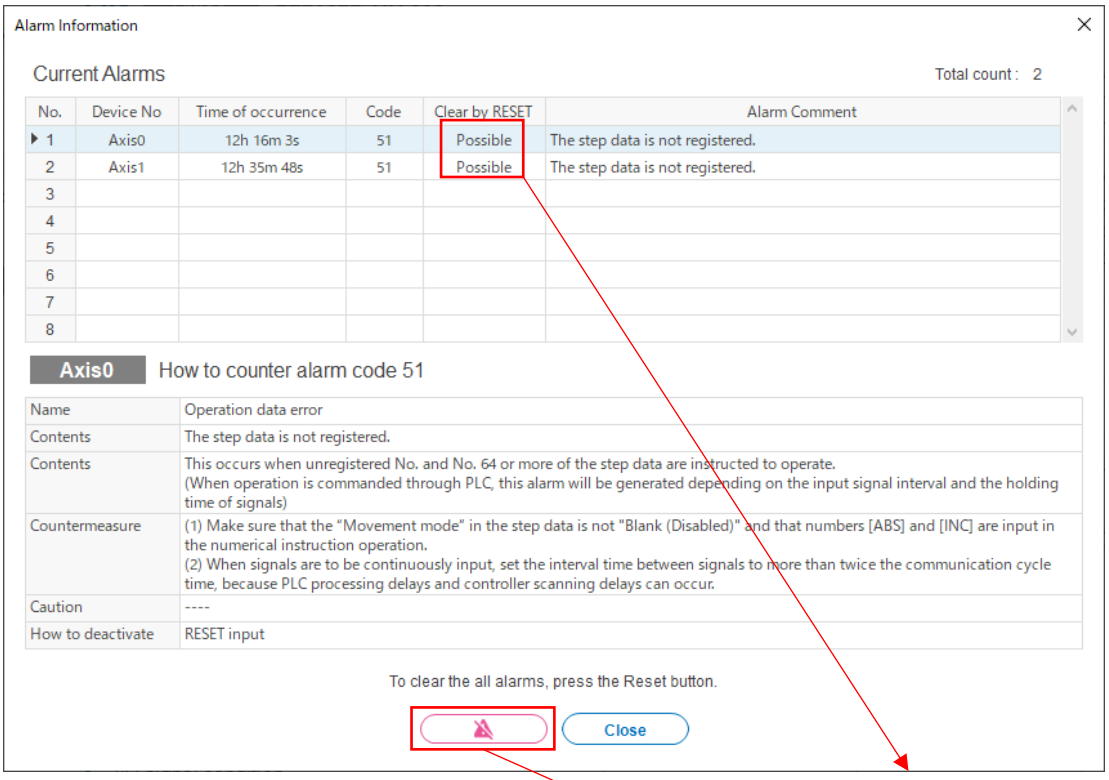
Click the "Alarm Information" icon to display the alarm information screen.
If an additional alarm occurs while the alarm information screen is displayed, the list will be updated.
Click the "Alarm Reset" icon on the alarm information screen to reset all alarms currently occurring in the gateway unit and driver unit.
However, alarms that cannot be deactivated by resetting cannot be reset using the "Alarm Reset" icon.
Check the Controller operation manual for the alarm reset conditions.

<u>If one or more alarms have occurred that cannot be reset using the "Alarm Reset" icon, the following will be displayed.</u>

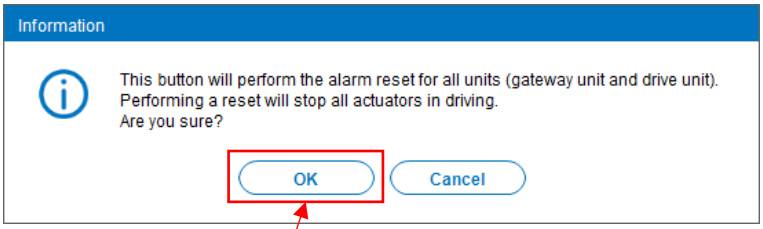


If the Clear by Reset is "Impossible" in the list, the "Alarm Reset" icon will be disabled.

If only alarms that can be reset using the "Alarm Reset" icon are occurring, the following will be displayed.



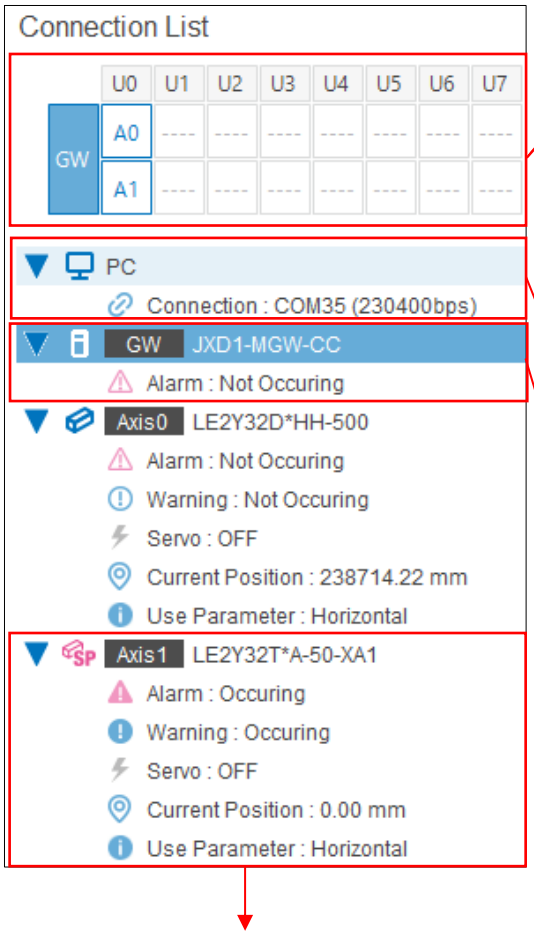
If the Clear by Reset is only "Possible" in the list, the "Alarm Reset" icon will be enabled.



Clicking the "Alarm Reset" icon will display "Information".
Clicking "OK" in the "Information" will reset the currently occurring alarm.

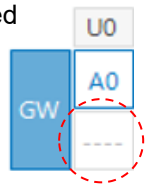
7.4 Connections list/Tree

It is easy to check the structure of the connected controllers and the status of each unit using the Connection List and Tree.



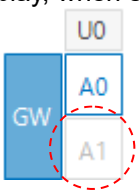
Connection list

Shows the structure of gateway units, driver units and actuator axis numbers.
By double-clicking on the actuator axis numbers or gateway unit, the display content in the Operation area can be switched.
-The background of the currently displayed in the Operation area is displayed in blue.
-Example display, when a single-axis driver unit is connected



Due to a single-axis driver unit, there is no indication of a second axis.

-Example display, when set an invalid axis.



The display is greyed out for an invalid axis.

PC Connection status

The connected COM port number and communication speed are displayed.
-The display content can be switched between displayed and non-displayed using the▼ button.

Gateway unit (GW) status

Indicates whether an alarm has occurred at the gateway unit.
-The display content can be switched between displayed and non-displayed using the▼ button.
-By double-clicking on the name part of gateway unit, the display content in the Operation area will be switched to gateway unit.
-By right-clicking on the name part of gateway unit, you can change the name of the gateway unit (max. 16 alphanumeric characters)

Actuator axis status

Displays the following item status for each axis.

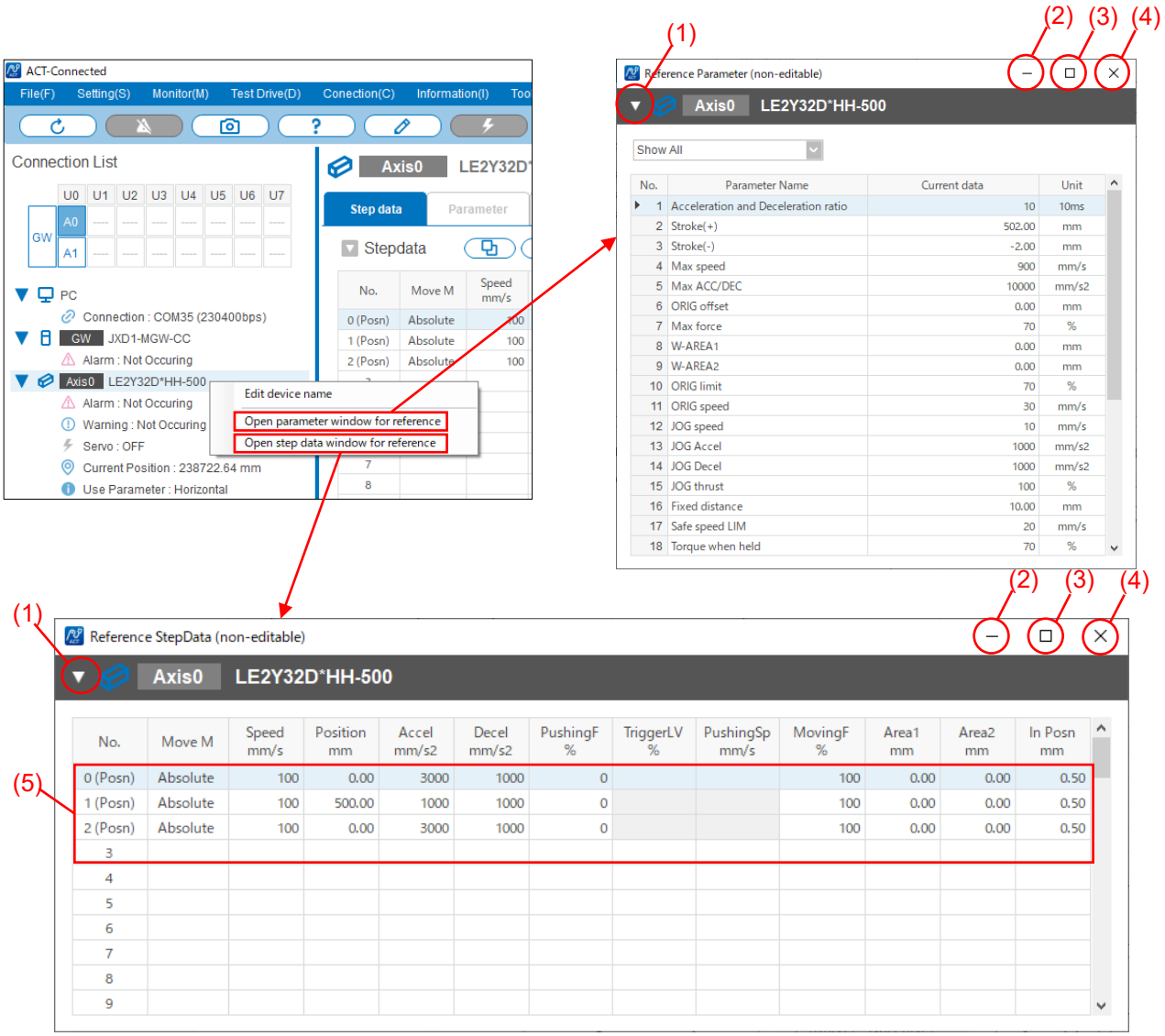
Alarm	Currently an alarm has occurred. White and red flash alternately during an alarm.
Warning	Currently a warning has occurred. White and blue flash alternately during a warning.
Servo	Displays the servo status of the motor.
Current position	Displays the current position of the actuator
Current Parameter	Indicates whether the currently applied parameter is horizontal or vertical

-The display content can be switched between displayed and non-displayed using the▼ button.
-By double-clicking on the name part of actuator axis, the display content in the Operation area will be switched to the selected axis.
-By right-clicking on the name part of actuator axis, you can change the name of the selected axis (max. 16 alphanumeric characters)
-By right-clicking on “Open parameter window for reference” “Open step data window for reference”, you can open the reference window for axis parameters and step data.
*Please refer to **7.5 Reference window** for details.
-For invalid axes, there is no indication of the axis status and only 'invalid' is displayed.
*Please refer to **9.6 Axis activation** for details.
-SP (icon) SP: Indicates that the parameters of the connected device are custom-made.

7.5 Reference window

By right-clicking on each axis in the Connection List and selecting "Open Parameter Window for Reference" or "Open Step Data Window for Reference," a dedicated window can be opened to reference the parameters or step data of that axis.

*The parameters and step data cannot be edited from the reference window.



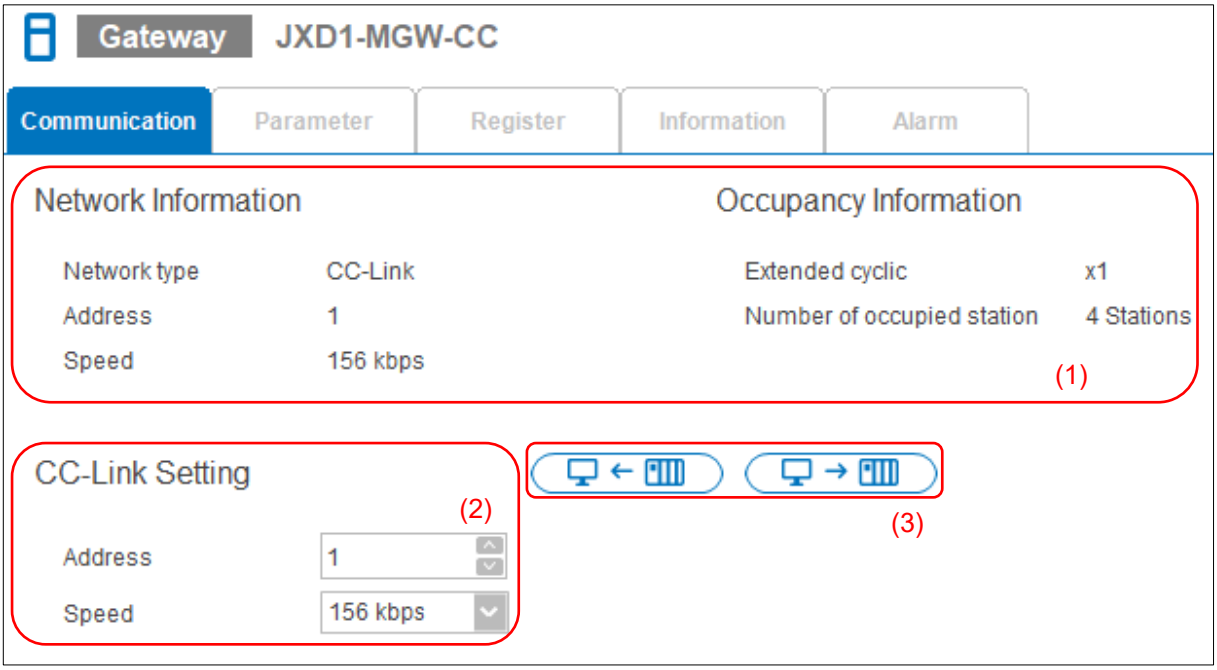
No.	Item	Description
1	Expand/Collapse Button	The window can be expanded/collapsed with each click.
2	Minimise button	Hides the open reference window on the taskbar of the computer being used, without closing it. Clicking the icon of this software on the taskbar returns it to its original size.
3	Maximise button	Allows the reference window to be returned to its maximised display. If the reference window is moved off-screen, it can be moved back onto the software.
4	Close button	Closes the open reference window.
5	Step No.	For reference step data, copying and pasting is possible line by line. Ctrl+C, copies the selected step data to the clipboard. Ctrl+A, all step data in the window can be selected at once. Ctrl+V, The copied step data can be pasted For editing step data, please refer to 9.1.1 Step Data. ***The reference parameter window does not have a copy function.**

8. Gateway unit screen

The Gateway unit screen tabs include “Communication”, “Parameter”, “Register”, “Information” and “Alarm”.

8.1 Communication Settings Tab

It is possible to carry out a network setting of the manifold controller and check the configuration status.



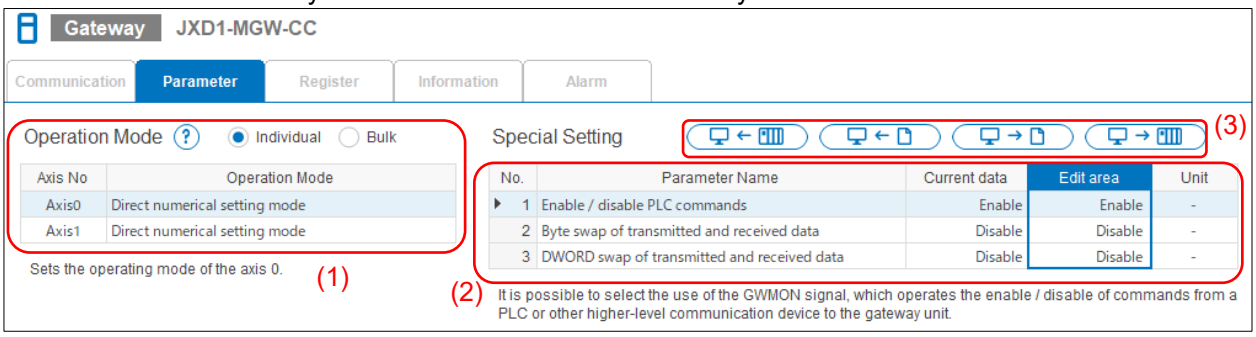
No.	Item	Contents
1	Network information	The network type and occupancy information of the connected gateway unit is displayed. *The content displayed difference depends on the fieldbus type and operation mode of the connected gateway unit.
2	Network settings	The communication speed, IP address, etc. of the connected gateway unit can be set. ∗Depends on the fieldbus type of the connected gateway unit, the configurable setting data show different.
3	Data operation buttons	: Load button. Reads data from the connected controller. : Save button. Writes data to the connected controller.

⚠Caution

-Do not change the Network Setting while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or PWR LED on the Gateway Unit is flashing (green). The data may not be written correctly.
-With this software Ver 1.1.0.0 or later, it is not necessary to activate the data by re-power the controller.

8.2 Parameter Tab

It is possible to set the Operation Mode and Special Setting parameters for the gateway unit. The operation mode can be set individually for each actuator axis or collectively for all axes.



No.	Item	Contents
1	Operation mode setting	It is possible to set the operation mode relating to the operational behavior of the actuator. The options are “Direct numerical setting mode”, “Step instruction mode”, “Simple direct value mode”, “IO mode”, and “Unset mode”. In “Individual” settings, the operation mode of each axis can be set separately. In “Bulk” setting is useful for setting all axes to the same mode. *The number of data occupied in each mode is different, please see the controller operation manual for details. *It is possible to see the information of the Operation mode setting via the (?) button.
2	Special parameter Setting	Special parameter settings for gateway units are available. *For detailed information on each parameter, refer to the Controller operation manual. *Please set the data according to the connected upper device (e.g. PLC).
3	Data operation buttons	: Load button. Reads data from the connected controller. : Data import button. Imports data from a backup file (.gbkp). : Data export button. Exports data to a backup file (.gbkp). : Save button. Writes data to the connected controller.

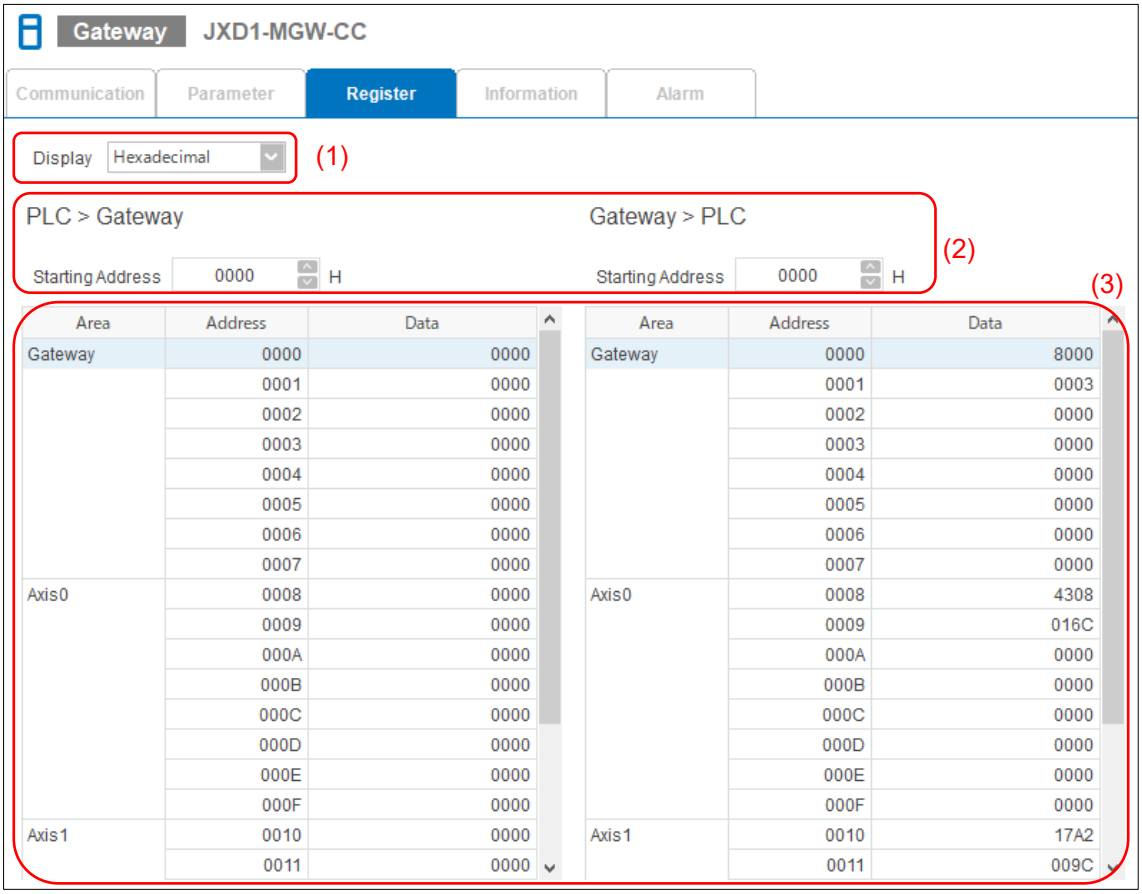
*In configurations where a single-axis driver unit is used, if the backup file (.gbkp) created with this setting software Ver 1.0.0.0 is read with Ver 1.1.0.0 or later, a data mismatch will occur, so please carry out a reconfiguration. After reconfiguration, create the backup file (.gbkp) again.

⚠ Caution

-Do not change the Operation Mode or Special Setting while the actuator is running, otherwise unexpected operation may occur.
- Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or PWR LED on the Gateway Unit is flashing (green). The data may not be written correctly.
-With this software Ver 1.1.0.0 or later, it is not necessary to activate the data by re-power the controller.

8.3 Register Monitor Tab

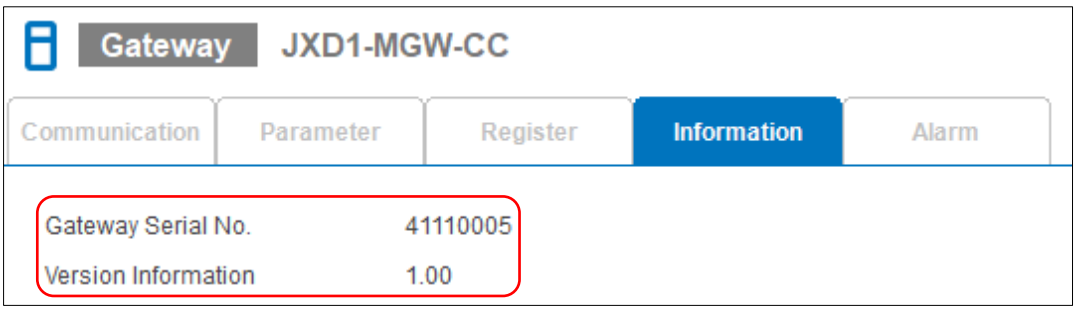
It is possible to monitor the data being transmitted to and received from an upper device (e.g. PLC).



No.	Item	Contents
1	Display format	It is possible to choose to display data in binary, decimal or hexadecimal.
2	Start address setting	Sets the address of the transmitted/received data to start monitoring. The input of the starting address is in hexadecimal.
3	Data monitor	The data transmitted and received is displayed from the specified start address. The displayed data is converted to swapped according to the special parameter settings of the gateway unit.

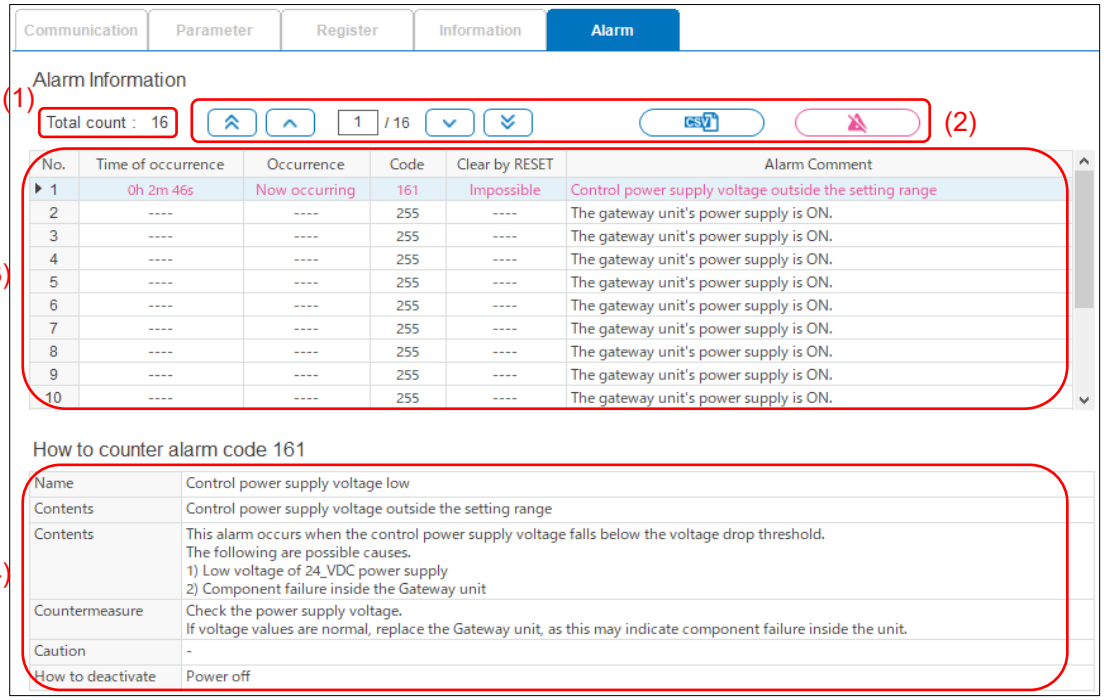
8.4 Information Tab

It is possible to confirm the serial number and version information of the connected gateway unit.



8.5 Alarm Tab

It is possible to check information about the alarms that have occurred in the gateway unit.



No.	Item	Contents
1	Total alarm count	The total number of alarms that have occurred can be checked. The maximum number of alarms stored is 16.
2	Operation button for alarm confirmation	: Go to the latest alarm in the alarm history. : Go to the previous alarm in the alarm history. : Input the number which you want to check. : Go to the next alarm in the alarm history. : Go to the oldest alarm in the alarm history. : The contents of the alarm history can be stored as a CSV. file : Reset (release) can be performed for alarms that have occurred. *
3	Alarm history	The alarms history that has occurred can be checked. The latest alarm will be No. 1. Currently occurring alarms are displayed in red. The currently selected alarm has a pale blue background and the ' ▶ ' symbol is displayed in the “No.” section.
4	Alarm details	For the selected alarm, the contents of the alarm and the countermeasure are displayed.

*The "Time of occurrence” in the alarm history shows the time when the alarm occurred after the controller power supply is ON each time. Unlike the alarm information on the actuator axes, this is not the cumulative activation time of the controller.

* An alarm that occurred immediately after the controller power supply is ON, the "Time of occurrence" will is displayed as "----".

⚠ Caution

When the controller is reboot from this setting software, the following alarm occurrence history remains in the Alarm Information of the gateway unit.

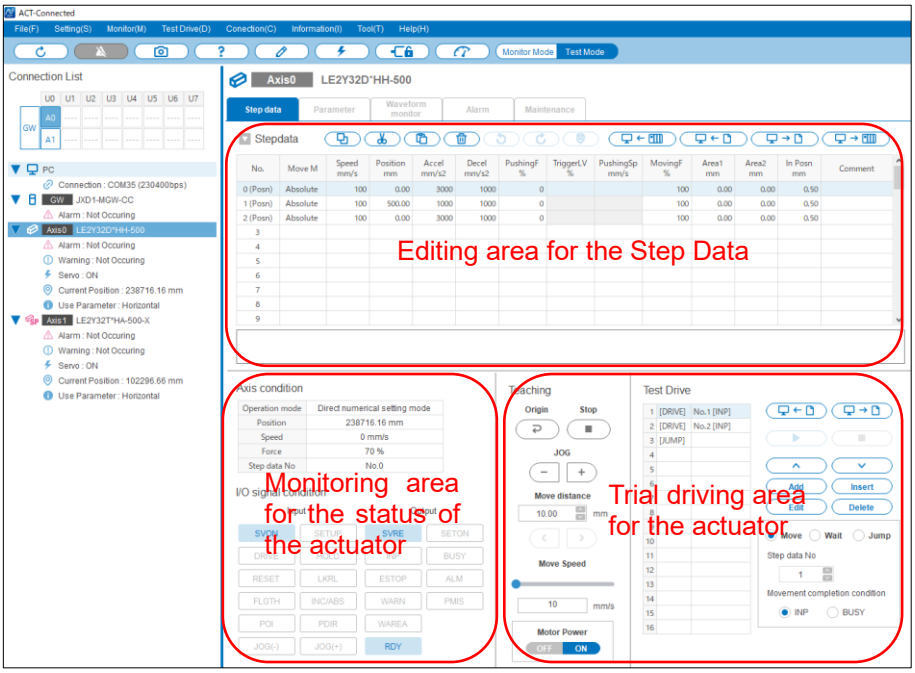
- When the communication settings or parameters of the gateway unit are changed: Alarm code 255
- When axis parameters are changed with controller reboot: Alarm codes 98 and 255.
- When an axis activation is changed: Alarm codes 98 and 255
- When Setup is carried out: Alarm codes 98, 255

9. Actuator axis screen

The screen tabs for each actuator axis include “Step Data”, “Parameter”, “Waveform Monitor”, “Alarm” and “Maintenance”.

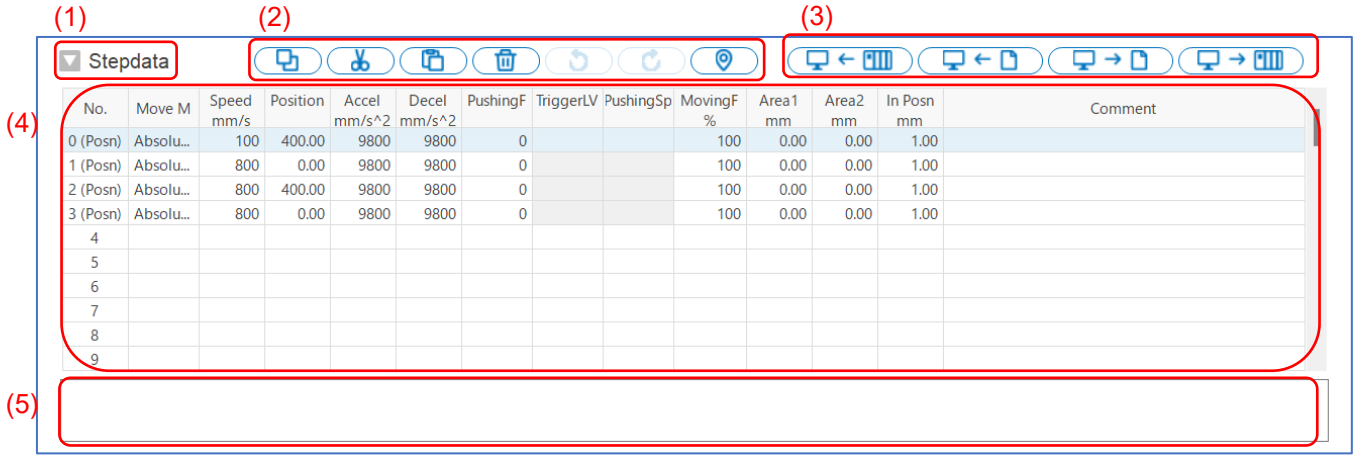
9.1 Step Data Tab

It is possible to edit step data, monitor the status of the actuator and carry out trial driving (including JOG, Inching and Test Drive) in the Step Data Tab.



9.1.1 Step Data

It is possible to check and edit the step data.



No.	Item	Contents
1	Show/Hide button	It is possible to choose to show or hide the step data.
2	Step data edit button	Copy (Ctrl+C) : The selected step data is copied to the clip board. Cut (Ctrl+X) : The selected step data is cut. Paste (Ctrl+V) : The selected step data is pasted. Clear (Delete) : The selected step data is deleted. Undo (Ctrl+Z) : The step data is restored to the condition before the action. Redo (Ctrl+Y) : The step data is reverted to the condition after the action. Get Position : The current position is taken from the selected step data. (*1)

No.	Item	Contents
3	Data operation buttons	 : Load button. Reads data from the connected controller.  : Data import button. Imports data from a backup file (.sbkp).  : Data export button. Exports data to a backup file (.sbkp).  : Save button. Writes data to the connected controller.
4	Step data editing area	Edit area for step data. For details of each item, please refer to the controller operation manual. The background colour is pale blue when selected. Meaning of number/letter display colours: -Black: Indicates data already stored in the controller. -Blue : Indicates data that has not yet been written to the controller when the data is changed. After changing the data, please carry out a download . -Red : Indicates that the data is outside the setting range. If the value is displayed in red, please change the value within the correct range. *For details on the contents of each item, please refer to the controller operation manual. *The 'Comment' is not recorded to the controller.
5	Description field	The description and input range of the selected item is displayed.

(∗1) Getting the current position using the  button is only available when SETON signal is ON and the operation method is "ABS".

9.1.2 Step data registration procedure

1. Select “Absolute” or “Relative” from “Move M” of the step data number to be registered.
2. After selecting either movement, the values will be automatically entered for the other items. Amend as necessary by selecting the field to amend. ∗
3. After completing the settings, click the download button  to confirm that the colour of all the values have hanged to black.

∗The value is shown in blue when changed, which means that it is not yet written to the controller. If the set value is shown in red, it means that the value is outside of the setting range. In this case, amend the value so that it is within the setting range.

⚠ Caution

-Do not change the Step Data while the actuator is running, otherwise unexpected operation may occur.

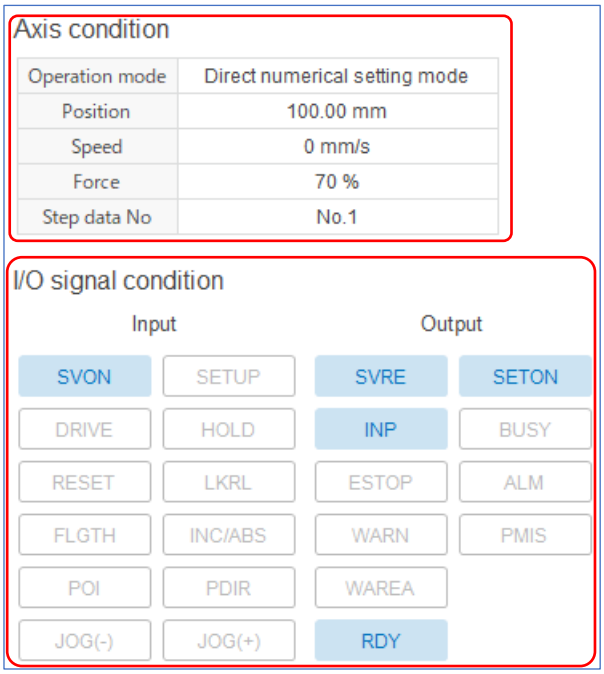
-Do not turn off the controller power or disconnect the USB cable during the EERROM saving symbol is being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.

9.1.3 Status

The status of the connected actuator (actuator status and I/O signal status) can be checked.

(1)

(2)



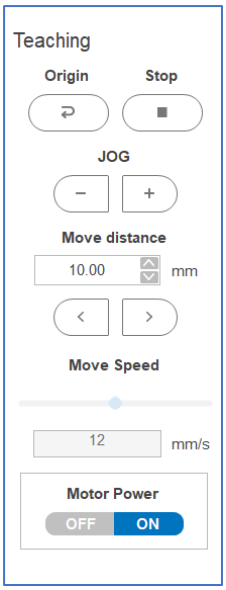
No.	Item	Contents
1	Actuator status	The current status of the actuator can be checked. Operation mode : The operation mode currently set for the actuator is shown. Position : Displays the current position. Speed : Displays the current speed. Force : Displays the current thrust force Step data No. : Displays the particulars of the step data.
2	I/O signal status	The current I/O signal status of the actuator can be checked. The items displayed different depend on the operation mode of the gateway unit. For details of each signal in each mode, please refer to the controller operation manual.

9.1.4 Trial driving

For the trial driving, it is possible to do the Teaching driving (JOG and Inching) and Test Drive.

9.1.4.1 Teaching driving (JOG and Inching)

Teaching is a method of setting the position by moving the actuator.



Icon	Function	Contents
	Return to ORIG	Return to origin position.
	Stop	Stop the operation.
	JOG (-)	The actuator moves in - direction while it is pressed.
	JOG (+)	The actuator moves in + direction while it is pressed.
	Move distance	Move distance for Inching.
	Inching (<)	The actuator moves the specified move distance in – direction when it is clicked.
	Inching (>)	The actuator moves the specified move distance in – direction when it is clicked.
mm/s	Speed	Set the moving speed for JOG and Inching.
OFF ON	Motor Servo	The motor servo can be switched on or off.

⚠ Caution

The actuator is operated during teaching. Take safety measures such as keeping hands away from the actuator's moving parts while operating the actuator.

9.1.4.2 Teaching driving (JOG and Inching) method

Preparation:

Prepare the following for teaching.

(1) Click the mode selection button to select test mode.
(2) Wait until the [SVRE] on the I/O signal status turns blue.
(3) Confirm that the [SET-ON] on the I/O signal status is blue.
If not, please enter button to do the return to the origin position.

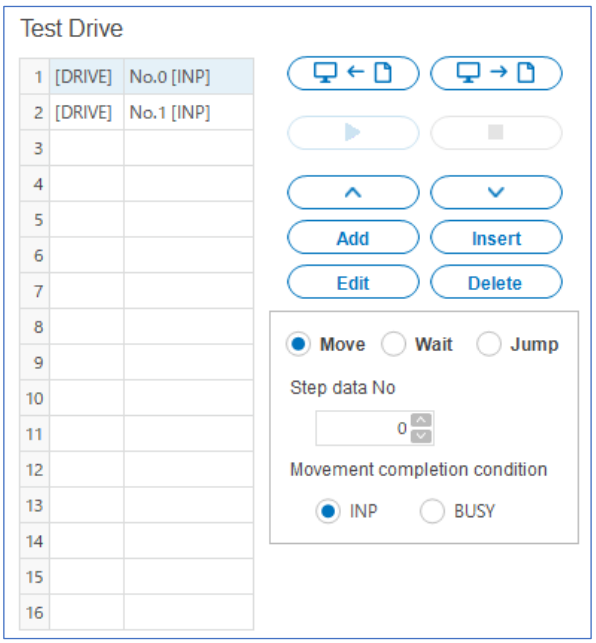
Teaching method:

The method is to move the actuator using the setting software and store the current position in the step data.

(1) Set the speed for JOG or Inching.
(2) Move the actuator to the target position using the JOG (-)/JOG (+)/Inching (<)/Inching (>) button.
(3) Select the step data to be set.
(4) Click the Get Position button in the Step Data window, and the current position will be written in the "Position" item of the step data.

9.1.4.3 Test Drive

A simple programme can be created in the Test Drive. The actuator can be operated according to the programme. It is possible to use multiple step data instructions, timer and repeat operations in the programme. The maximum number of programme data is 16.



Icon	Function	Contents
	File import	Imports the Drive Test data from a specified file (.tbkp).
	File export	Exports the Drive Test data to a specified file (.tbkp).
	Start	Starts the test drive. If the step data contains values outside the range (indicated by red text) or values under editing (indicated by blue text), the button is disabled. In this case, please correct the step data first.
	Stop	Stops the operation.
	Move up	The selected command in the test drive list is moved up by one line.
	Move down	The selected command in the test drive list is moved down by one line.
Add	Add command	This button is used to add a new operation command to the test operation list.
Insert	Insert command	A new command is added in the test drive list (after the selected command).
Edit	Edit command	The selected command in the test drive list is edited.
Delete	Delete command	The selected command in the test drive list is deleted.

9.1.4.4 Test Drive method

Preparation:

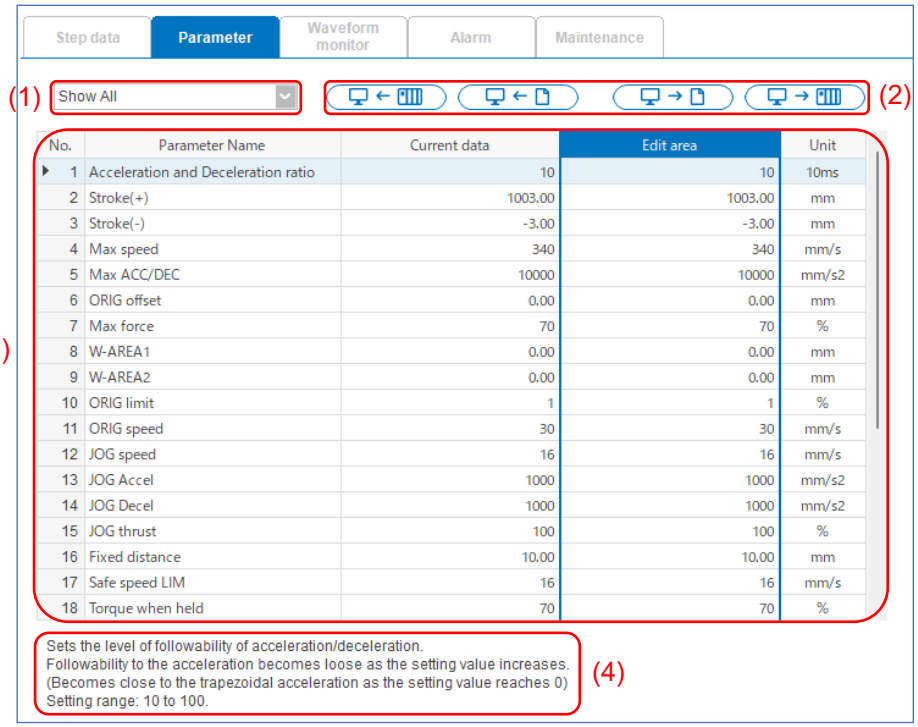
Prepare the following for teaching.

(1) Click the mode selection button to select test mode.
(2) Wait until the [SVRE] on the I/O signal status turns blue.
(3) Confirm that the [SET-ON] on the I/O signal status is blue.
If not, please enter button to do the return to the origin position.

＜ Example of repetition operation of step data №.0 and №.1＞

(1) Select step data №. 0 from “Move” and press Add button.
(2) Add step data №. 1 as the same way as (1) into the second line of the list.
(3) Select “Jump” and add into the third line of the list.
(4) If you want to change the content after adding the list, please press Edit button to change.
(5) Press button to start the operation.
(6) If you want to stop the operation, please press button.

9.2 Parameter Tab



No.	Item	Contents
1	Parameter Classification	The parameters displayed can be switched according to the selected category. ・Display all : Displays all parameters. ・Basic parameters : Displays the parameters for the basic specification of the actuator. ・Drive parameters : Displays the parameters for driving actuators. ・Return to origin parameters : Displays the parameters for return to original.
2	Data operation buttons	: Load button. Reads data from the connected controller. : Data import button. Imports data from a backup file (.abkp). : Data export button. Exports data to a backup file (.abkp). : Save button. Writes data to the connected controller.
3	Parameter edit area	Edit area for parameters. For details of each item, please refer to the controller operation manual. The background colour is pale blue when selected. Meaning of number/letter display colours: -Black: Indicates data already stored in the controller. -Blue : Indicates data that has not yet been written to the controller when the data is changed. After changing the data, please carry out a download . -Red : Indicates that the data is outside the setting range. If the value is displayed in red, please change the value within the correct range.
4	Description field	The description and input range of the selected item is displayed.

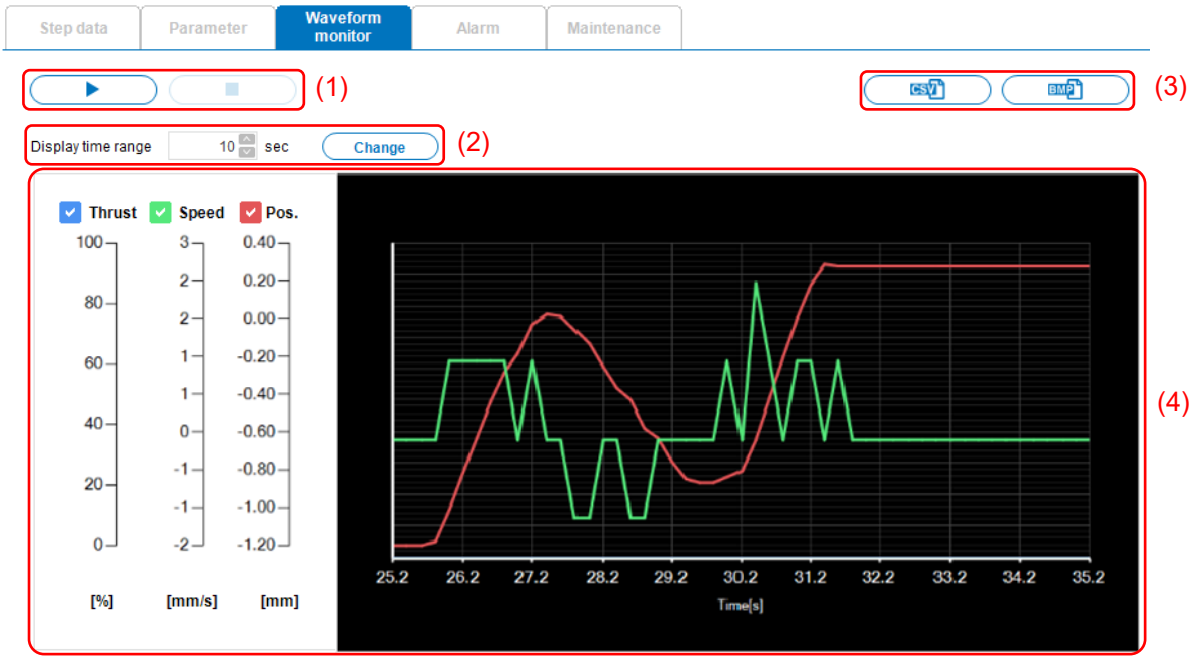
∗For details on each parameter, please refer to the controller operation manual.

⚠Caution

-Do not change parameters while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.
-With this software Ver 1.1.0.0 or later, it is not necessary to activate the data by re-power the controller.

9.3 Waveform Monitor Tab

This function monitors the current “Thrust”, “Speed” and “Position” of the connected actuator. However, this function cannot be used in the Test Mode. This function can only be used during operation by an upper device (like PLC).



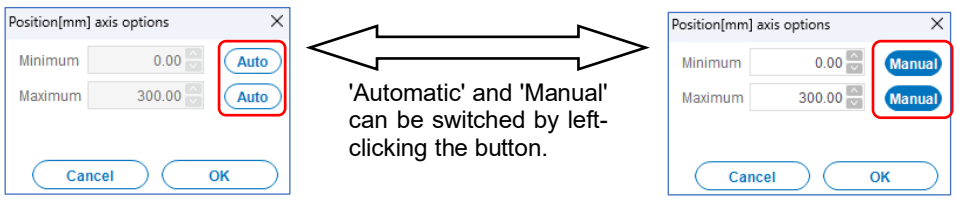
No.	Item	Contents
1	Start / Stop	Selects to start/stop the monitor.
2	Time interval setting	Change the measurement time interval displayed on the time axis. The value is reflected by selecting the Change button.
3	File output	CSV : Outputs the measured waveform as a .CSV file. BMP : Outputs the measured waveform as a .BMP file.
4	Waveform monitor	The measurement data can be checked. You can select whether to show or hide the graphs in the 'Current thrust', 'Current speed' and 'Current position'. The minimum/maximum value of the memory display can be changed by double-clicking the memory part of 'Present thrust', 'Present speed' and 'Present position'.

・How to change the memory display:

Step1 : Double-click on the memory sections of 'Current thrust', 'Current speed' or 'Current position'.

Step2 : The Axis Options window appears as follows.

Step3 : Click on 'Automatic' to change to 'Manual' and enable the numerical input of the minimum/maximum value. After changing the value, confirm the change with the 'OK' button. To stop the change, select the 'Cancel' button.



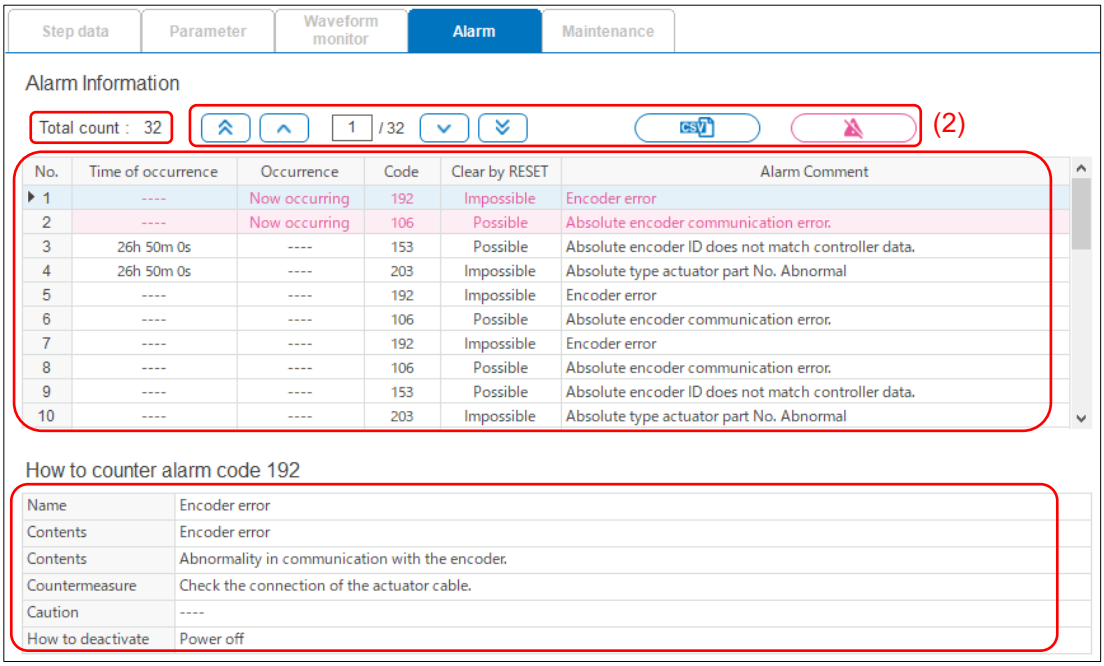
⚠ Caution

-The waveform monitor cannot be moved to another screen while it is measuring. When moving to another screen, please stop measurement.

-The measurement time should not exceed 10 minutes at a time. When measuring for a long time, data display may not be possible.

9.4 Alarm Tab

It is possible to check information about the alarms that have occurred in the actuator axis.



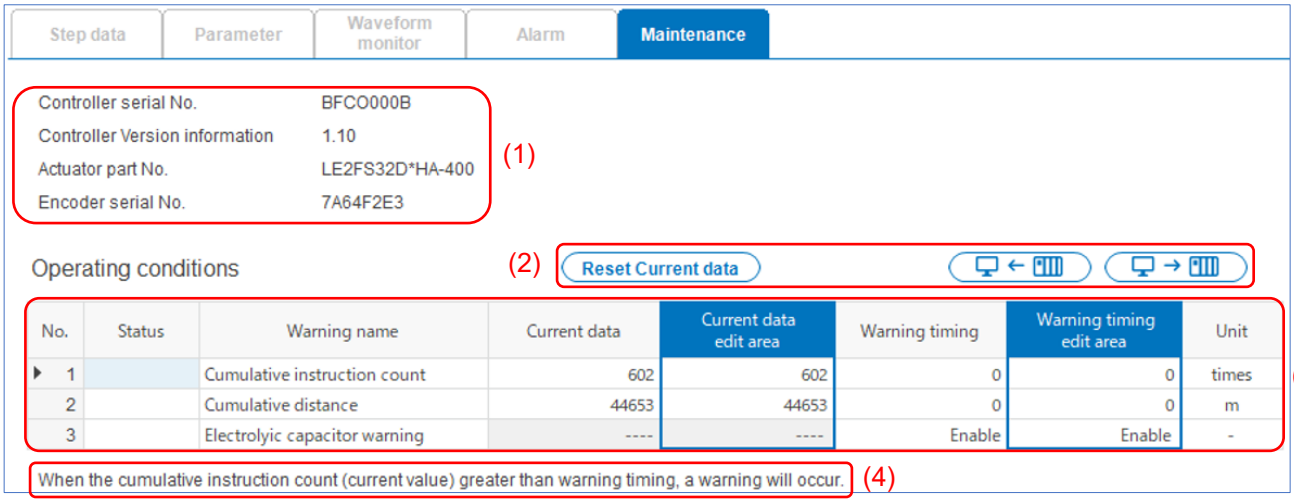
No.	Item	Contents
1	Total alarm count	The total number of alarms that have occurred can be checked. The maximum number of alarms stored is 32 per each actuator axis.
2	Operation button for alarm confirming	: Go to the latest alarm in the alarm history. : Go to the previous alarm in the alarm history. / : Input the number which you want to check. : Go to the next alarm in the alarm history. : Go to the oldest alarm in the alarm history. : The contents of the alarm history can be stored as a CSV. file : Reset (release) can be performed for alarms that have occurred.*
3	Alarm history	The alarms history that has occurred can be checked. The latest alarm will be No. 1. Currently occurring alarms are displayed in red. The currently selected alarm has a pale blue background and the ' ▶ ' symbol is displayed in the “No.” section.
4	Alarm details	For the selected alarm, the contents of the alarm and the countermeasure are displayed.

∗Some alarms cannot be cleared by the reset button depending on the type of alarm.
Please refer to the controller’s operation manual for details.

∗The "Time of occurrence” in the alarm history shows the cumulative activation time when the alarm occurred.
Please note that if the controller was activated for less than 10 minutes, the time is not cumulative.

∗ An alarm that occurred immediately after the controller power supply is ON, the "Time of occurrence" will is displayed as "----".

9.5 Maintenance Tab



No.	Item	Contents
1	Connected devices information	Shows information of connected devices
2	Operation button	Reset Current data : Resets the value of the “Current data” in the Operating condition. : Load button. Reads data from the connected controller. : Save button. Writes data to the connected controller.
3	Operating condition	The current operating status can be checked. And the currently selected alarm has a pale blue background. For details on each item in the operating status, please check the “'Operating condition details”.
4	Description field	The description and input range of the selected item is displayed.

・Operating condition details:

Item	Contents
Status	It is possible to check whether warnings are occurring on the connected devices. If a warning is occurring, the message "Warning" will be displayed.
Waring name	The following items can be checked as maintenance information. For details on each item, please refer to the controller operation manual. -Cumulative instruction count -Cumulative distance -Electrolyic capacitor warning
Current data*	The status of the connected devices can be checked.
Current data edit area	It is possible to change the current data of each item of the connected device to any value. Meaning of number/letter display colours: -Black: Indicates data already stored in the controller. -Blue : Indicates data that has not yet been written to the controller when the data is changed. After changing the data, please carry out a download . -Red : Indicates that the data is outside the setting range. If the value is displayed in red, please change the value within the correct range.
Warning timing	The output thresholds for the warnings set for each item are displayed.
Warning timing edit area	The threshold for outputting warnings can be set and changed for each item. Meaning of number/letter display colours: -Black: Indicates data already stored in the controller. -Blue : Indicates data that has not yet been written to the controller when the data is changed. After changing the data, please carry out a download . -Red : Indicates that the data is outside the setting range. If the value is displayed in red, please change the value within the correct range.
Unit	The units of measure for each item are indicated.

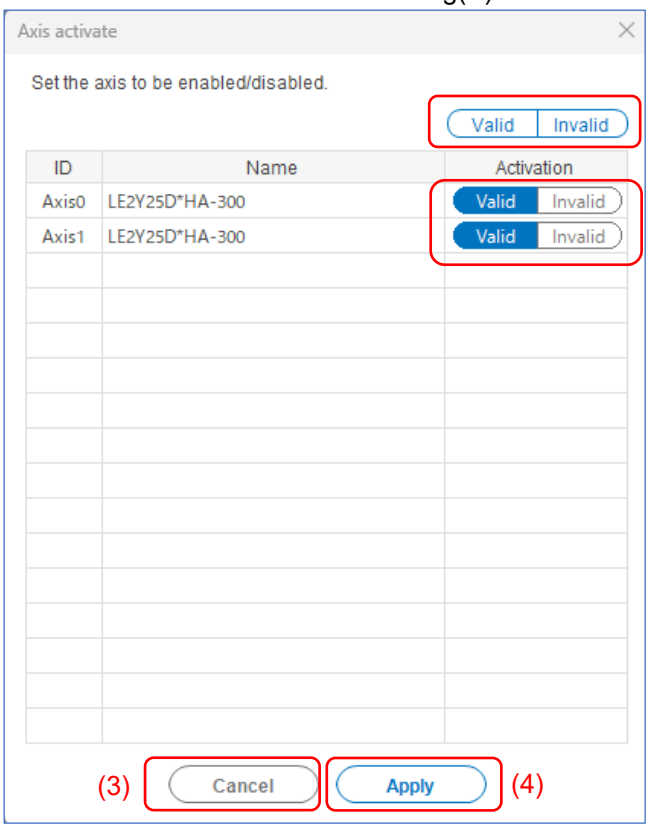
*If the current value exceeds the countable upper limit of 4,294,967,295, it will be reset to 0 and the count will start again.

⚠ Caution

Records relating to the maintenance functions of this controller are saved at 10-minute intervals. If the controller input power supply is cut off or controller reboot is done within 10 minutes after the last record of the maintenance function to the controller, the maintenance record will not be saved between the last record and the power supply cut off or reboot.
Therefore, if the controller input power supply is cut off or controller reboot is done within 10 minutes after a warning (WARN) has occurred, the warning (WARN) may be switched off at the next start-up.

9.6 Axis activation

If there are unused axes in the driver unit, they can be set to invalid via the Axis activate window. By an invalid axis, no alarm is triggered even if actuator is not connected. Also, the gateway unit will not communicate to an invalid axis.
The Axis activate window can be found in the menu bar ⇒ Setting(S) ⇒ Actuator axis ⇒ Activation.



No.	Icon	Name	Contents
1	Valid Invalid	Batch switching	Changes the activation of all connected axes at once.
2	Valid Invalid	Individual switching	Changes the activation of the connected axes individually.
3	Cancel	Cancel	Cancels the changes.
4	Apply	Apply	Applies the changes.

⚠ Caution

-Do not change the Axis activate while the actuator is running, otherwise unexpected operation may occur.
-Do not turn off the controller power or disconnect the USB cable during the operation symbols are being displayed (max. 60s) or CH A/CH B LED on the Driver Unit is flashing (0.4s cycle). The data may not be written correctly.
-The operation mode of the gateway unit is not changed even if the axis is changed to an invalid axis in the Axis Activity. If you want to set the number of occupied data on the PLC to 0 for an invalid axis, be sure to set the operation mode separately to "Mode unset".
-With this software Ver 1.1.0.0 or later, it is not necessary to activate the data by re-power the controller.

10. Offline

If there is no controller that can be connected, the ACT-Connected software can only be used in offline mode.
In the offline mode, it is possible to edit the created backup file and save it as well. Please note that it is not possible to create any new data without a backup file.

Please select File(F) file ⇒ Open⇒ 'Edit gateway parameters', 'Edit axis parameters' or 'Edit step data' from the menu bar to edit a backup file. It is not possible to edit the backup file other than those listed above.

⚠Caution

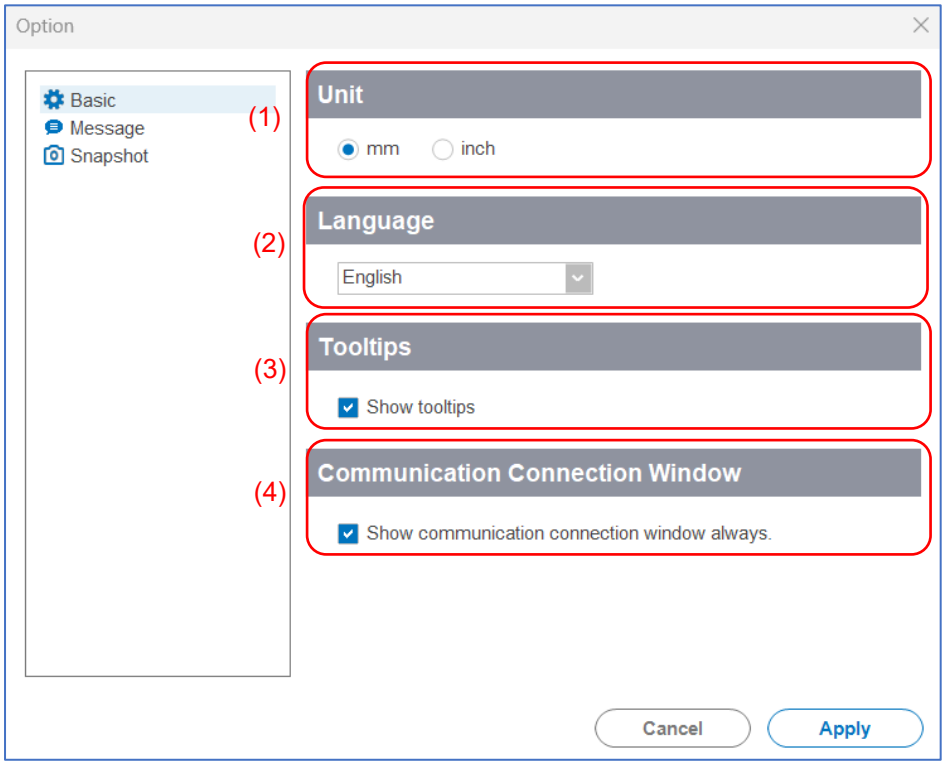
In configurations where a single-axis driver unit is used, if the backup file (.gbkp) created with this setting software Ver 1.0.0.0 is read out on offline, a data mismatch will occur.
Please recreate the backup file (.gbkp) when online with this configuration software Ver 1.1.0.0 or later.

11. Option Window

It is possible to set basic settings, message display and snapshot settings. After making changes, be sure to press Apply button.

The Option window can be found in the menu bar ⇒Tool(M) ⇒ option.

11.1 Basic Settings

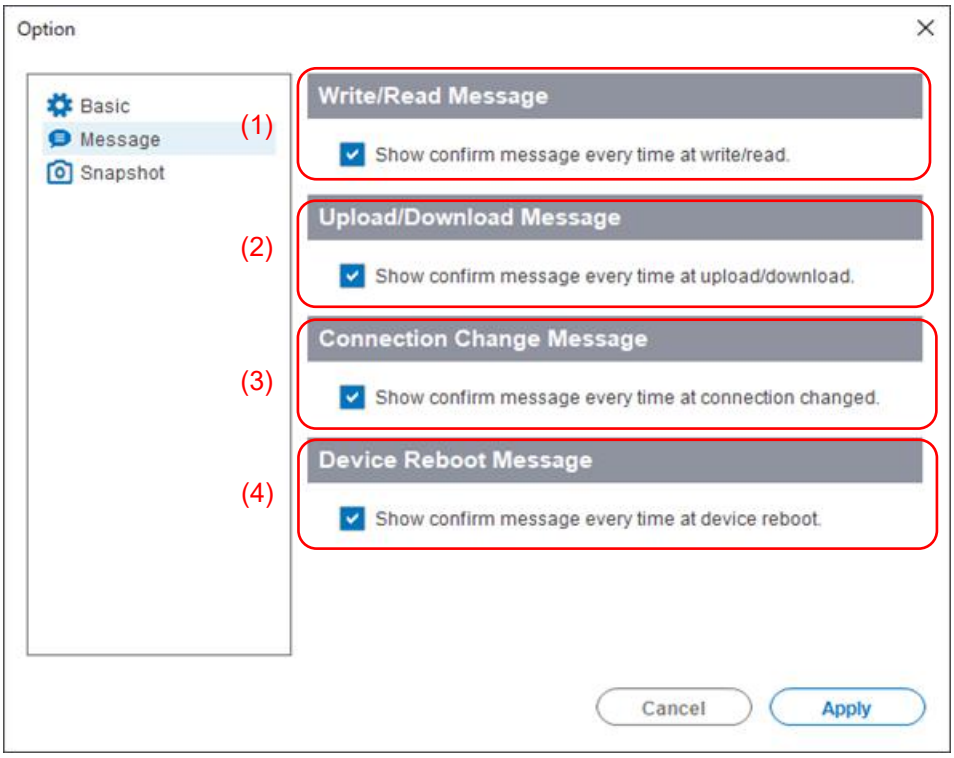


No.	Item	Contents
1	Unit	“mm” or “inch” notation display can be selected. When a rotary actuator is used, the display is shown in "°", irrespective of the setting.
2	Language	English or Japanese language can be selected.
3	Tooltips	Select to display tooltips.
4	Communication connection message	Select to show or hide the list of communication ports when making a communication connection. If unchecked, the connection is made automatically when there is only one connection port. If no connection is found, the system automatically goes into offline mode.

⚠ Caution

When changing the display of units from [mm] to [inch], the colours of some characters in the data after the unit change may be blue and red due to the unit conversion and the number of digits that can be set.
For data where the text display colours are blue and red, please reconfigure the data based on the units displayed after the change.
If the text display colour is black after changing the display unit, the data does not need to be re-set.
Example:
Set value of speed 1 mm/s → [Change display to inch] → 0.0 inch/s
The value 0.0inch/s is displayed in red because it is outside the setting range; reset the value to 0.1inch/s.

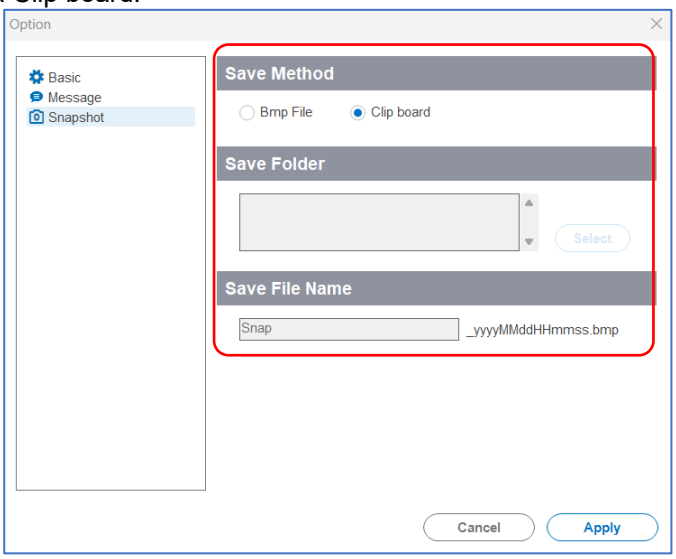
11.2 Message display



No.	Item	Contents
1	Write/Read Message	Select to show or hide the confirmation message displayed when writing/reading data.
2	Upload/Download Message	Select to show or hide the confirmation message displayed when Upload/Download data.
3	Connection Change Message	Select to show or hide the confirmation message displayed when changing the connection port.
4	Device Reboot Message	Select to show or hide the confirmation message when reboot the device via this setting software.

11.3 Snapshot

When saving the screen, you can choose to save it as a BMP file or as a Clip board.
If you select BMP file, set the save folder and file name.
If you select Clip board, please paste the file into Paint to save.
The default is worked as a Clip board.



12. Help

This can be found in the “Help” of the menu bar.

12.1 Help

The access QR code can be found on the SMC website. Always check the latest operation manual for the ACT-Connected.

By clicking on the "Operation Manual" icon, it is possible to open the Operation manual PDF file included with this application.



Click on the "Operation Manual" icon to open the operation manual.

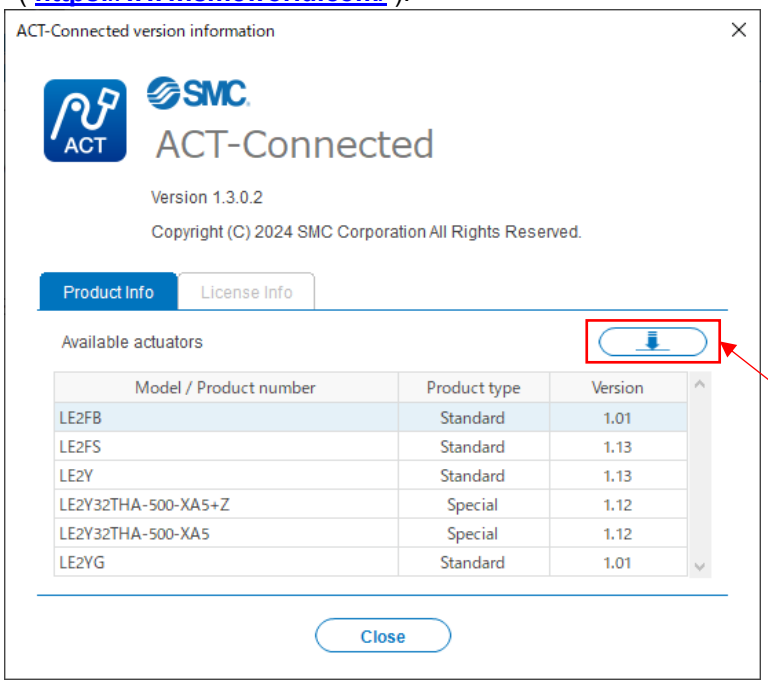
12.2 Version Information

The version information, product information and license information of the configuration software currently used can be checked.
Please always use the latest setting software.

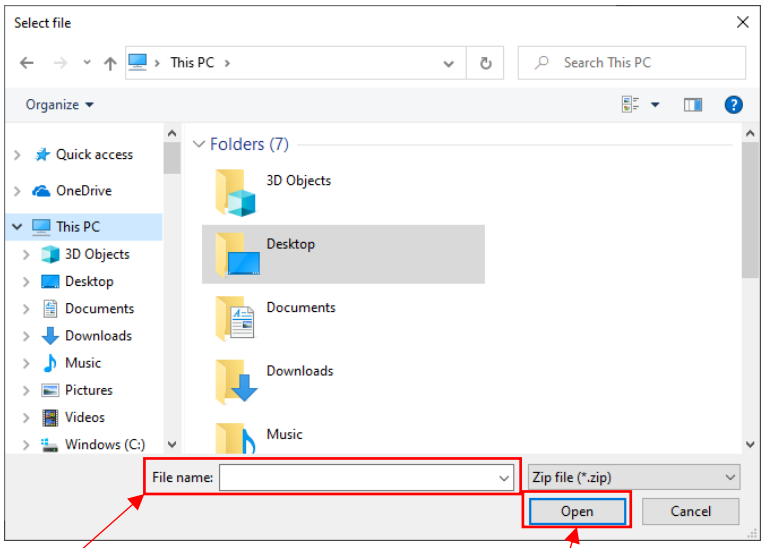
12.2.1 Product Information

Click the "Product Information" tab on the “ACT-Connected version information” screen to display the product information that can be used when writing the default parameters of the actuator.

The product information can be registered in this application by clicking the "Product registration" icon.
The product information (zip file) can be downloaded from the SMC website
(https://www.smcworld.com/).



(1) Click on the "Product registration" icon.

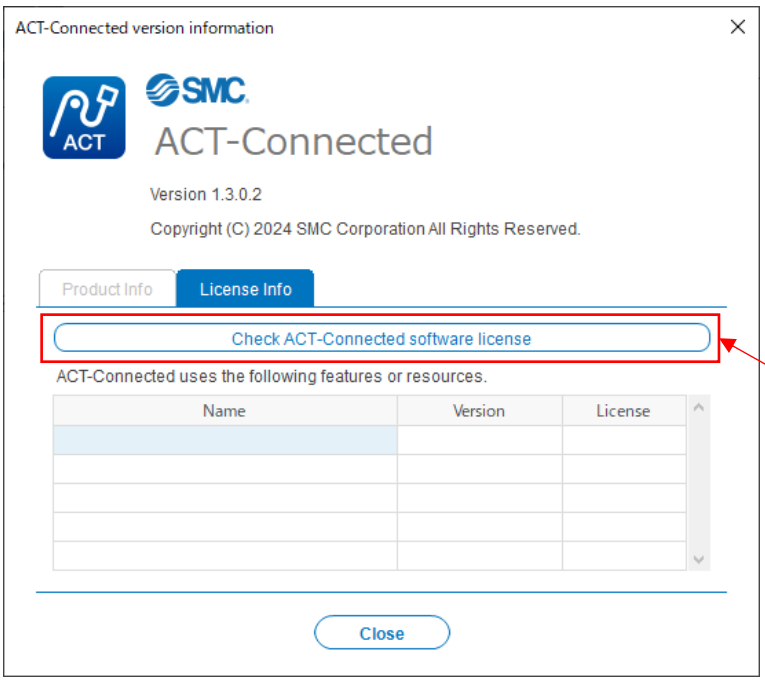


(2) Select Product information (zip file).

(3) Click "Open" to register the product information.

12.2.2 License Information

Click the "License Information" tab on the “ACT-Connected version information” screen to display the license information for the ACT-Connected and also the license information for third party libraries, etc. used by ACT-Connected.



Click the "Check ACT-Connected software license" icon to display the ACT-Connected license information.

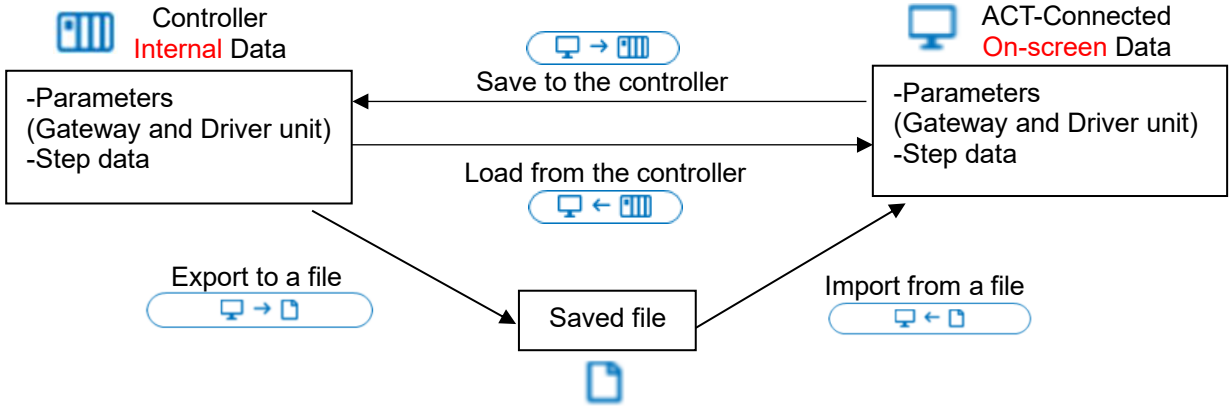
13. Troubleshooting

If an operation failure occurs, check the cause of the failure and the measures to be taken according to the information message that pops up and the trouble phenomenon.
If the cause corresponding to the trouble phenomenon is not confirmed, please contact us.

No.	Problem	Possible causes	Investigation method and location of possible causes	Countermeasures
1	Communication fault	The USB driver is not installed.	Please check that the USB driver for the USB cable is installed.	Please install the USB driver. For details, please refer to **3.2 Installation procedure**.
		Connection failure	Please confirm the connection status.	Please ensure that the connection is made correctly. For example, communication cannot be established if the connector has been damaged. Please confirm the power supply of actuator has been turned ON. Communication cannot be established if the power supply is OFF. If equipment other than the motor controller (PLC and measurement equipment) is connected to the PC, disconnect and check. (There is a possibility that the communication with other equipment in the PC is interfering.)
2	Incorrect data saved in file	"Save to File" before writing the settings data to the controller.	Please check that the setting data (parameters and step date) have been written to the controller.	When saving data to a backup file, if there is data displayed in blue on the screen, please writing the data to the controller firs. Only data that has been written to the controller will be saved to a file.
3	The backup file cannot be read	The part number of the connected actuator mismatched between the backup file one.	Please check that the connected actuator model matches to the backup file one.	Files cannot be read unless the model of the connected actuator and the model of the backup file match. Make sure that the models match.
		The Mount Posture (horizontal/vertical) of the using parameters do not match	Please check that the horizontal/vertical specifications of the currently used parameters match to the backup file or not.	Files cannot be read in unless the horizontal/vertical specifications of the parameters used match.
4	The following error appears during set-up "No data corresponding to the product number."	The product information of the connected actuator is not registered in this application.	Check if the product information of the connected actuator is registered in the "Product information" section of the version information. For details, please refer to **12.2.1 Product Information**.	Register the product information (zip file) of the connected actuator in this application. For details, please refer to **6.1 Default parameter setting of the connected actuator**.

No.	Problem	Possible causes	Investigation method and location of possible causes	Countermeasures
5	The following error appears during set-up "Failed to import data from the file. [symbol (□□□)]"	An error occurred with the default parameter file.	-	If an error occurs, please contact SMC. If [symbol (□□□)] appears in the error description, please contact SMC and let us know the symbol.
6	The following error appears during set-up "Failed to download data to device. [symbol (□□□)]"	An error occurred when writing parameters to the driver unit.	-	If an error occurs, please contact SMC and let us know the displayed error and [symbol (□□□)].
7	The following error appears during set-up "Failed to update the pairing ID."	An error occurred when writing data to the driver unit.	-	If an error occurs, please contact SMC.
8	The following error appears during set-up "Failed to reset the pairing ID."			

State transition diagram of setting data in ACT-Connected software.



Trademark
Windows® 10, Windows® 11 and .NET Framework® are registered trademarks of Microsoft Corporation.

Revision history
Edition 1: Description changed [Jun 2024]
Edition 2: Description changed [Sep 2024]
Edition 3: Description changed [Feb 2025]
Edition 4: Description changed [Sep 2026]

SMC Corporation
URL https://www.smcworld.com

Note: Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.
© SMC Corporation All Rights Reserved