

Ezi-SERVOII-EC 기초 사용법

< TRIO 'MC4N'편 >



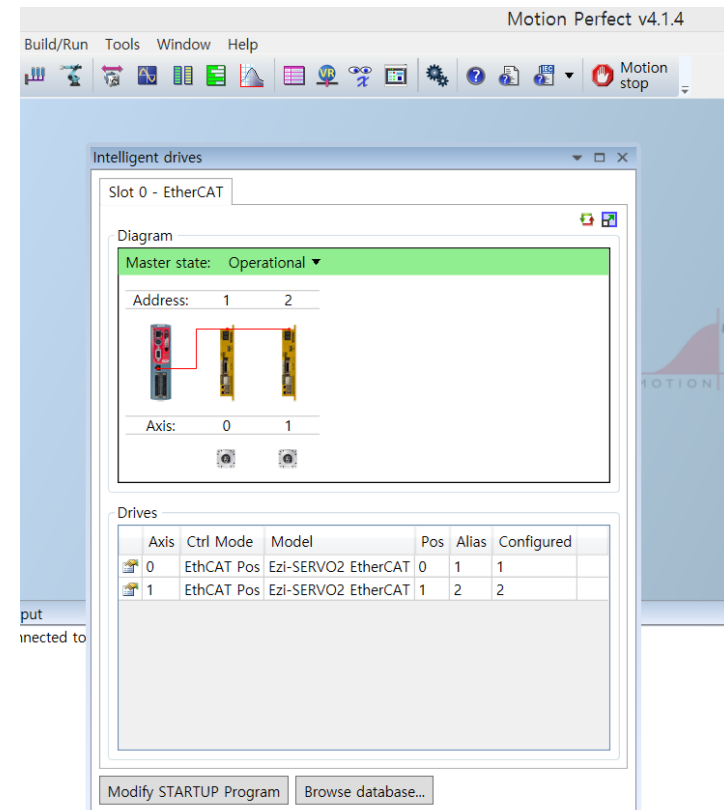
ESI(XML) 저장

□ TRIO 社の MC4N master 의 경우 당사의 ESI 파일을 User 가 별도로 Register 할 필요가 없음.

□ 당사의 ESI (XML) file을 TRIO 본사에 보내 TRIO 본사에서 당사의 ESI file 정보를 TRIO master F/W에 등록하여 사용.

□ Tools menu에서 intelligent drives를 클릭하면 현재 연결된 Drive축 정보를 확인 할 수 있음

□ USER 는 TRIO MASTER에 당사 Drive를 연결하여 TRIO BASIC 구동 program 을 제작하거나 기 보유 program 을 load 하여 사용 가능 함



Program 설치

□ <http://www.triomotion.com/> 사이트 접속 -> user 등록 진행

→ 구동 프로그램 다운로드를 위해서 User 등록 필수



MC664-X

NEW from Trio

The new MC664-X features a Quad Core 1GHz A9 processor allowing up to 128 axes and 50us servo updates for 8 axes.

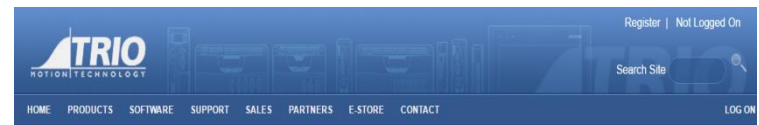
It has built-in EtherCAT and also supports a wide variety of other communication protocols.

Trio's highest performance and most flexible Motion Coordinator!

MC508...

NEW from Trio

The MC508 is a high specification Motion Coordinator using a high performance ARM Cortex A9 800 Mhz Processor, with eight Voltage outputs and eight flexible axis ports, that can be configured for up to sixteen pulse and direction output axes or eight closed loop servo axes.



Trio User Registration

Please fill in your details in the boxes provided below in order to complete your registration for the Trio Motion web-site. Boxes marked with * are mandatory.

First Name	<input type="text" value="Yunwoo"/>	*
Surname	<input type="text" value="Oh"/>	*
E-mail Address	<input type="text" value="ywoh@fastech.co.kr"/>	*
Handle (to be used in the Trio Forum)	<input type="text"/>	*
Company	<input type="text"/>	*
Address 1	<input type="text"/>	
Address 2	<input type="text"/>	
City	<input type="text"/>	
State / Region / County	<input type="text"/>	*
Country	<input type="text" value="Please Select"/>	*
Postcode	<input type="text"/>	

Program 설치

User 등록 후 Home 에서 Software 클릭

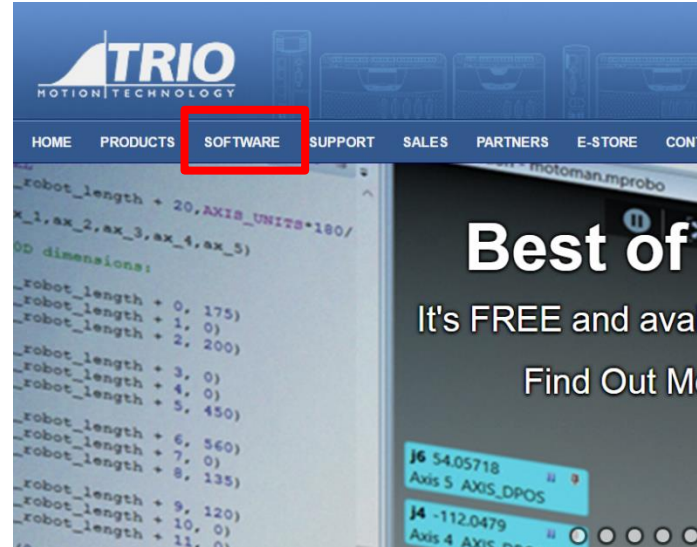


MC664-X
NEW from Trio

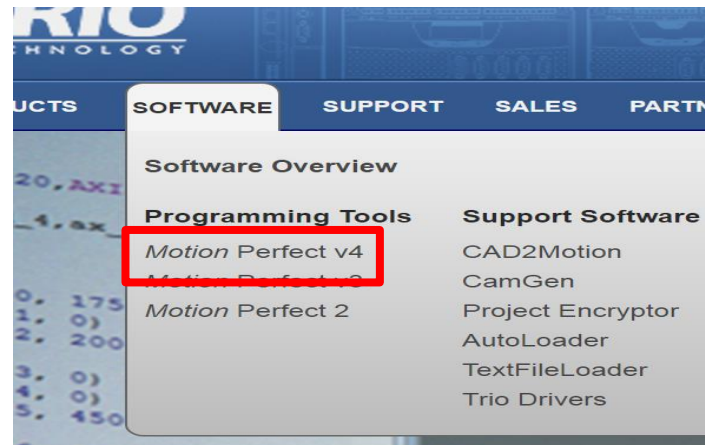
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Motion Perfect V4 선택



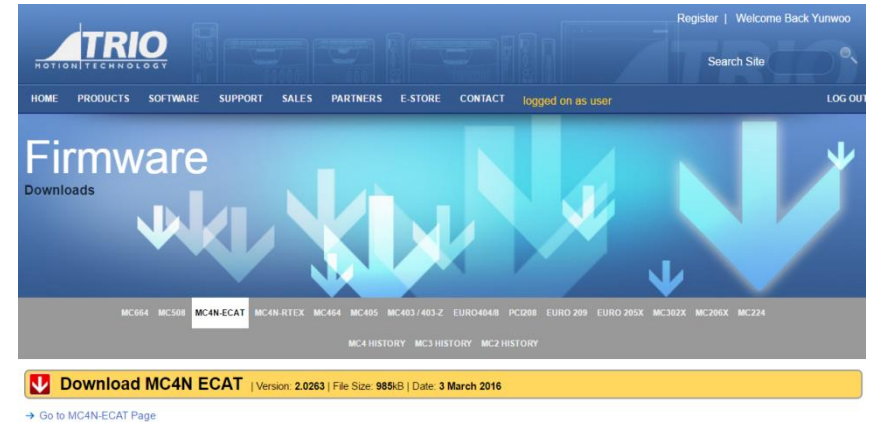
Program 설치

Set up Program 과 F/W를 다운 받는다.

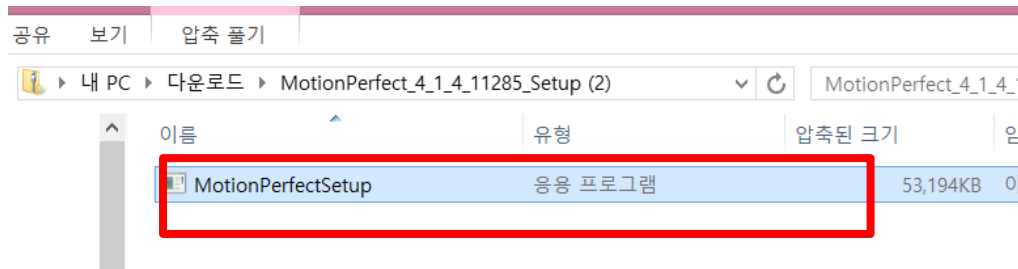


Motion Perfect v4 is FREE to download.

⚠ 2.0196 or newer firmware is required to run MPv4.

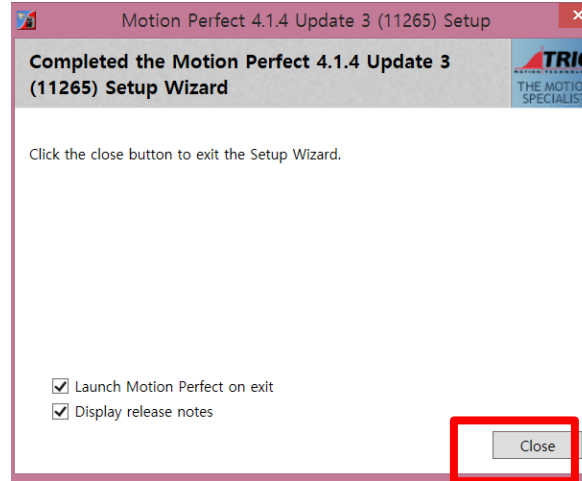


Download 후 set up program 을 실행

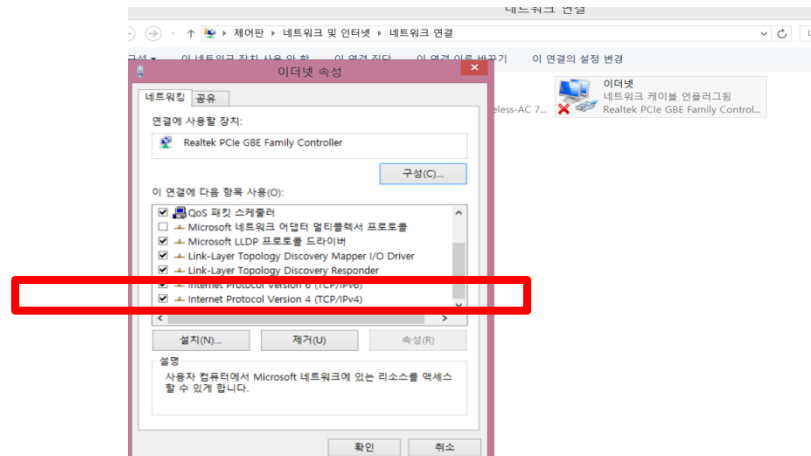
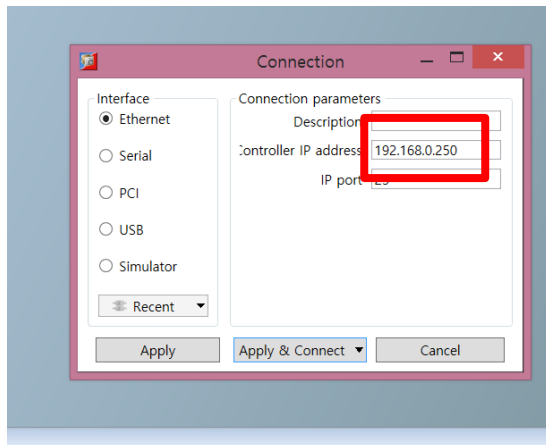


Program 설치

program 설치

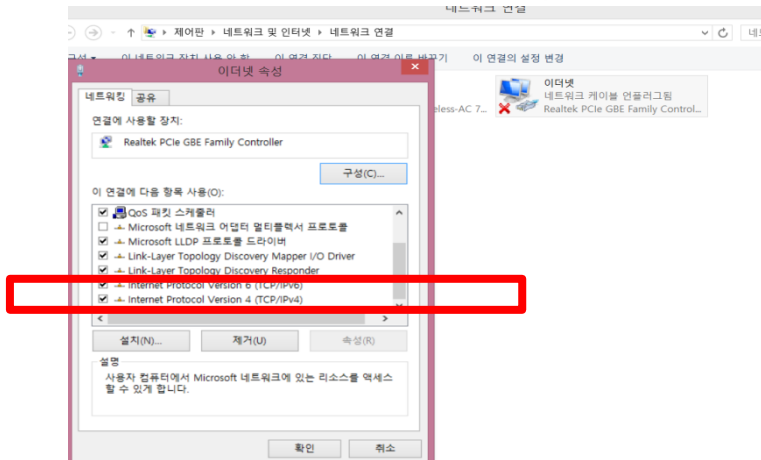


controller Ethernet IP 확인 및 설정 변경 후 연결 (192.168.0.250)



Program 설치

Ethernet 속성 변경 (internet protocol version 4 (TCP/IPv4) 클릭



controller IP (192.168.0.250) 와 충돌하지 않도록 address 변경 입력 ex) (192.168.0.251)



Master 와 Drive 연결

master 연결



PC 와 Ethernet 연결 port (Pc internet port 와 연결)

Drive 와 EtheCAT 연결 port (Drive ECAT IN port에 연결)

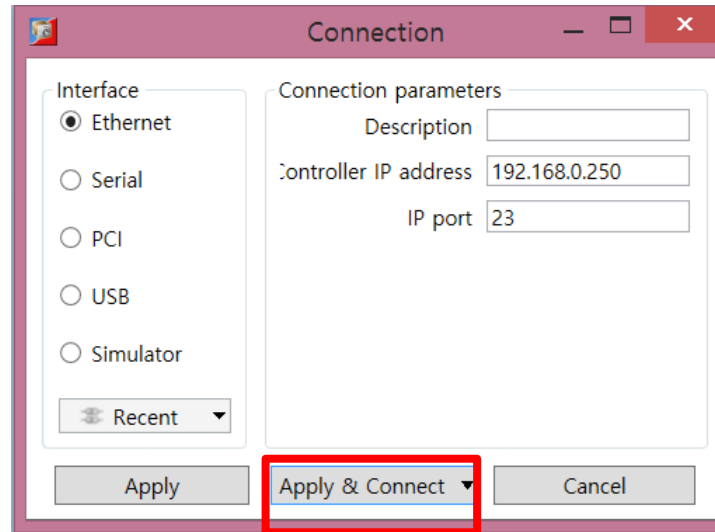
Ground 연결

전원 연결

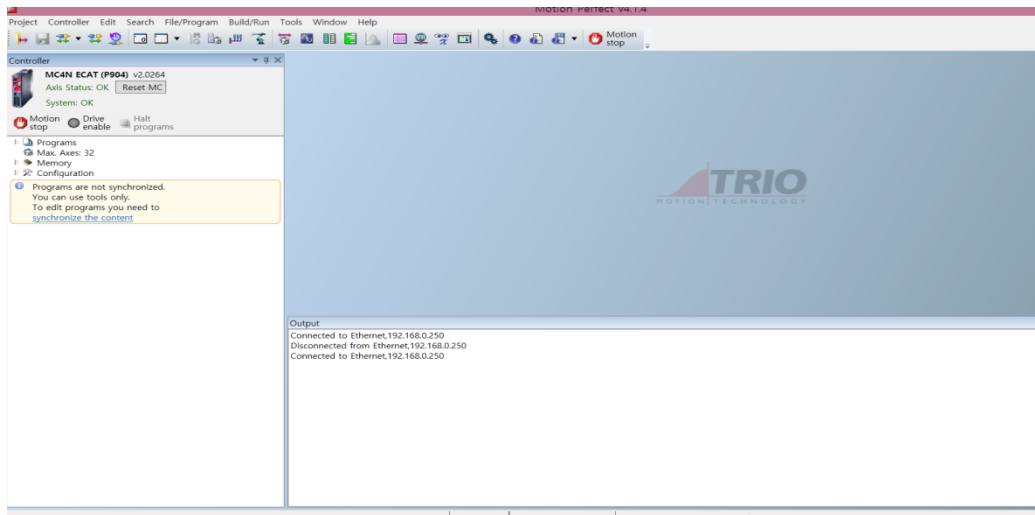
연결 후 Demo의 전원을 인가 후 Motion Perfect v4 프로그램 연결

Program 구동

Program 연결



실행하고 나면 하기 프로그램이 화면에 뜬다



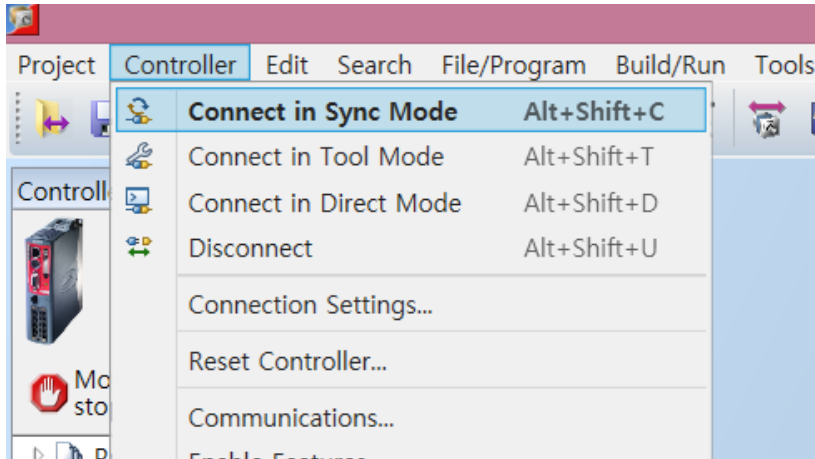
Program 구동

□ Menu 에서 controller를 클릭 후 Load firmware 를 클릭 하여 F/W down load 진행 (TRIO master F/W 임 _ 당사 Drive정보 포함된 F/W)

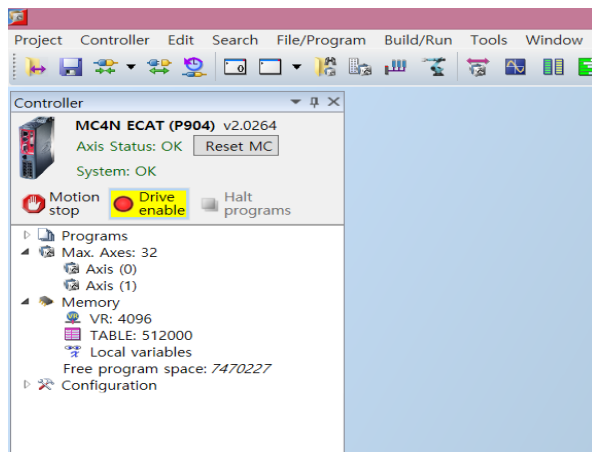
The screenshot displays the Motion Perfect v4.1.4 software interface. The main window shows the 'Controller' panel on the left, which includes the MC4N ECAT (P904) v2.0264 controller status (Axis Status: OK, System: OK) and control buttons (Motion stop, Drive enable, Halt programs). The 'Programs' tree on the left lists various parameters like Max. Axes, VR, and TABLE. A 'Load Firmware' dialog box is open in the foreground, displaying a warning message: 'Warning: Please read the following very carefully'. The dialog lists four critical instructions: 1) This process will completely overwrite the existing firmware with a new version; 2) Make sure that all the drives and actuators are disabled as the servo and I/O control will be lost for the duration of the load; 3) Make sure that the programs on the controller have been saved before continuing as this process will erase the contents of the controller; 4) This process may take several minutes to complete!!! The dialog also includes a 'Next >>' button and a 'Close' button.

Program 구동

□ F/W down load 후 Menu 의 Controller 항목에서 Sync Mode 클릭

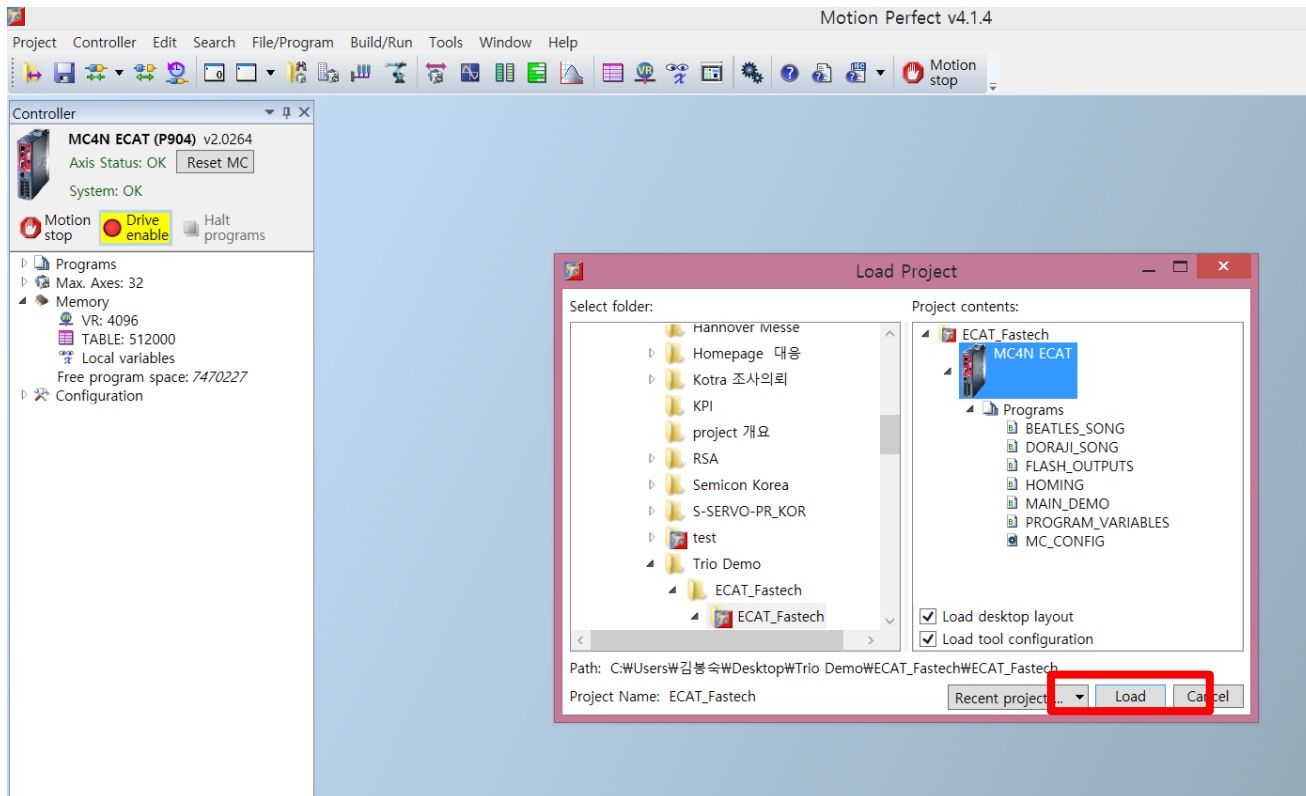


□ Drive Enable을 활성화 시킴



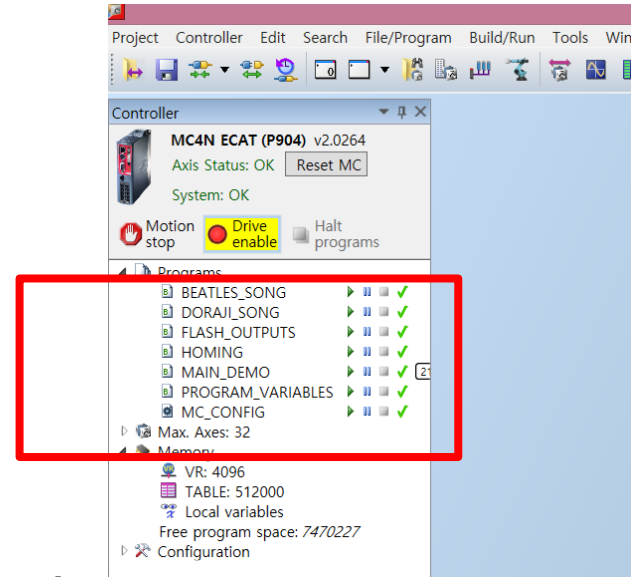
Program 구동

Menu 의 Project 에서 Load project를 클릭 후 Program 선택 후 load 시킴

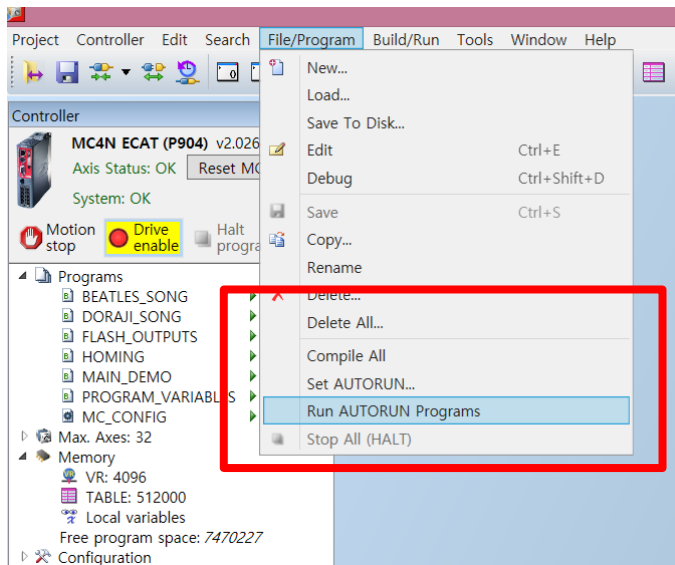


Program 구동

구동 프로그램 설치 확인

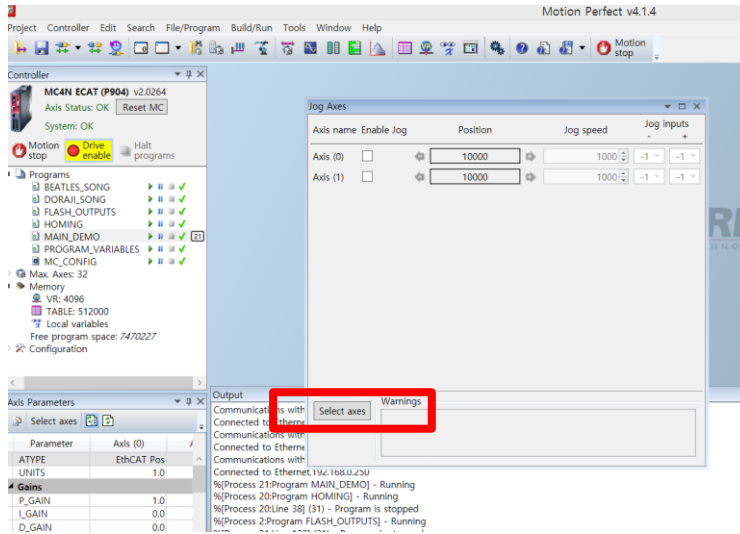


Build/ Run Menu 선택 후 Run AUTORUN 클릭 (Master Off/ 재 On)

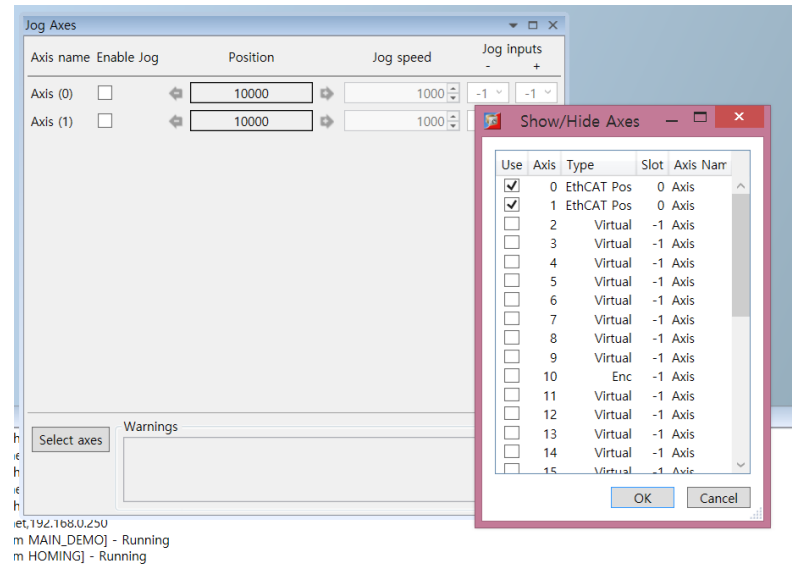


Program 구동 (Jog 운전)

Tools menu 의 jog Axes 를 클릭하여 Jog 운전 모드 선택



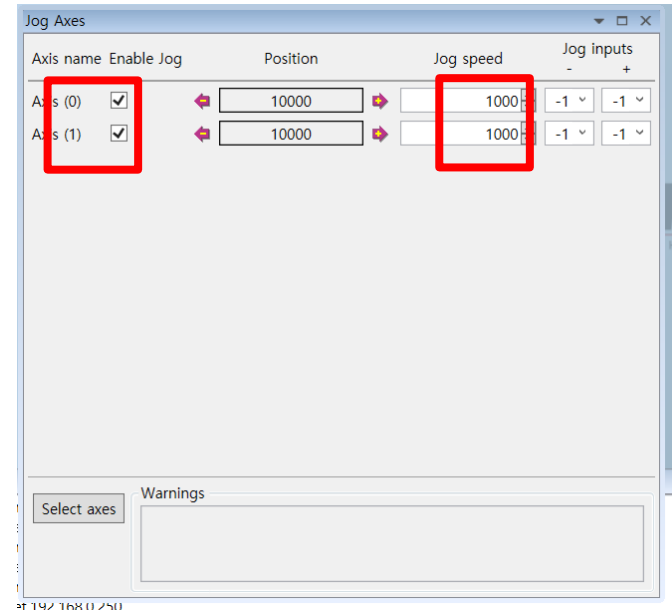
Select axes를 클릭하여 축 지정



Program 구동 (Jog 운전)

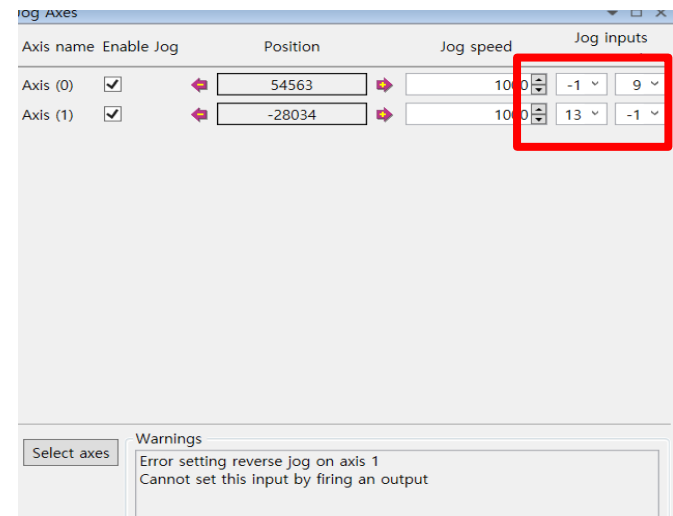
Jog 운전 setting

1. 각 축을 클릭하여 활성화 시킴
2. jog speed 를 setting
3. Jog input setting
 - Jog input - / + 항목 지정값 변경하여 구동 가능
 - - 는 CCW 구동 / +는 CW 구동



Jog 운전

1. Value 를 -1 로 지정한 축은 Jog 구동 안하며 + value를 지정한 축만 setting 된 jog speed 로 구동
2. 각 항목을 모두 -로 value로 변경 하면 Jog 모드 정지 됨.



우리는 40년 Stepping Motor의 역사를 바꾸는 주인공입니다!!



세계로!!
세계로!!

Ezi-SERVO[®]
Closed Loop Stepping System