

Ezi-MOTIONLINK[®]

Network based Motion Controller Plug-In to Servo Drives

- Ethernet Based Motion Controller
- Plug-in to Various Types of Servo Drive
- Various Motion Functions
- Simplification of the Wirings

Plus-E



CE

FASTECH

Fast, Accurate, Smooth Motion



Fast, Accurate, Smooth Motion

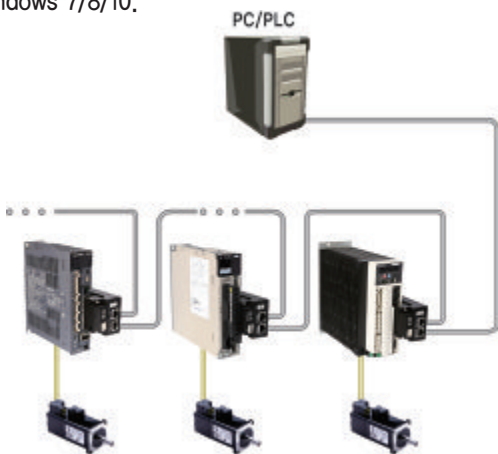
Ezi-MOTIONLINK[®] Plus-E

Network based Motion Controller Plug-In to Servo Drives



1 Network Based Motion Controller

A maximum of 254 axis can be operated from a PC through Ethernet communications. It can be connected in daisy-chain method by embedded Ethernet HUB. All of the Motion conditions are set through the network and saved in Flash ROM as a parameter. Motion Library(DLL) is provided for programming under Windows 7/8/10.



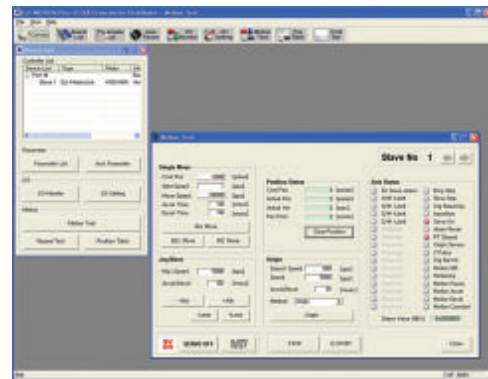
2 Plug-in to Various Servo Drives

Ezi-MOTIONLINK Plus-E does not need wiring of drives because it is directly connected to User interface connector of Servo Drives. Available Servo Drives are Yaskawa, Mitsubishi, Panasonic, Sanyo Denki, Nidec Sankyo, LS Mecapion, Higen, RS Automation Servo Drives.

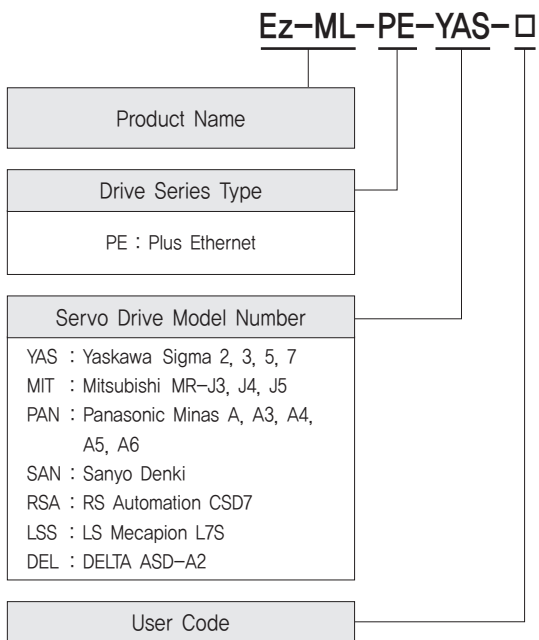


3 Various Motion Function

Ezi-MOTIONLINK supports various motions such as symmetric/asymmetric trapezoidal acceleration/deceleration. In addition, motion test, parameter setting, I/O setting, etc. can be performed simply and conveniently using the GUI(Graphic User Interface) provided.



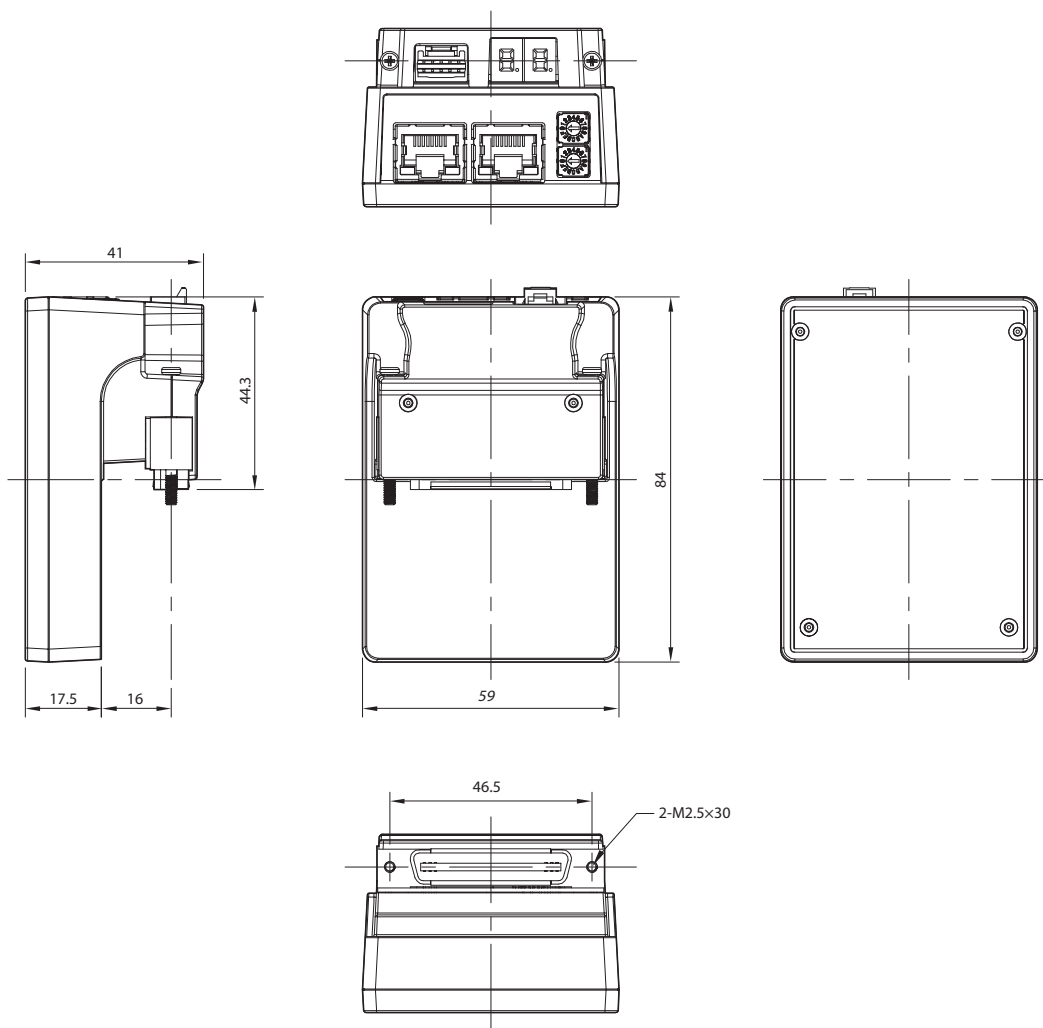
● Ezi-MOTIONLINK Plus-E Part Numbering



● Part Number

Part Number
Ez-ML-PE-YAS
Ez-ML-PE-MIT
Ez-ML-PE-PAN
Ez-ML-PE-SAN
Ez-ML-PE-RSA
Ez-ML-PE-LSS
Ez-ML-PE-DEL

● Dimensions of Controller [mm]



● Specifications of Controller

Input Voltage	24VDC \pm 10%	
Data Range	-134,217,728 ~ +134,217,727 [pulse] (28bit)	
Type of Acc/Dec	Symmetric / Asymmetric trapezoidal acceleration & deceleration	
Command pulse output method	2 pulse mode (CW/CCW) or 1 pulse mode (Pulse/Dir) (Selected by parameter)	
Max. Output Frequency	5MHz	
Encoder Max. Input Frequency	4MHz	
Input Signal	3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN), 1 programmable input (photocoupler)	
Output Signal	1 programmable output (photocoupler), Brake	
Rotational Direction	CW/CCW (Selectable by parameter)	
7-Segment Display	IP address, Alarm status	
Communication Interface	Ethernet communication, Dual port Ethernet switch embeded, Communication speed: 10/100 Base - T/TX Full-Duplex	
Multi Axes Drive	Maximum 254 axis operating with default configuration(Selectable IP: 1~254)	
Return to Origin	Origin Sensor, Z phase, \pm Limit Sensor	
GUI	User Interface Program within Windows	
Library	Motion Library (DLL) for windows 7/8/10	
Operating Condition	Ambient Temperature	<ul style="list-style-type: none"> · In Use: 0~55°C · In Storage: -20~70°C
	Humidity	<ul style="list-style-type: none"> · In Use: 35~85% RH (Non-condensing) · In Storage: 10~90% RH (Non-condensing)
	Vib. Resist.	0.5g

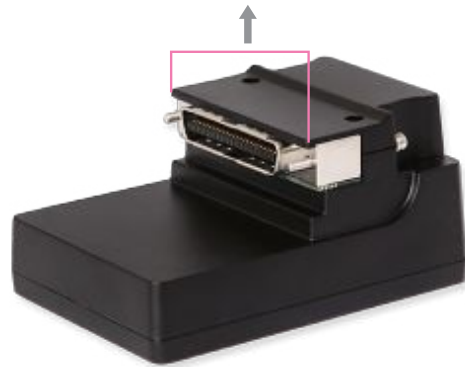
Settings and Operation

Power Input/Output signal connection(CN1)



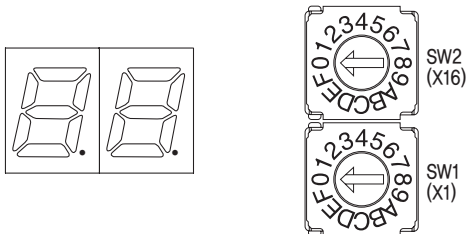
IP setting switch(SW1, SW2)
Ethernet communication connection(CN2, CN3)

Servo drive connection(CN4)



1. Ethernet IP Display and Setting Switch(SW1, SW2)

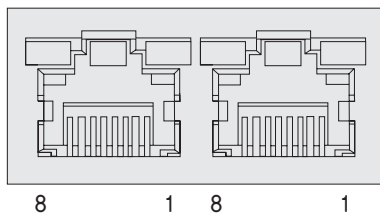
It is to be set from 1 to 254. Please set the IP not to overlap each other. (Basic set up is "192.168.0.xxx" and xxx is to be set by switch)
If set the switch to 255, IP is set automatically. (DHCP)



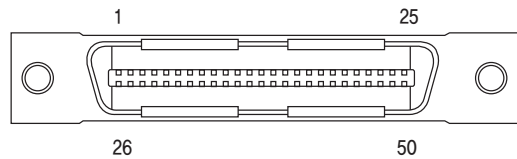
Ex) In case of SW1: 7 and SW2: 5
 $5 \times 16 + 7 \times 1 = 87$
IP is to be set as 192.168.0.87

2. Ethernet Communication Connector(CN2, CN3)

NO.	Function	NO.	Function
1	TD+	6	RD-
2	TD-	7	----
3	RD+	8	----
4	----	Connection hood	F_GND
5	----		



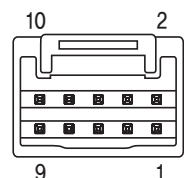
3. Servo Drive Connector(CN4)



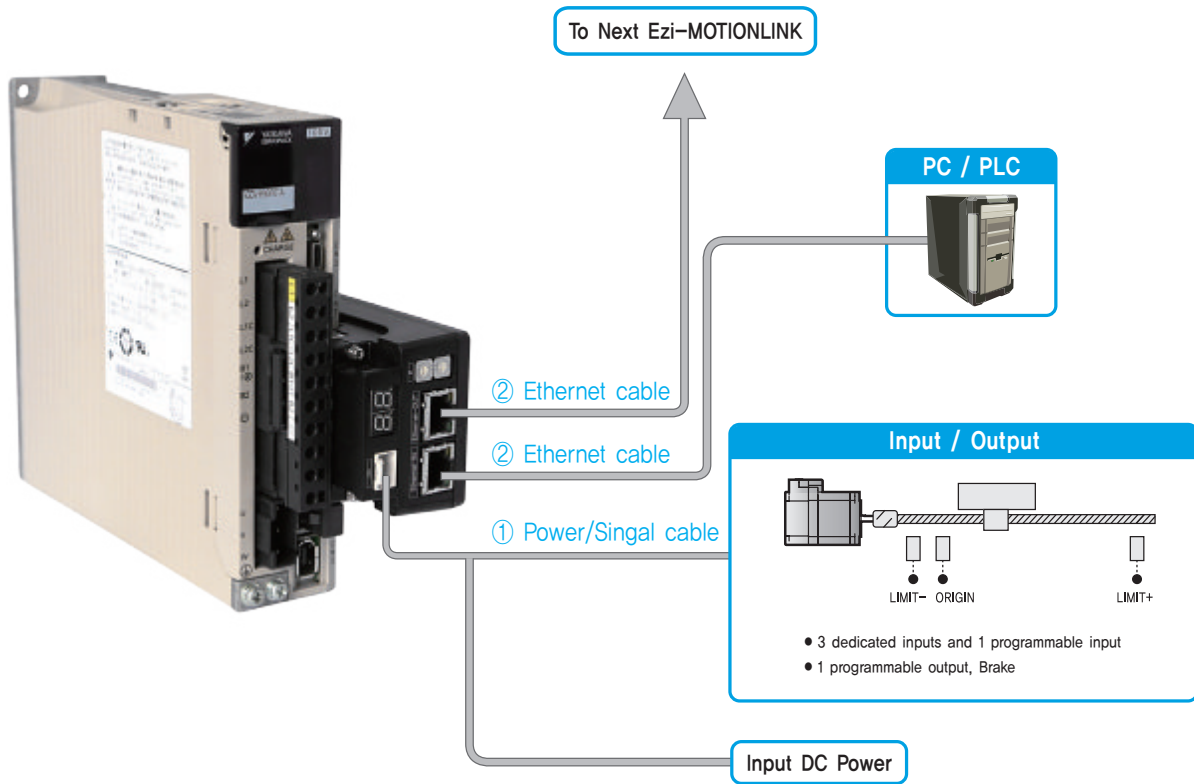
Pin Map of connector(CN4) which connects to Servo Drives is various according to type of Servo Drives, Please check Manual in detail. (It is plug-in to Servo Drives which are using normally so users do not have to concern.

4. Power Input/Output Signal Connector(CN1)

NO.	Function	I/O
1	24VDC	Input
2	GND	Input
3	EXT_24VDC	Output
4	EXT_GND	Output
5	LIMIT+	Input
6	LIMIT-	Input
7	ORIGIN	Input
8	Digital In1	Input
9	BRAKE	Output
10	Digital Out1	Output



● System Configuration



1. Options

① Power/Signal Cable

Power and I/O connection cable for Ezi-MotionLink Plus-R, Origin Sensor and etc.

Item	Length [m]	Remark
CSPE-S-□□□F	□□□	Normal Cable

□ is for Cable Length, The unit is 1m and Max. 20m length.

② Ethernet Cable

STP(Shielded twisted pair) cable of Category 5e or higher.

Item	Length [m]	Remark
CGNR-EC-□□□F	□□□	Normal Cable

□ is for Cable Length, The unit is 1m and Max. 100m length.

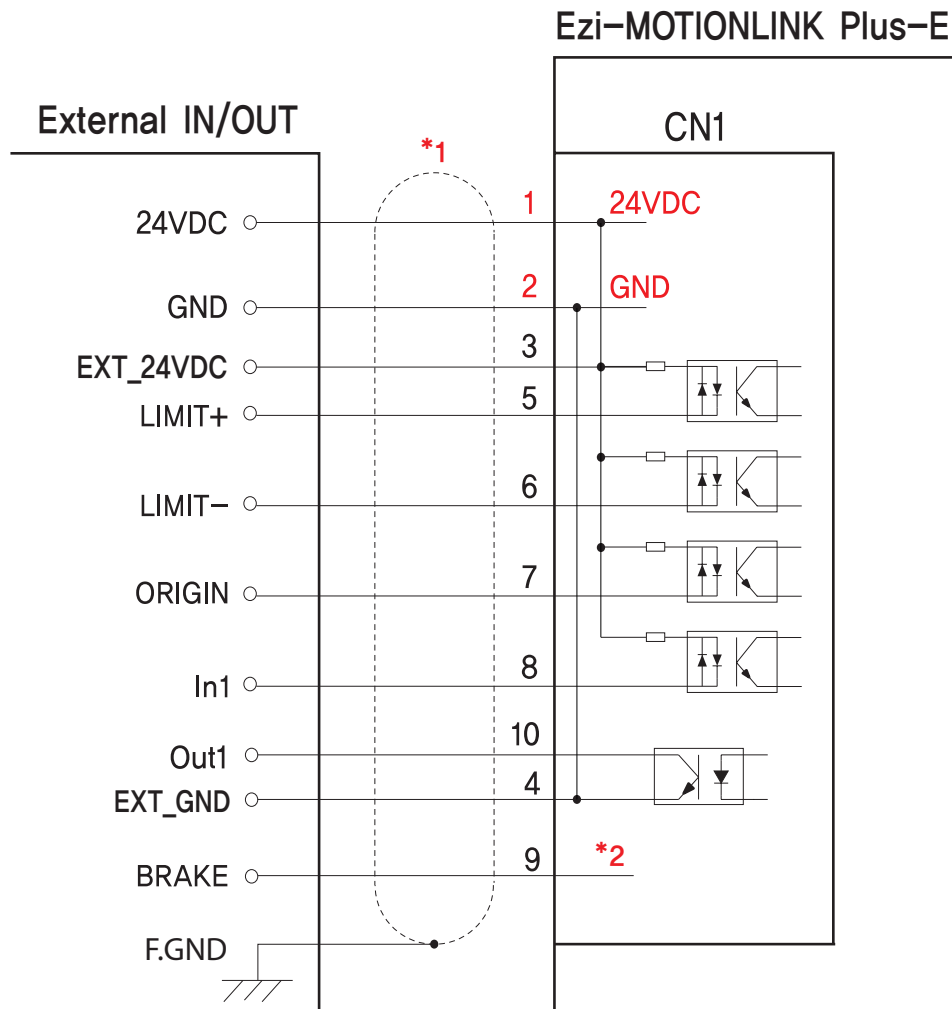
2. Connector Specifications

Connector specifications for cabling to drive.

Purpose	Item	Part Number	Manufacturer
Power/Signal Connector (CN1)	Housing Terminal	501646-1000 501648-1000 (AWG 26~28)	MOLEX

※ Above connector is the most suitable product for the drive applied, Another equivalent connector can be used.

External Wiring Diagram

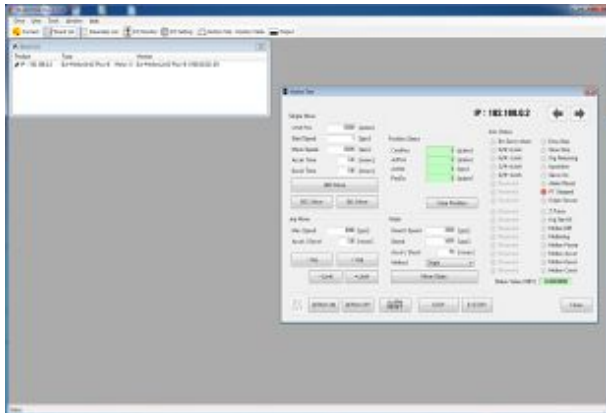


* 1) Shield Cable

* 2) Please refer to the manual of the servo drive and set the brake function if you want to use the brake function with Ezi-MOTIONLINK.

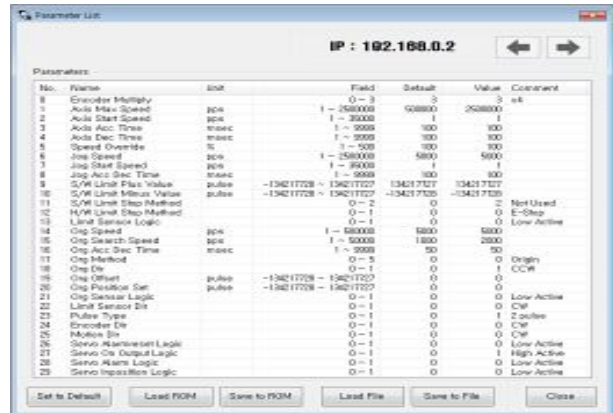
※ When connects I/O cable between controller and drive, please turn off the power of both controller and drive, in order to protect the drive from any damage.

● GUI(Graphic User Interface) Screenshot



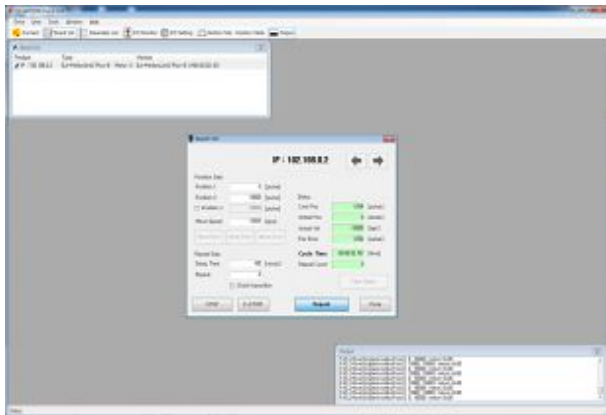
◆ Controller Lists and Motion Test

This screen display the controller list that connected to system, You can make a single move, jog and origin command and also the motor status is displayed.



◆ Parameter List

All of the parameters are displayed and modified on this screen.



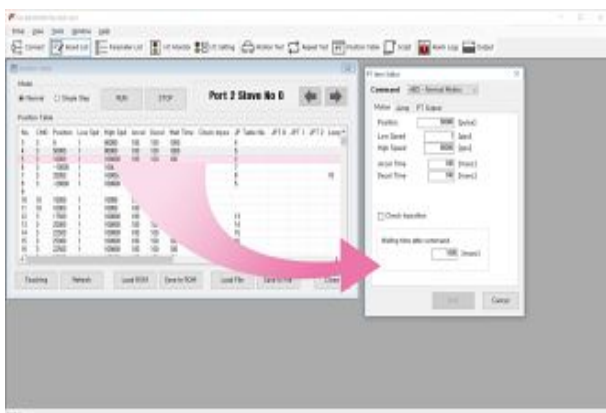
◆ Motion Repeat and Monitor Status

Target position, speed, delay time and repeat count are selected for repeat motion test. Motion library(DLL) is also displayed on screen.



◆ I/O Monitoring and Setting

You can select various digital input and output signals of controller.



◆ Position Table

You can edit the position table and execute it, The position table data can be saved and loaded from Flash ROM and Windows file.

※ Graphic User Interface(GUI) Program can be downloaded from website, (www.fastech.co.kr)

※ Graphic User Interface(GUI) Program can support Windows 7/8/10.

※ Graphic User Interface(GUI) Program can be update without prior notice for improving the performance or convenience of user.

MEMO

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