

Ezi-SERVOII-EC 기초 사용법

< **Elmo** 'Maestro'편 >

Motion Control



■ Ezi-SERVOII-EC 관련 자료 Down

Confidential

□ ESI(XML) : www.fastech.co.kr 홈페이지 [파스텍 자료실]에서 다운로드

The screenshot shows the Fastech website interface. At the top, there is a navigation menu with links for '회사소개', '제품정보', '제품동영상', '전시회안내', '해외판매망', '파스텍 자료실', 'FAQ', and '온라인상담'. The main content area features a large banner with the text 'Fast, Accurate and Smooth Motion Control Technology together with always constant mind'. Below the banner, there is a search bar and a section titled '파스텍 자료실' (Fastech Archive). The archive section displays a list of files, with the file 'FASTECH_Ezi-SERVO2_EtherCAT.XML (176.2K) [93]' highlighted by a red dashed box. A red arrow points to this file with the word 'Click' written above it. The file details include the date '2015-10-12 09:59:27' and a download count of 676.

■ Ezi-SERVOII-EC 관련 자료 Down

Confidential

□ Manual : www.fastech.co.kr 홈페이지 [제품정보]에서 다운로드

FASTECH
Fast, Accurate, Smooth Motion

회사소개 제품정보 제품동영상 전시회안내 해외판매망 파스텍 자료실 FAQ 온라인상담

Fast, Accurate and Smooth Motion Control Technology
together with always constant mind

FASTECH products can be found driving applications such as: LCD/LED Manufacturing Semi-conductor fabrication, Assembly machines, Packaging machines, Medical diagnostic equipment, Laboratory apparatus, Vision Inspection systems and many other applications that require precise smooth movement. Fastech drives have industry standard NEMA mounting flanges and easily adapt to most linear actuators and precision stages.

SEARCH 검색

Ezi-Servo series
풍부한 기술력과 경쟁력을 가진 파스텍(주)을 소개합니다.

HOME > 제품정보 > Ezi-Servo series

제품정보
Product Information

- 파스텍 제품특성
- Ezi-SERVO series
- Ezi-STEP series
- Ezi-LinearStep series
- Ezi-Robo series
- S-SERVO series
- Ezi-MotionNetwork series
- Ezi-Motionlink series

Ezi-SERVO II EtherCAT
Closed Loop Stepping System

EtherCAT CE
Conformance tested

Ezi-SERVO II EtherCAT은 FASTECH의 페루프 스텝 모터제어 시스템과 Ethernet 기반의 Fieldbus인 EtherCAT을 결합한 시스템입니다. Ezi-SERVO II EtherCAT은 CiA402 Drive Profile을 지원합니다.

Click

- CiA 402 Drive Profile Support
- Closed Loop Stepping System
- No Gain Tuning / No Hunting
- Torque Improvement by Boost Current Control

제품사양 제품형명 및 도면 카탈로그 메뉴얼

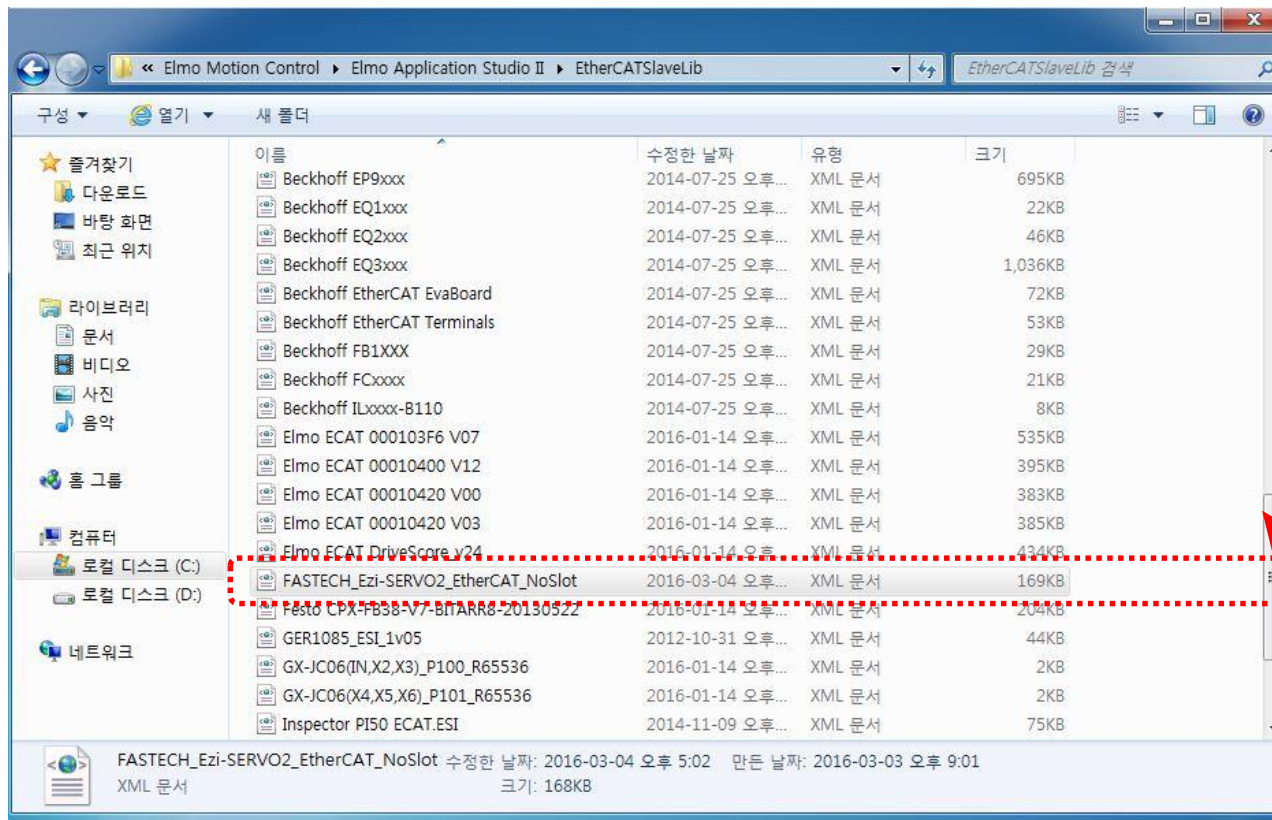
Closed Loop Stepping System

ESI(XML) 저장

Confidential

다운받은 ESI(XML)파일을 아래의 경로에 복사

저장 경로 : C:\Program Files (x86)\Elmo Motion Control\Elmo Application Studio II\EtherCATSlaveLib



파스텍 ESI(XML)파일

PC Setting [IP 주소 변경 필요]

Confidential

Maestro와 연결될 PC의 이더넷 네트워크 'IP 주소', '서브넷 마스크' 변경

Internet Protocol Version 4 (TCP/IPv4) 속성

일반

네트워크가 IP 자동 설정 기능을 지원하면 IP 설정이 자동으로 할당되도록 할 수 있습니다. 지원하지 않으면, 네트워크 관리자에게 적절한 IP 설정값을 문의해야 합니다.

자동으로 IP 주소 받기(O)

다음 IP 주소 사용(S):

IP 주소(I): 192 . 168 . 1 . 2

서브넷 마스크(U): 255 . 255 . 255 . 0

기본 게이트웨이(D): . . .

자동으로 DNS 서버 주소 받기(B)

다음 DNS 서버 주소 사용(E):

기본 설정 DNS 서버(P): . . .

보조 DNS 서버(A): . . .

끝낼 때 설정 유효성 검사(L)

고급(V)...

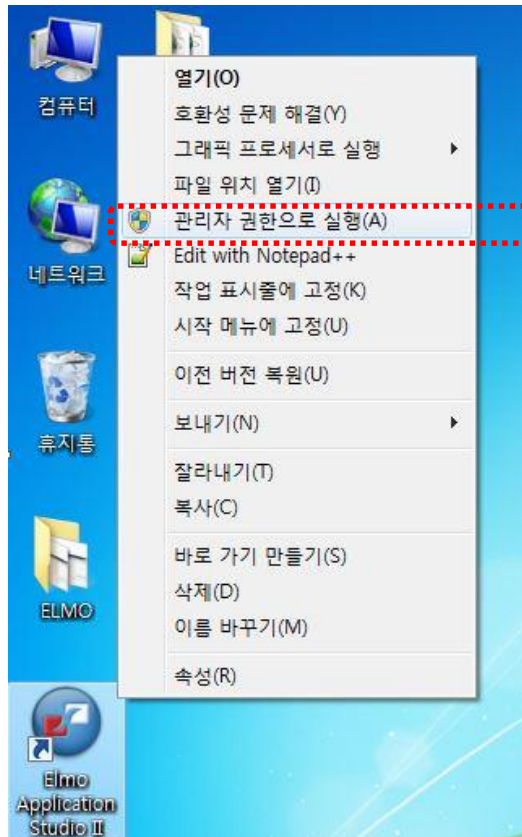
확인 취소

ex) IP 주소 마지막에 '3'을 사용하면 X

- 연결할 마스터와 문제가 없게 설정
- Gold Maestro의 경우 192.168.1.3 을 사용

Elmo Application Studio II

실행 파일은 바탕화면에 생성



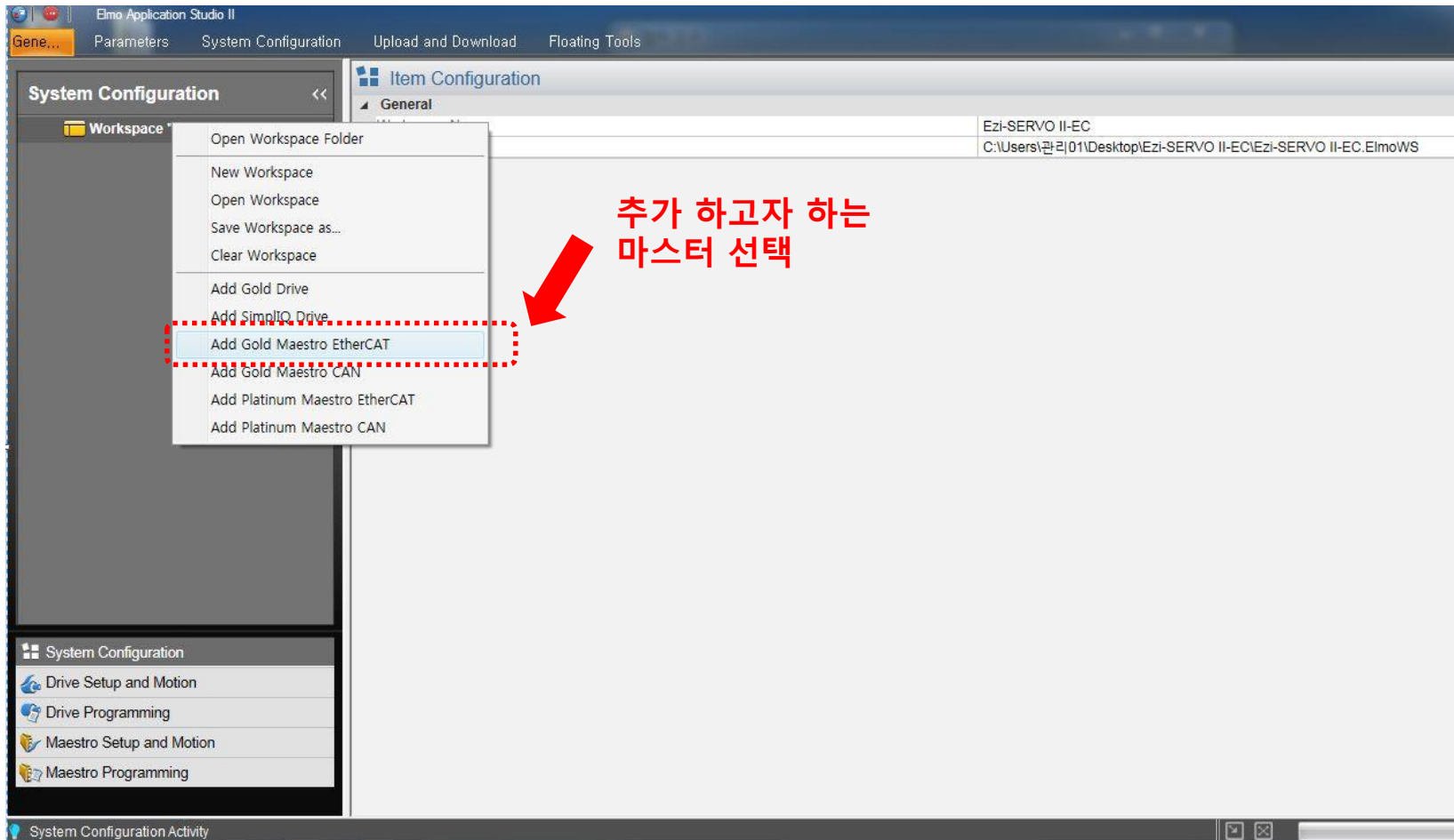
관리자 권한으로 실행

- 실행 전 윈도우 방화벽 해제
- 별도의 Init File 제작 없이 해당 GUI에서 모든 기능 구현

1. Master 설정 [새로운 마스터 추가하기]

Confidential

□ 신규 Workspace에서 마우스 '우클릭' 하여 Master 추가



1. Master 설정 [새로운 마스터 추가하기]

Confidential

□ 생성된 Master(G01) 기본 설정

The screenshot shows the 'Item Configuration' window for Master G01. The configuration is as follows:

Property	Value
Target Name	G01
Target Version	Unknown
Target Type	Gold Maestro EtherCAT
Cycle Time	1000
Mailbox Cycle Time	5000
Background Cycle Time	100
Receive f.b. status	<input type="checkbox"/>
Target Connection	
Connection Type	Maestro TCP/IP
IP Address	192.168.1.3
Maestro Network	
Network Type	ETHERCAT
Gateway	
Auto Connect Gateways	<input type="checkbox"/>
Auto Disconnect Gateways	<input type="checkbox"/>
Host Interface	
Host IP Address	192.168.1.2

The 'Target Connection' section (IP Address: 192.168.1.3) and the 'Host Interface' section (Host IP Address: 192.168.1.2) are highlighted with red dashed boxes. A red arrow points to the 'Target Connection' section.

'Target Connection'
내용을 아래와 같이 설정

□ Host IP Address는 PC의 IP Address

1. Master 설정 [새로운 마스터 추가하기]

Confidential

□ 기본 설정 후 연결된 EtherCAT Slave 검색

System Configuration

Workspace "Ezi-SERVO II-EC"

G01

Item Configuration

G01:192.168.1.3

General

Target Name G01

Target Version Unknown

Cycle Time 1000

Cycle Time Unit 5000

Cycle Time Resolution 100

Type Maestro TCP/IP

Network 192.168.1.3

Host Interface

Host IP Address 192.168.1.2

Context Menu:

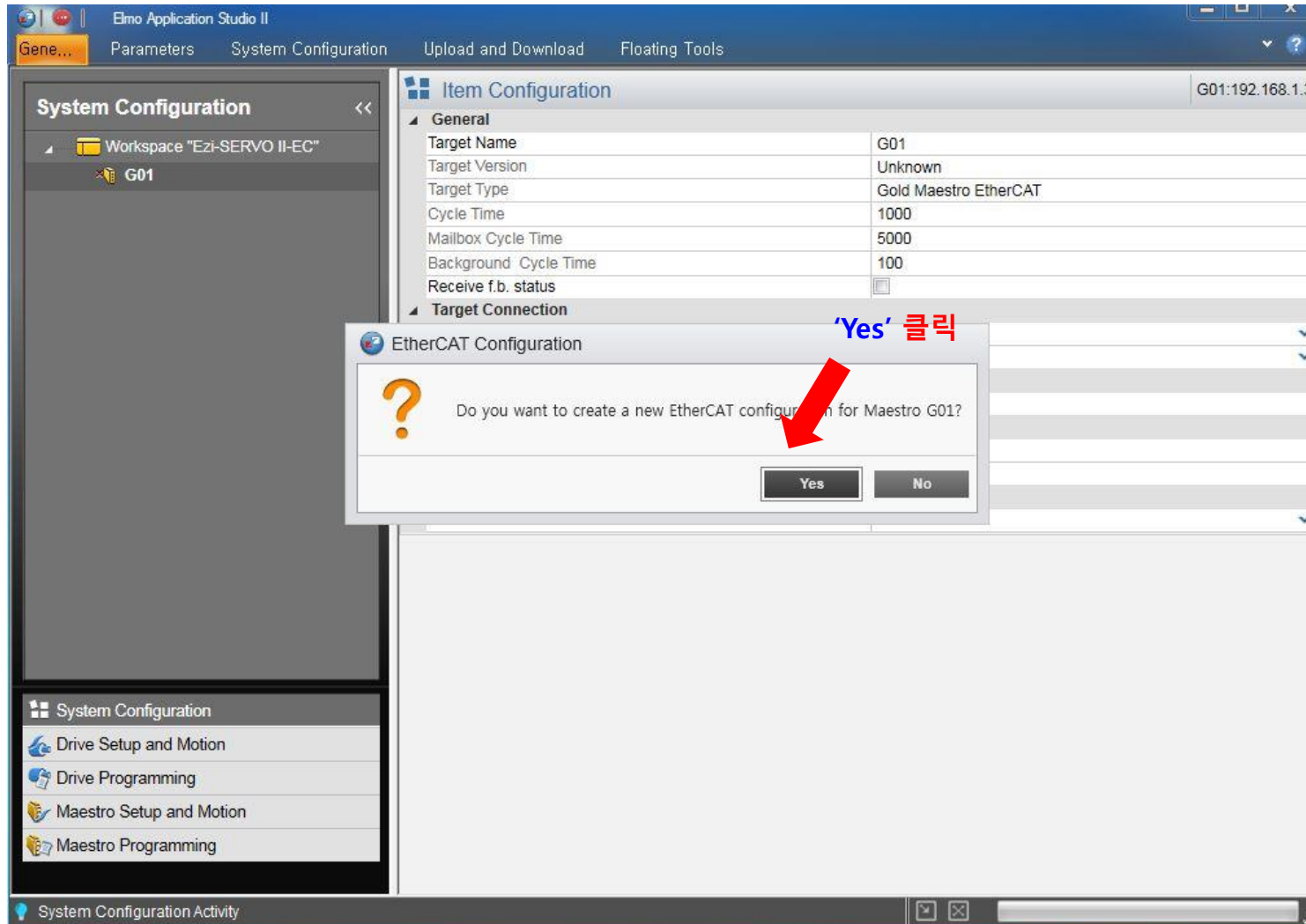
- Open Target Folder
- Remove Target
- Connect
- Connect Maestro & Gateways
- New EtherCAT Configuration
- Edit EtherCAT Configuration
- Add Group
- Add Virtual Device

Annotations:

- G01 마우스 '우클릭' 후
- 'New EtherCAT Configuration' 클릭

1. Master 설정 [새로운 마스터 추가하기]

Confidential



2. Slave 설정 [Ezi-SERVO II-EC 연결]

Confidential

□ Physical Layer에 연결된 드라이버가 인식(ex> 3축 연결)

The screenshot displays the Elmo Application Studio II interface. On the left, the 'System Configuration' tree shows a folder 'Ezi-SERVO II-EC' containing a sub-folder 'G01' with three entries: 'g01 (Ezi-SERVO2 EtherCAT)', 'g02 (Ezi-SERVO2 EtherCAT)', and 'g03 (Ezi-SERVO2 EtherCAT)'. The main window is the 'Maestro EtherCAT Configurator' with tabs for 'Master', 'Quick Settings', 'Process Image', 'Cyclic', and 'Distributed Clocks'. The 'Master' tab is active, showing three sections: '1. Connection Settings for the Master Server' (Host IP Address: 192.168.1.3, Port Number: 5000), '2. EoE IP Parameters' (Create Gateway: checked, Set EoE IP Start Address: Automatically, EoE IP Start Address: 192.168.1.4), and '3. Master Parameters' (Initial Master State: OPERATIONAL, Default Cycle Time: 1ms). A dialog box titled 'EtherCAT Configuration' is overlaid, asking 'The Main Cycle time of Maestro will be 1000 usec. Do you want to continue?'. A red arrow points to the 'Yes' button, with the text 'Cycle time '1ms'일 시 'Yes' 클릭'. The bottom status bar shows 'Current Toolset EtherCATConfigurationToolsetModel' and a message log with the entry '2016-03-30 오후 2:24:30 Download Configuration Start'.

2. Slave 설정 [Ezi-SERVO II-EC 연결]

Confidential

□ PDO Mapping 및 드라이버 설정

- 드라이버 설정을 위하여 마스터를 'STOP' 시킨다

The screenshot shows the Maestro EtherCAT Configurator software interface. On the left, the 'System Configuration' tree is visible, with 'Ezi-SERVO II-EC' expanded to show three slave units (g01, g02, g03). A red dashed box highlights the 'g01' unit, and a context menu is open over it with 'Stop Master' selected. A red arrow points from the text '마우스 '우클릭' 후 'Stop Master'' to the 'Stop Master' option in the menu. The main window displays the 'Maestro EtherCAT Configurator' settings for the Master Server, including connection settings (IP address 192.168.1.3, port 5000) and various parameters (Master Parameters and Frame Parameters). The status bar at the bottom shows the current toolset as 'EtherCATConfigurationToolsetModel'.

1. Connection Settings for the Master Server	
Address	192.168.1.3
Port	5000
Parameters	
Create Gateway	<input checked="" type="checkbox"/>
Set EoE IP Start Address	Automatically
EoE IP Start Address	192.168.1.4
3. Master Parameters	
Initial Master State	OPERATIONAL
Default Cycle Time	<input checked="" type="checkbox"/>
Cycle Time (µs)	1000
Mailbox Cycle Time (µs)	3000
Auto Recovery Timeout (µs)	100
EtherCAT Datagram DATA Max Size (Bytes)	1486
Watchdog	Enable
4. Frame Parameters	
Destination MAC	FFFFFFFFFFFF
Source MAC	000000000000
Ethernet Type	a488

마우스 '우클릭' 후 'Stop Master'

2. Slave 설정 [Ezi-SERVO II-EC 설정]

Confidential

□ PDO Mapping 및 드라이버 설정(Slave)

- Device Profile을 'Motion Device DS402'로 설정

The screenshot shows the Maestro EtherCAT Configurator interface. On the left, the 'System Configuration' tree shows 'Ezi-SERVO II-EC' expanded to 'G01', which contains three EtherCAT slaves: 'g01 (Ezi-SERVO2 EtherCAT)', 'g02 (Ezi-SERVO2 EtherCAT)', and 'g03 (Ezi-SERVO2 EtherCAT)'. The main window displays the configuration for slave 'g01'. The 'Device Profile' is set to 'Motion Device DS402'. A red arrow points to the 'Device Profile' dropdown menu, and another red arrow points to the 'Motion Device DS402' option. The 'Watchdog' is set to 'Disable'. The bottom status bar shows the current toolset as 'EtherCATConfigurationToolsetModel'.

Slave Parameters	
Name	g01
Vendor ID	0x0FA00000 (262144000)
Vendor Name	FASTECH
Device Name	Ezi-SERVO2 EtherCAT
Device Type	Ezi-SERVO2 EtherCAT
Product Code	0x00001002 (4098)
Revision Number	0x00000001 (1)
Physical Address	1001
Auto Inc Address	0(0x0000)
Process Data Handling	0
Watchdog	Disable
Device Profile	General Device Motion Device DS402 General Device

Errors | Warnings | (6)Messages

- 2016-03-30 오후 2:24:30 Download Configuration Start
- 2016-03-30 오후 2:25:05 Download Configuration File Done
- 2016-03-30 오후 2:25:05 Download Configuration Done
- 2016-03-30 오후 2:25:06 Master Started
- 2016-03-30 오후 2:25:06 New EtherCAT Configuration Done
- 2016-03-30 오후 2:27:06 Master Stopped

Current Toolset EtherCATConfigurationToolsetModel

2. Slave 설정 [Ezi-SERVO II-EC 설정]

Confidential

□ PDO Mapping 및 드라이버 설정(Slave)

- FMMU/SM에서 'PDO Mapping' 가능

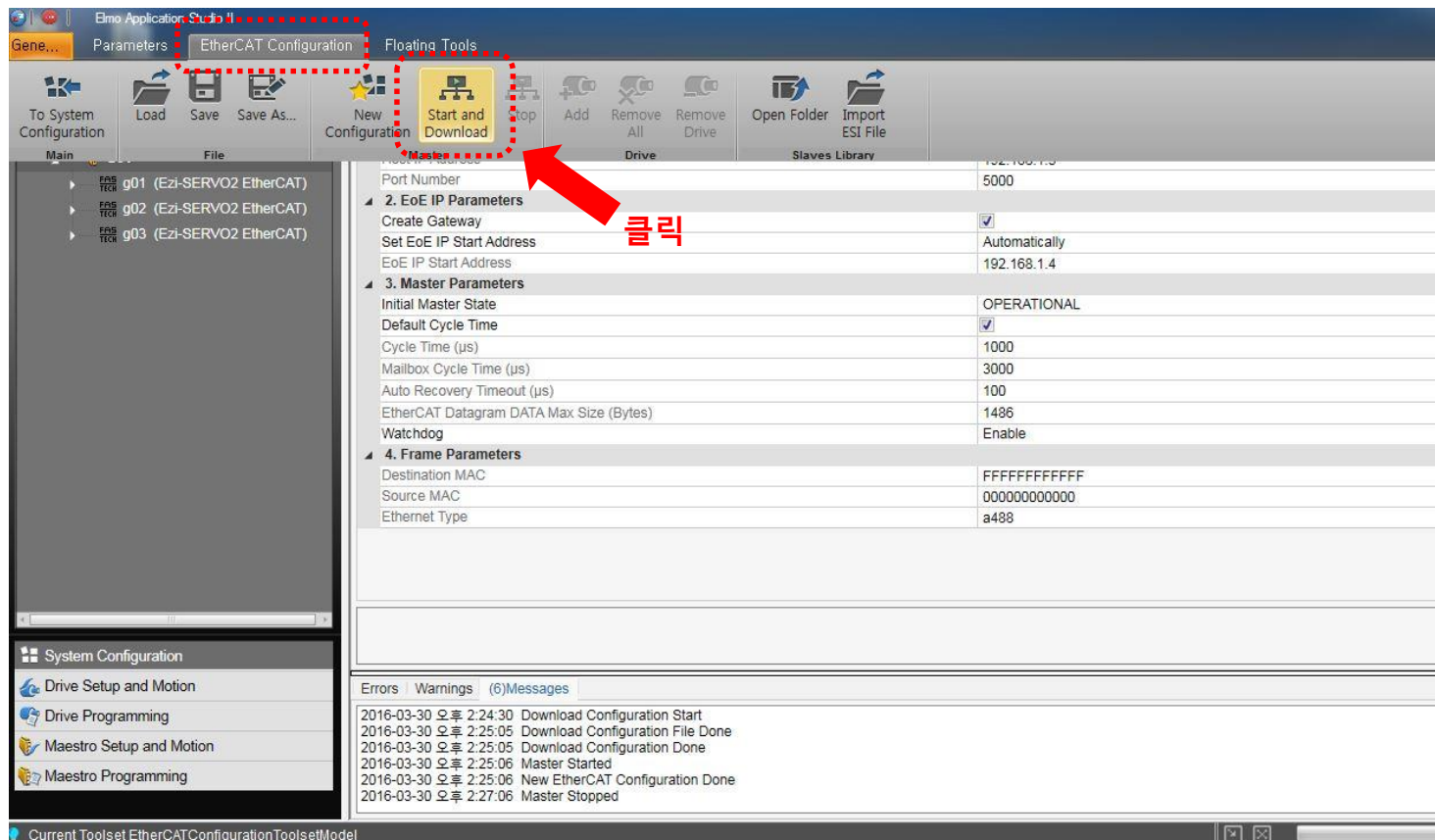
The screenshot shows the 'Maestro EtherCAT Configuration' window for a Slave FMMU/SM. The 'System Configuration' tree on the left shows 'Ezi-SERVO II-EC' expanded to 'G01', with 'g03 (Ezi-SERVO2 EtherCAT)' selected. The main configuration area shows a tree view of SMs: 'SM 0:MBxOut (0x1000, 128, 0x26000100)', 'SM 1:MBxIn (0x1400, 128, 0x26000100)', and 'SM 2:Outputs (0x1800, 12, 0x64000100)'. The 'SM 2:Outputs' node is selected, and a red arrow points to it with the text '클릭'. Below this, a 'Variables' table is displayed, which is highlighted with a dashed red box. A red arrow points to this table with the text '선택한 PDO 항목 정보 표시'. The 'Variables' table has the following columns: Name, Index, Type, Bit Size, Bit Offset, Value, Var Offset, and Alias. The table lists various input and output variables for the selected SM. Below the table are buttons for 'Save Input Template' and 'Save Output Template'. At the bottom, there is an 'FMMUs configuration' table with columns: L. start, Length, L. start bit, L. end bit, P. start, Flags, and Mapped SM. The table shows two entries: one for SM2:Outputs and one for SM3:Inputs. At the very bottom, there is an 'Errors | Warnings | (6)Messages' section with a log of system events.

2. Slave 설정 [Ezi-SERVO II-EC 설정]

Confidential

□ PDO Mapping 및 드라이버 설정(Slave)

- 설정한 내용 저장을 위해 'EtherCAT Configuration' 의 'Start and Download' 클릭



2. Slave 설정 [Ezi-SERVO II-EC 설정]

Confidential

□ PDO Mapping 및 드라이버 설정(Slave)

- 'To System Configuration' 클릭

The screenshot shows the Elmo Application Studio II interface. The 'EtherCAT Configuration' tab is active. In the 'File' menu, the 'To System Configuration' button is highlighted with a red dashed box and a red arrow. The main window displays configuration parameters for a slave drive, including EoE IP Parameters, Master Parameters, and Frame Parameters. The status bar at the bottom indicates the current toolset is 'EtherCATConfigurationToolsetModel'.

Parameter	Value
Port Number	5000
2. EoE IP Parameters	
Create Gateway	<input checked="" type="checkbox"/>
Set EoE IP Start Address	Automatically
EoE IP Start Address	192.168.1.4
3. Master Parameters	
Initial Master State	OPERATIONAL
Default Cycle Time	<input checked="" type="checkbox"/>
Cycle Time (µs)	1000
Mailbox Cycle Time (µs)	3000
Auto Recovery Timeout (µs)	100
EtherCAT Datagram DATA Max Size (Bytes)	1486
Watchdog	Enable
4. Frame Parameters	
Destination MAC	FFFFFFFFFFFF
Source MAC	000000000000
Ethernet Type	a488

Errors | Warnings | (5)Messages

- 2016-03-30 오후 2:34:31 Download Configuration Start
- 2016-03-30 오후 2:34:34 Download Configuration File Done
- 2016-03-30 오후 2:34:35 Download Configuration Done
- 2016-03-30 오후 2:34:35 Master Started
- 2016-03-30 오후 2:34:36 Start Master Scan and Download Done

2. Slave 설정 [Ezi-SERVO II-EC 설정]

Confidential

□ PDO Mapping 및 드라이버 설정(Slave)

- 설정한 내용의 저장 및 적용을 위하여 수 십초 정도의 시간이 소요된다

Maestro EtherCAT Configurator

Master | Diagnostics | System Information | Process Image | Cyclic | Distributed Clocks

1. Connection Settings for the Master Server

Host IP Address	192.168.1.3
Port Number	5000

2. EoE IP Parameters

Create Gateway	<input checked="" type="checkbox"/>
Set EoE IP Start Address	Automatically
EoE IP Start Address	192.168.1.4

3. Master Parameters

Initial Master State	OPERATIONAL
Default Cycle Time	<input checked="" type="checkbox"/>
Cycle Time (µs)	
Mailbox Cycle Time	
Auto Recover Time	
EtherCAT Datagra	
Watchdog	

4. Frame Parameters

Destination MAC	
Source MAC	
Ethernet Type	a488

Please wait ...

Please wait... The Maestro is modifying its working mode.
A new configuration file has been created for this Maestro.
Please add axes and 'Groups' if necessary.

Errors | Warnings | (6)Messages

- 2016-03-30 오후 2:34:31 Download Configuration Start
- 2016-03-30 오후 2:34:34 Download Configuration File Done
- 2016-03-30 오후 2:34:35 Download Configuration Done
- 2016-03-30 오후 2:34:35 Master Started
- 2016-03-30 오후 2:34:36 Start Master Scan and Download Done
- 2016-03-30 오후 2:35:49 Master Stopped

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ GUI 모터 구동 (구동 GUI 켜기)

- 좌측 하단의 1) **Maestro Setup and Motion** 클릭 후
- 2) **Motion - Maestro Axes**를 클릭하면 아래와 같은 화면 출력

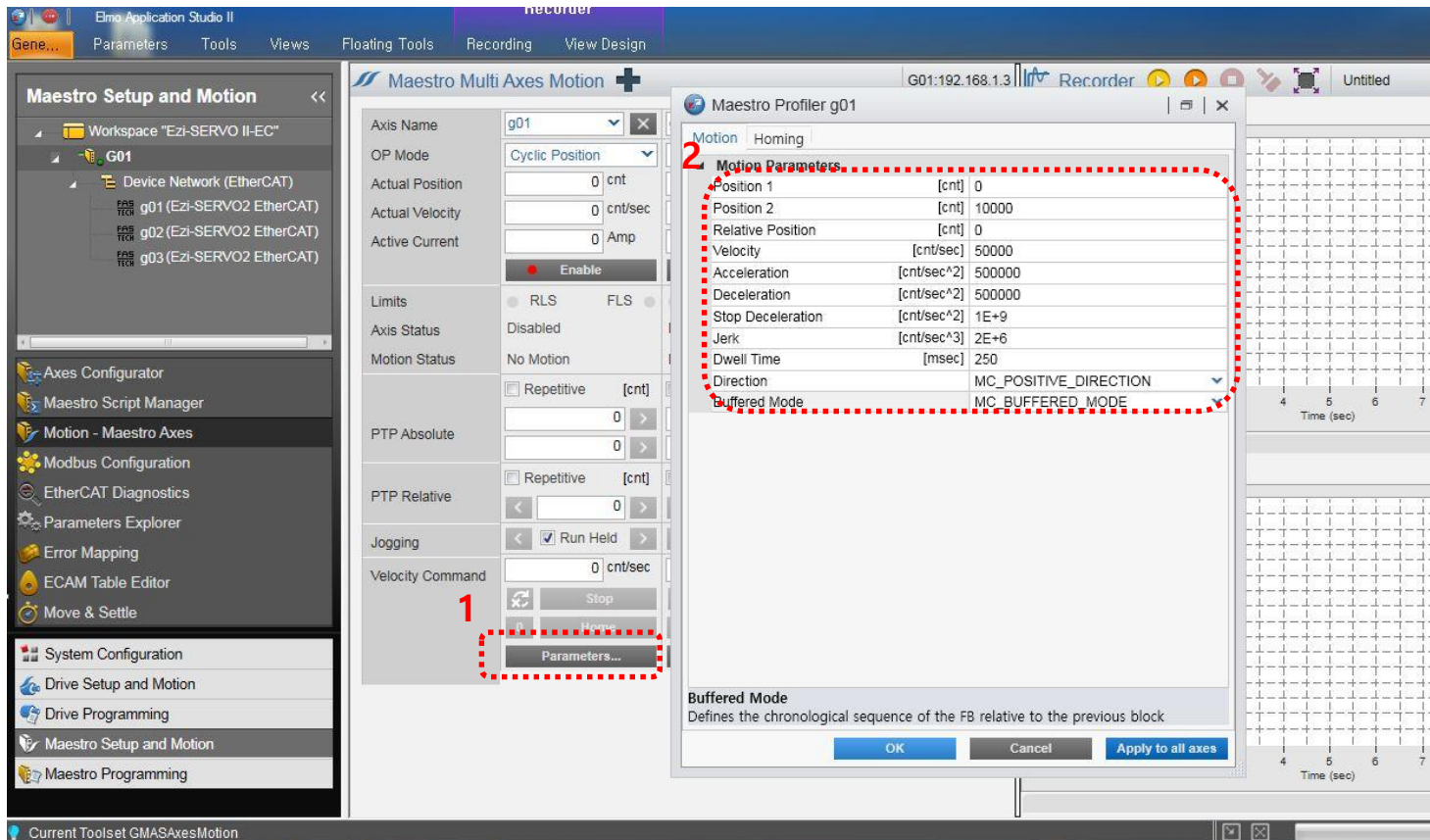
The screenshot displays the 'Maestro Multi Axes Motion' configuration window. The left sidebar contains a tree view with 'Maestro Setup and Motion' (1) and 'Motion - Maestro Axes' (2) highlighted. The main window is divided into three columns for axes g01, g02, and g03. Each column has a 'Parameters...' button at the bottom. The right side of the window shows two empty charts, 'Chart #1' and 'Chart #2', with a grid and a time axis from 0 to 7 seconds.

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ GUI 모터 구동 (모터 파라미터 설정)

- 하단에 있는 1) **Parameters...** 를 클릭 후
- 2) **Position, Velocity** 등의 Value 입력 가능
- 3) **'OK'** : 현재의 Axis만 적용 / **'Apply to all axes'** : 전체 적용



3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ GUI 모터 구동 (SERVO ON/OFF)

- 1) Enable / Disable 버튼으로 SERVO ON/OFF 가능
- 2) SERVO ON/OFF 시 동작 명령 키 활성화/비 활성화

The screenshot displays the Maestro Multi Axes Motion GUI. The central panel is divided into three columns for axes g01, g02, and g03. The 'Active Current' row shows a 'Disable' button for g01 and 'Enable' buttons for g02 and g03, highlighted with a red dashed box and the number '1'. Below this, the 'Jogging' row shows 'Run Held' buttons for all three axes, highlighted with a red dashed box and the number '2'. The 'Velocity Command' row shows a 'Stop' button for each axis. The right side of the GUI features two empty chart windows, 'Chart #1' and 'Chart #2', both with a time axis from 0 to 9 seconds and a vertical axis from -40 to 40.

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ GUI 모터 구동 (Position Move)

- 1) Absolute Position Move(반복 가능) : > 버튼을 클릭하여 동작
- 2) Relative Position Move(반복 가능) : > 버튼을 클릭하여 동작
- 3) JOG Move : 'Run Held' 클릭 해제 시 리미트까지 동작

The screenshot shows the Maestro Multi Axes Motion GUI. The interface is divided into several sections. The top section shows the Axis Name (g01) and OP Mode (Cyclic Position). Below this are fields for Actual Position (0 cnt), Actual Velocity (0 cnt/sec), and Active Current (0 Amp). A 'Disable' button is present. The next section shows Limits (RLS and FLS), Axis Status (Stand Still), and Motion Status (No Motion). The third section, highlighted with a red dashed box and labeled '1', shows PTP Absolute settings with a checked 'Repetitive' checkbox and a value of 0. The fourth section, highlighted with a red dashed box and labeled '2', shows PTP Relative settings with an unchecked 'Repetitive' checkbox and a value of 10000. The fifth section, highlighted with a red dashed box and labeled '3', shows Jogging settings with a checked 'Run Held' checkbox. The bottom section shows Velocity Command (100000 cnt/sec) and buttons for Stop, Home, and Parameters...

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

Object Value 확인(PDO)

- 1) 'Maestro Setup and Motion' 클릭
- 2) 'EtherCAT Diagnostics' 의 Process Image 탭에서 확인 가능
- 3) 'Digital Inputs' 확인 가능

The screenshot shows the 'EtherCAT Diagnostics' window with the 'Process Image' tab selected. The table below represents the data shown in the interface:

Name	Type	Bit Size	PI Offset	Value	Var Offset	Alias
Input variables						
g01						
Status Word	UINT	16	0	4663	0	I0x6041.0
Position actual value	DINT	32	16	0	1	I0x6064.0
Velocity actual value	DINT	32	48	0	2	I0x606C.0
Digital inputs	UDINT	32	80	0	3	I0x60FD.0
Error code	UINT	16	112	0	4	I0x603F.0
Touch probe status	UINT	16	128	0	5	I0x60B9.0
Touch probe 1 positive value	DINT	32	144	0	6	I0x60BA.0
Touch probe 2 positive value	DINT	32	176	0	7	I0x60BC.0
g02						
Status Word	UINT	16	208	4657	0	I0x6041.0
Position actual value	DINT	32	224	4	1	I0x6064.0
Velocity actual value	DINT	32	256	0	2	I0x606C.0
Digital inputs	UDINT	32	288	0	3	I0x60FD.0
Error code	UINT	16	320	0	4	I0x603F.0
Touch probe status	UINT	16	336	0	5	I0x60B9.0
Touch probe 1 positive value	DINT	32	352	0	6	I0x60BA.0
Touch probe 2 positive value	DINT	32	384	0	7	I0x60BC.0
g03						
Status Word	UINT	16	416	4657	0	I0x6041.0
Position actual value	DINT	32	432	0	1	I0x6064.0
Velocity actual value	DINT	32	464	0	2	I0x606C.0
Digital inputs	UDINT	32	496	0	3	I0x60FD.0
Error code	UINT	16	528	0	4	I0x603F.0
Touch probe status	UINT	16	544	0	5	I0x60B9.0
Touch probe 1 positive value	DINT	32	560	0	6	I0x60BA.0
Touch probe 2 positive value	DINT	32	592	0	7	I0x60BC.0
Output variables						
g01						

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ Maestro Script Manager 사용 (1. Star Loop 생성)

- 1) 데모 구동을 위한 Script 제작 가능
- 2) '모션 구동' 및 'Set Digital Outputs', 'Send SDO' 가능

The screenshot displays the Elmo Application Studio II interface. The top menu bar includes 'Gene...', 'Parameters', 'Maestro Script Manager', 'Views', 'Floating Tools', 'Recording', and 'View Design'. The 'Recorder' window is active, showing 'Start Axis' set to 1 and 'Number of Axes' set to 2. A toolbar with a 'Run' button (a person icon) is highlighted with a red dashed box and an arrow pointing to the text '클릭하여 실행' (Click to execute). The 'Maestro Script Manager' window shows a tree view on the left with 'Maestro Script Manager' selected, indicated by a red dashed box and the number '2'. The main area shows a script for 'Device: g01' with a 'Loop 1' section. The 'Loop 1' section includes 'Start Loop 1', 'g01.Set Digital Outputs', 'g01.Send SDO', 'g01.Wait State', 'g01.Move Relative', 'g01.Wait State', and 'End Loop 1'. The 'Number of Loop' is set to 1. A red arrow points to the 'Number of Loop' field with the text '반복 횟수' (Number of repetitions). The 'Recorder' window also shows two empty charts, 'Chart #1' and 'Chart #2', with axes for 'Time (sec)' and values ranging from -40 to 40.

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ Maestro Script Manager 사용 (2. Digital Outputs 확인)

- 1) 데모 구동을 위한 Script 제작 가능
- 2) '모션 구동' 및 'Set Digital Outputs', 'Send SDO' 가능

The screenshot displays the Maestro Script Manager interface. On the left, a sidebar contains navigation options like 'Maestro Script Manager' and 'Send SDO'. The main area shows a 'Commands' list with 'g01.Set Digital Outputs' highlighted. To the right, the 'Set Digital Outputs' properties panel is visible, showing 'Axis Name' as 'g01' and four output checkboxes. A 'Recorder' window on the far right shows two empty charts. Red annotations highlight key features: a red arrow points to the 'g01.Set Digital Outputs' command in the script list, accompanied by the text '클릭하여 실행 및 저장, 불러오기 가능'; another red arrow points to the 'Set Digital Outputs' properties panel, with the text '클릭하여 'On/Off' 가능 (현재 4Point 만 가능)'. The status bar at the bottom indicates 'Script '2016AIMEX' Paused.'

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ Maestro Script Manager 사용 (3. SDO 송신)

- 1) 데모 구동을 위한 Script 제작 가능
- 2) '모션 구동' 및 'Set Digital Outputs', 'Send SDO' 가능

클릭하여 실행 및 저장, 불러오기 가능

SDQ 송신 가능
(ex>Run Current '150%' 설정)

3. Ezi-SERVO II-EC 사용하기 [GUI 사용법]

Confidential

□ Maestro Script Manager 사용 (4. SDO EEPROM에 저장하기)

- 1) 데모 구동을 위한 Script 제작 가능
- 2) '모션 구동' 및 'Set Digital Outputs', 'Send SDO' 가능

Send SDO	
Axis Name	g01
Service	Download
Index	0x1010
SubIndex	1
Data	1702257011
Data Length	4

클릭하여 실행 및 저장, 불러오기 가능

Index 0x1010에 좌측 데이터 송신 (EEPROM에 저장)

우리는 40년 Stepping Motor의 역사를 바꾸는 주인공입니다!!



세계로!!
세계로!!

Ezi-SERVO[®]
Closed Loop Stepping System