



User Manual

User Program(GUI) Function

(Rev.01)



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This manual describes how to operate User Program(GUI).

For more information, refer to related manuals as following.

- (1) [User Manual_Text](#)
- (2) [User Manual_Communication Function](#)

1 . Installation and connection of the Program

This chapter describes the user program(GUI) used for the installation and running test of the controller.

1 - 1 . Installable PC environment

Type : Compatible with PC/AT

Ethernet 10/100base-T/TX Lan Card

Hard disk capacity more than 10MB

Screen SVGA(1024×768 or more)

CPU Pentium4 2.0GHz or more

OS : PC installed with Windows7/ 8.1/ 10(32/64Bit)

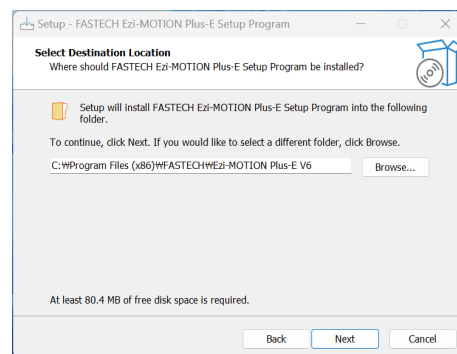
1 - 2 . User Program(GUI) installation method

Download [Ezi-MOTION Plus-E V6_Setup] program on FASTECH website

(<http://fastech-motions.com/new/eng/sub0301.php>) and install as shown below.

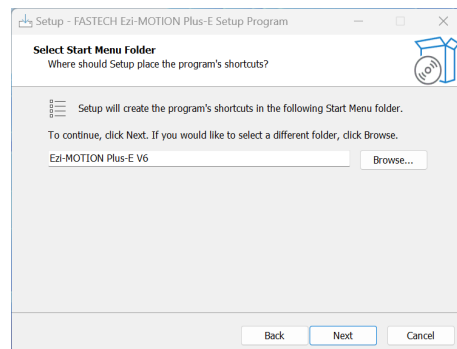
Select a folder where the program is installed.

Click 'Next'.



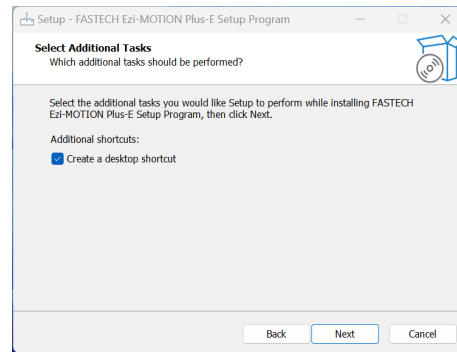
Select Window Start menu folder.

Click 'Next'.



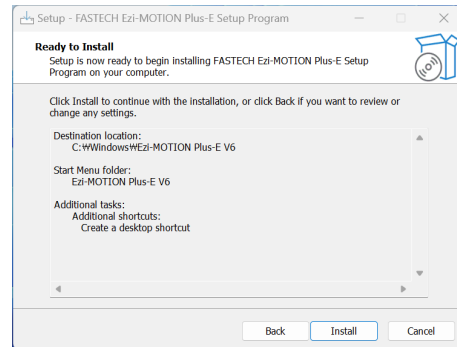
Check 'Create a desktop shortcut'.

Click 'Next'

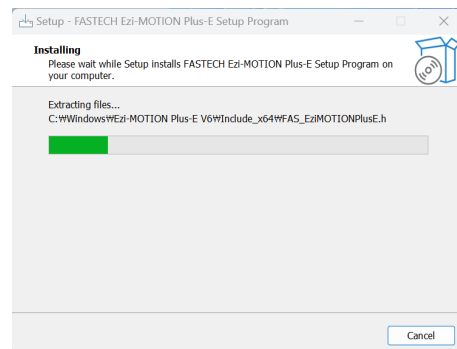


Check Installation location, Start menu folder, additional setting(desktop shortcut).

Click 'Install'.

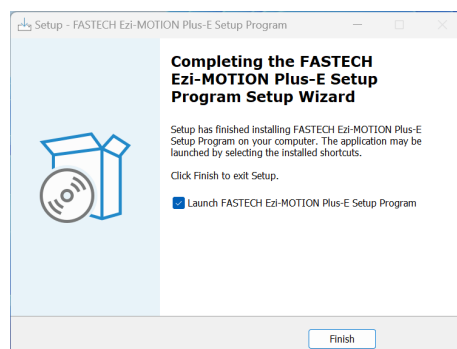


Installing

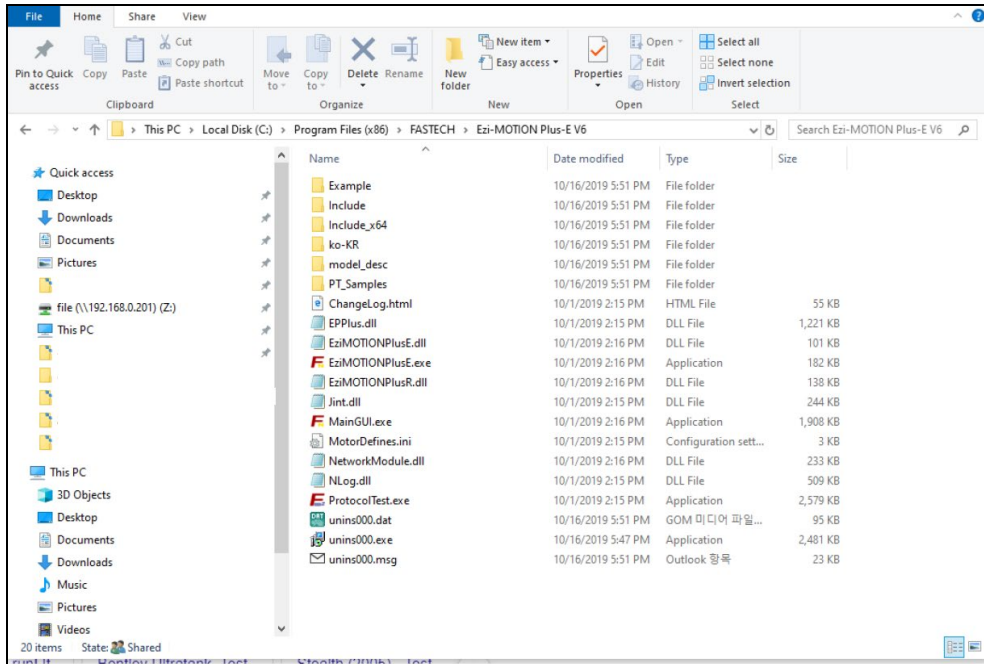


When installation is completed, select 'Start a program'.

Click 'Finish'.



When installation is completed, you can find the below files in the selected folder.



- 1) Include folder : *.dll, *.lib, *.h, *.cs files (32bit, C#)
- 2) Include_x64 folder : *.dll, *.lib, *.h, *.cs files(64bit, C#용)
- 3) Example folder : source code for sample
- 4) PT_Samples folder : sample data files for position table


1 - 3 . Connecting PC with Drive Module

- (1) Execute User program(GUI) icon(Ezi-MOTION Ethernet V6) and click 「Connect」. Then the following window will be displayed.



Button	Description
ADD	Enter IP Address and add on the list. If the product does not exist with added IP Address, it will not be added on the list.
Broadcast Search	Search all products that be connected to GUI and add the product on the List.
Refresh Status	Check the connection status of the product on the list.
Connect	Connect the product on the list and execute GUI.

- When setting the IP address differently for each product and clicking 'Broadcast Search', all products are displayed on the list. Click 'Connect' to connect all products with GUI.

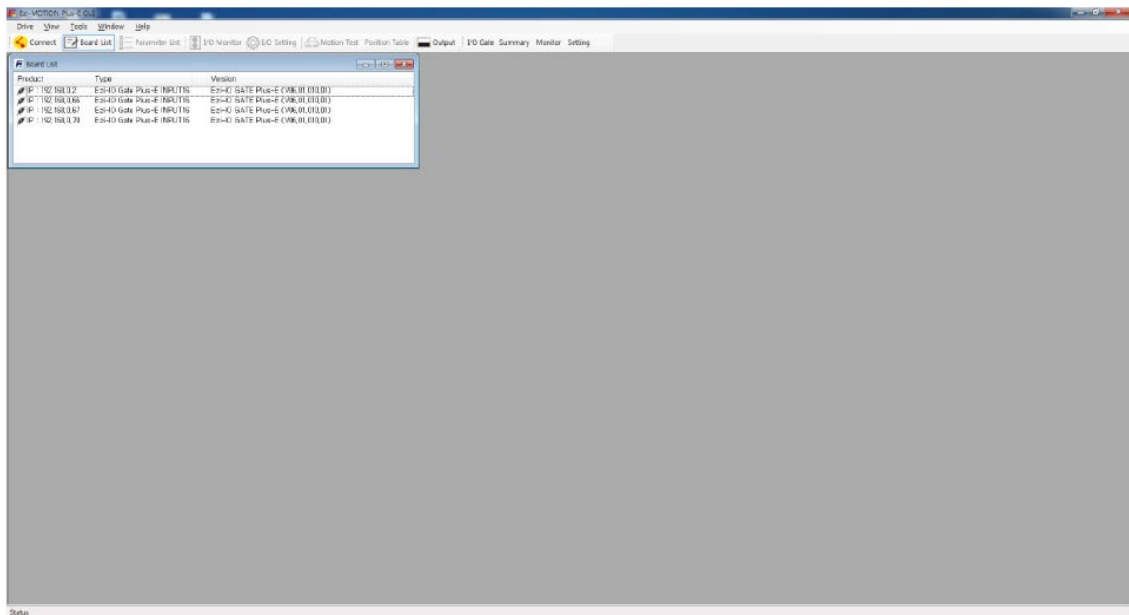
 Caution	<p>1. Please assign different IP Address to each connected devices within one network(segment).</p> <p>2. If the connection fails, check the IP conflict and IP Address of PC.</p>
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(2) When the connection is completed, the window will appear as shown below.

- 1) IP Address of connected devices
- 2) Type of all connected devices
- 3) Firmware Version

Board List		
Product	Type	Version
IP : 192.168.0.3	Ezi-IO Ethernet AD8	Ezi-IO Ethernet AD (V06.01.020.13)

2 . Main Window



This is the basic window to operate the program. Each window is displayed in this window. The user can open each window with a toolbar. Buttons become enabled or disabled depending on the connected board.

2 - 1 . Menu



'View' menu shows other screens. In the 'Drive' menu, you can select communication connection or disconnection function.

2 - 2 . Toolbar

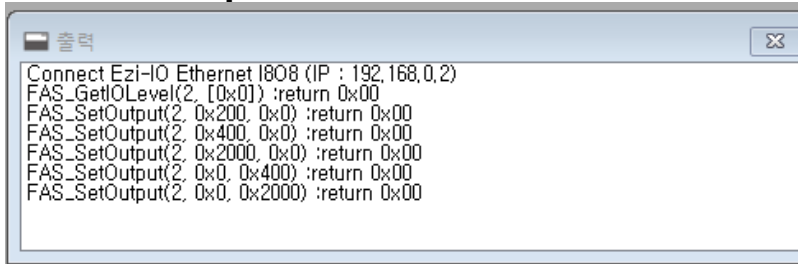


The Toolbar icons become enabled or disabled depending on the type of connected board. In case of Ezi-IO Ethernet product, Connect, Board List, Output, Summary, Monitor and Setting icons become enabled.

Click each button to execute the following functions.

Button	Description
Connect	To connect or disconnect with the drive
Board List	To display information of the connected module and communication status
Output	To display DLL function corresponding to the command being executed
Summary	To check the status of all connected Ezi-IO
Monitor	To check current status of one module
Setting	To set, save, load the parameter values or logic

2 - 3 . Output



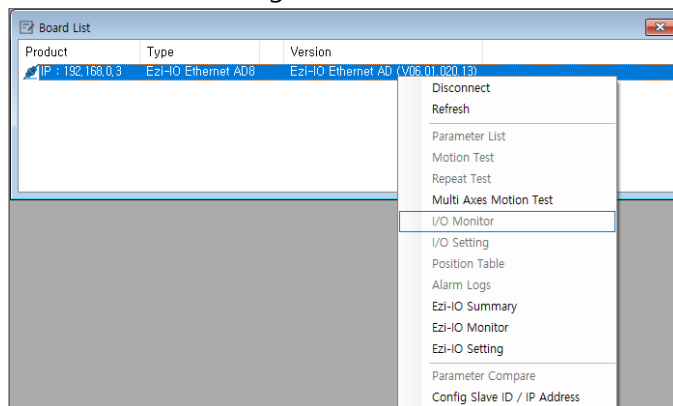
Click 'Output' at the Toolbar or check off [Menu] – [View] – [Output]

This window shows commands used for the controller. The user can check which functions are used, how the parameter values are set and how the commands are processed.

The window shows the functions which are input by the user or used when the user clicks each button. For more information about Command, refer to 「[User Manual-Communication Function](#)」.

2 - 4 . Board List

This window shows the connected drive list. The user can check information of each drive. There are buttons to go to windows for function setting and testing.



- 1) Board IP address and type
- 2) **Firmware Version number of board**

- Disconnect / Reconnect
Disconnect : Disconnect the communication
Reconnect : Reconnect the communication
- Ezi-IO Monitor
Input : Input / To monitor information such as Latch and to control related to Latch
Output : To monitor and control the output
A/D : To monitor A/D converted value
D/A : To activate DAC CH and set DAC value
- Ezi-IO Setting
Input : To set, save and load the input Active Level
Output : To set, save and load the output Active Level

A/D : To set, save and load the analog input range, filter buffer length, offset

D/A : To set analog output range, calibration value(High, Low)

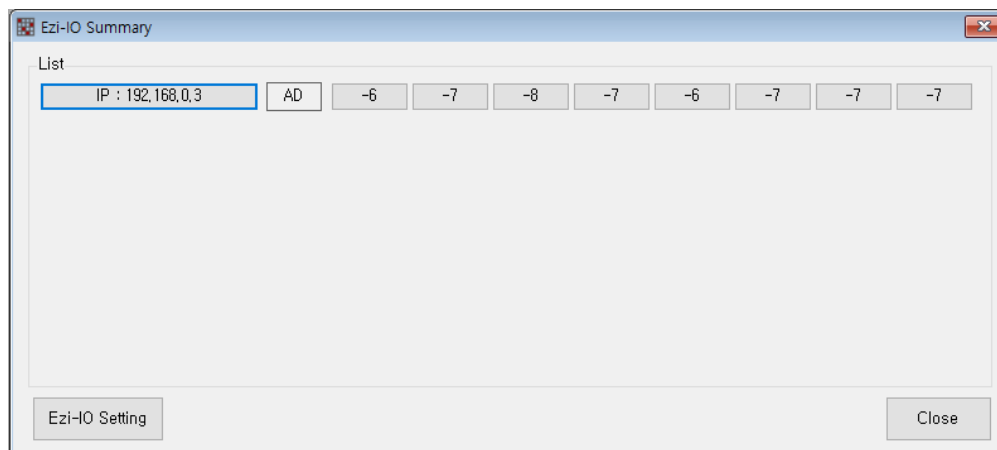
- Ezi-IO Summary

The status of all connected Ezi-IO Ethernet can be monitored at once.

In case of Output module, you can control and monitor.

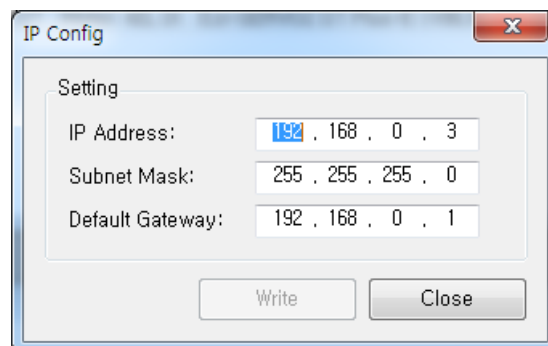
When clicking the Product IP on the list, window about the product opens.

When Ezi-IO Ethernet AD is activated, preset DAC value is displayed.



- Config Slave ID / IP Address

To change the setting of default IP Address / Subnet Mask / Gateway.



After clicking 'Write' and resetting the power, new configuration is applied.

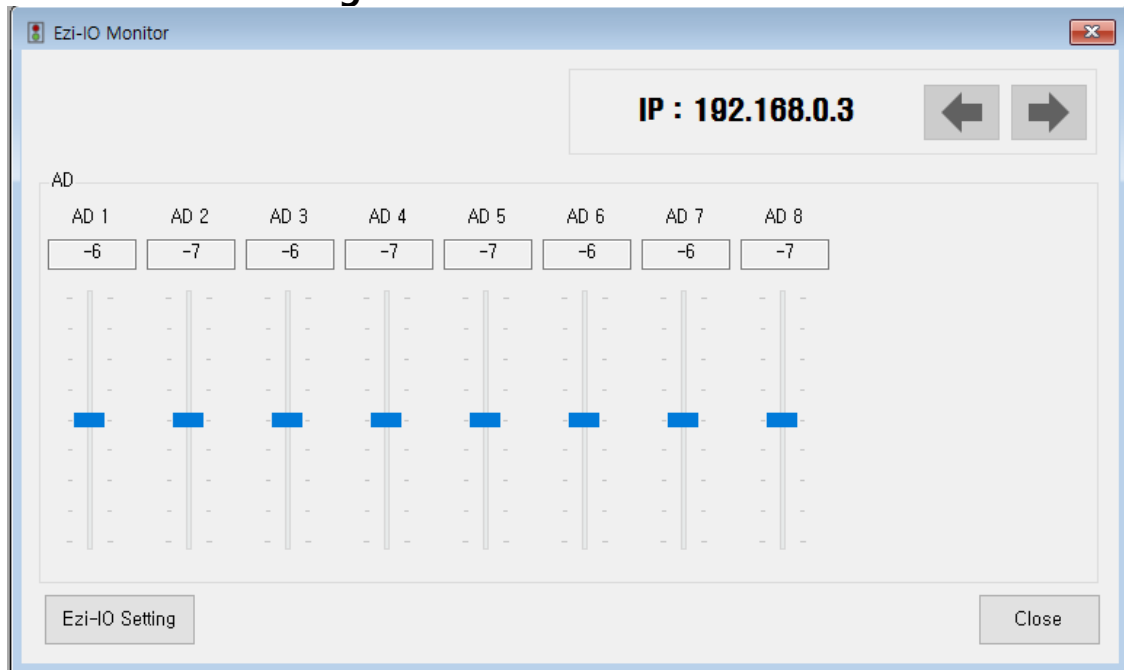
Last number of IP Address does not change.

Last number of IP Address is set **via Switch**.

Ex) When changing IP Address from 192.168.0.3(Switch : 3) to 192.169.10.100, IP Address is changed to 192.169.10.3.

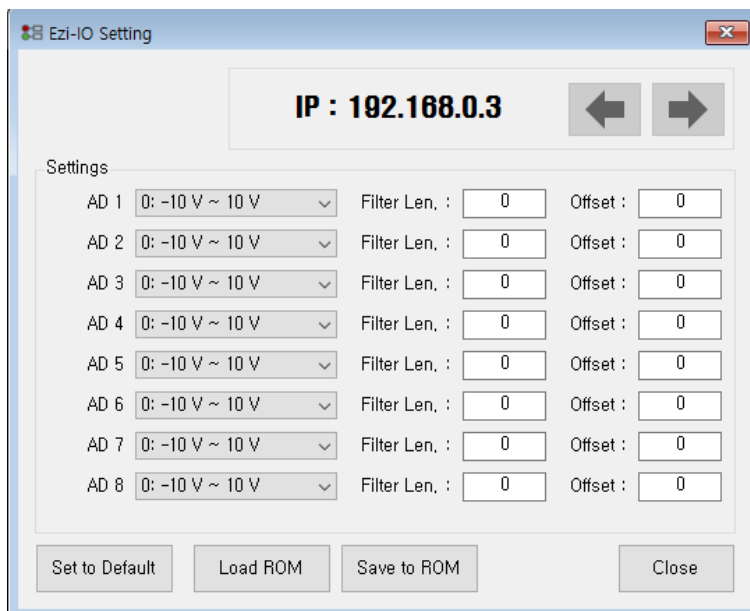
3 . I/O Monitoring and Setting

3 - 1 . Monitoring



A/D converted value of all channels for the module can be monitored.

3 - 2 . Setting



1) Setting analog input range :

- ① 0~4 : When SW3.1 is OFF, setting is available.
- | | |
|-----------------|--------------|
| 0 : -10 ~ 10V | 3 : 0 ~ 10V |
| 1 : -5 ~ 5V | 4 : 0 ~ 20mA |
| 2 : -2.5 ~ 2.5V | |
- ② 16~19 : The value set by SW3.3~10 is displayed.
- | | |
|----------------|------------------|
| 16 : -10 ~ 10V | 18 : -2.5 ~ 2.5V |
| 17 : -5 ~ 5V | 19 : 0 ~ 10V |

2) Filter buffer length :

Moving average filter function is provided to remove the noise in the analog signal and reduce the fluctuation of analog input value. The filter time interval of the moving average filter can be set between 0 and 200msec.

Filter length buffer can be set between 0 and 1,000. (Unit : 200 μ s)

When using moving average filter, set the filter buffer length 2 or higher. When the filter buffer length is 0 or 1, analog signal is not filtered through moving average filter.

3) Offset :

Offset function is provided to calibrate the deviation of voltage and current data caused by installment environment.

Offset value can be set between -1000 and 1000.

A/D converted value is applied as [A/D converted value + Offset value].

Change in Offset is applied immediately.

4) Default value setting :

Analog input range, filter buffer length and offset value is initialized(0).

When SW3.1 is ON, analog input value is not initialized and the value set by SW3 is maintained.

5) Loading ROM :

Set values stored in ROM is loaded to RAM.

6) Saving to ROM :

All changes are stored in RAM temporarily. Click 'Save to ROM' button to save to ROM.



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