FASTECH Ezi-SERVO II Plus-E

Ethernet Driver

V1.4.11.23 or higher

Supported version TOP Design Studio



CONTENTS

We want to thank our customers who use the Touch Operation Panel.

1. System configuration Page 2

Describes the devices required for connection, the setting of each device, cables, and configurable systems.

2. External device selection Page 3

Select a TOP model and an external device.

3. TOP communication setting Page 4

Describes how to set the TOP communication.

4. Supported addresses

Page 9

Refer to this section to check the addresses which can communicate with an external device.



1. System configuration

The system configurations of TOP and "FASTECH – Ezi-SERVO Plus-E Series" are as follows:

Series	Communication method	Communication setting	Cable
Ezi-Servo II Plus-E	Ethernet TCP	3. TOP communication setting 4. TOP external device setting	5.1. Cable table 1

■ Connection configuration

• 1:1 (one TOP and one external device) connection



• 1:N (one TOP and multiple external devices) connection





2. External device selection

■ Select a TOP model and a port, and then select an external device.

PLC select [Et	hernet]				
Filter : [All]		\sim	:	Search :	
				Model	del 🔿 Vendor
Vendor	•	Model			
ROOTECH		Ezi-Sei	rvo PlusE		
IDEC Corporation					
LENZE					
BECKHOFF Automation	_				
FASTECH Co., Ltd.					
ODVA					
HYOSUNG					
HB TECH					
DNP					
FANUC Co., Ltd.					
BOOSTER					
Robots and Design					
CoDeSys Automation Alli	ance				
Connex Corporation	~				
elect Device			Dack	I Next	Cancel
PLC Setting[Ezi-Se	ervo PlusE]				
Alias Name :	PLC1		Bind IP : Auto	\sim	
Interface :	Ethernet	~		_	
Protocol	EziServoPlusE	\sim		(Comm Manual
String Save Mode 1	Firet I H HI	Change			
String Save Mode :	First LH HL	Change			
String Save Mode :	First LH HL	Change			
String Save Mode :	First LH HL V ID V TimeOut	Change	and)		
String Save Mode : String Save Mode : String Save Mode : Operate Condition : Change Condition :	First LH HL y ID v TimeOut Condition	Change	ond)		Edit
String Save Mode : Use Redundance Operate Condition :	First LH HL Y D Condition	Change 5 🗘 (Seco	ond)		Edit
String Save Mode : Use Redundance Operate Condition : Change Condition : Primary Option IP	First LH HL y TimeOut Condition 192 116 116	Change	ond)		Edit
String Save Mode : Use Redundance Operate Condition : Primary Option IP Ethernet Protocol	First LH HL V D V ID V ID ImeOut Condition I92 I1 Iter Iter Iter Iter Iter Iter Iter Iter	Change 5 \$ (Sect 38 \$	ond)		Edit
String Save Mode : Use Redundance Operate Condition : Primary Option IP Ethernet Protocol Port	First LH HL	Change 5 • (Secc 58 • 0	ond)		Edit
String Save Mode : Use Redundanc Operate Condition : Primary Option IP Ethernet Protocol Port Timeout	First LH HL y D √ TimeOut Condition 192 11 2002 1000 1000	Change 5 Change	ond)		Edit
String Save Mode : Use Redundanc Operate Condition : Primary Option IP Ethernet Protocol Port Timeout Send Wait	First LH HL y D TimeOut Condition 192 10 2002 1000 0	Change 5 (Sect 38 (Sect 39 (Se	ond)		Edit
String Save Mode : Use Redundanc Operate Condition : Anage Condition : Primary Option IP Ethernet Protocol Port Timeout Send Wait	First LH HL y JD TimeOut Condition 192 102 102 100 0 0	Change 5 (Sect 58) 0 msec msec	ond)		Edit
String Save Mode : Use Redundanc Operate Condition : Primary Option IP Ethernet Protocol Port Timeout Send Wait	First LH HL	Change	ond)		Edit
String Save Mode : Use Redundance Operate Condition : Primary Option IP Ethernet Protocol Port Timeout Send Wait	First LH HL	Change	ond)		Edit
String Save Mode : Use Redundance Operate Condition : Primary Option IP Ethernet Protocol Port Timeout Send Wait	First LH HL	Change	ond)		Edit

Settings			Contents	
ТОР	Model	Check the TOP display and process to select the touch model.		
External device	Vendor	Select the vendor of the external device to be connected to TOP. Select "FASTECH Co., Ltd."		OP.
	PLC	Select an external device to connect to TOP.		
		Model	Interface	Protocol
		FASTECH : Ezi-Servo	Ethernet Tcp	Ezi-Servo PlusE
		Please check the system confi connect is a model whose syst	guration in Chapter 1 to see if tem can be configured.	the external device you want to



3. TOP communication setting

The communication can be set in TOP Design Studio or TOP main menu. The communication should be set in the same way as that of the external device.

3.1 Communication setting in TOP Design Studio

(1) Communication interface setting

■ [Project > Project Property > TOP Setting] → [Project Option > "Use HMI Setup" Check > Edit > Ethernet]

- Set the TOP communication interface in TOP Design Studio.



Items	ТОР	External device	Remarks
IP Address	192.168.0.100	192.168.0.1	
Subnet Mask	255.255.255.0	255.255.255.0	
Gateway	192.168.0.1	192.168.0.1	

* The above settings are examples recommended by the company.



(2) Communication option setting

- [Project > Project Property > Device Setting > "FASTECH : Ezi-Servo"]
 - Set the options of the Computer Link communication driver in TOP Design Studio.

Project Option		×
Change HMI[<u>H</u>] Add	PLC [A] TITI Change PLC[C] Delete PLC[D]	
 TOP Setting TOP Setting Option Module Setting FieldBus (0) FieldBus (0) COM1 (0) COM2 (0) COM3 (0) COM3 (0) Ethernet (1) Ethernet (1) USBDevice (0) 	PLC Setting[Ezi-Servo PlusE] Alias Name : PLC1 Interface : Ethernet Protocol : ExiServoPlusE String Save Mode : Fret LH HL Change Condition : Month Condition Condition Ethernet Protocol Primary Option IP 192 Ethernet Protocol Torp Port 2002 Timeout 1000 Send Wait 0	Comm Manual
	Ар	ply Close

Items	Settings	Remarks
Interface	Select "Ethernet".	El cond
Protocol	Select "EziServoPlusE".	Fixed
IP	Enter the IP address of the external device.	
TimeOut (ms)	Set the time for the TOP to wait for a response from an external device.	
	Set the waiting time between TOP's receiving a response from an external	
Sendwait (ms)	device and sending the next command request.	



3.2. Communication setting in TOP

* This is a setting method when "Use HMI Setup" in the setting items in "3.1 TOP Design Studio" is not checked.

■ Touch the top of the TOP screen and drag it down. Touch "EXIT" in the pop-up window to go to the main screen.



(1) Communication interface setting

■ [Main Screen > Control Panel > Ethernet]

	6	Ethernet ×	×
Run	🔯 System	Port Ethernet Port : ETH1 • 0 •	Option
MC	PLC Se	Link Speed : Auto MAC Address : 00:15:1D:00:00:00 IP Address : 192.168.0.1 O L L M L 255.055.055	Sound Sound
YNC Viewer	<u></u>	Subnet Mask : 255.255.255.0 Gateway : 192.168.0.1	((:-
Screen shot		DNS (1) : DNS (2) : Ethernet	
Silut	Diagnostic M	Primary IP : 192.168.0.1 Cable Status : ETH1 Connected Bridge Mode : Use Bridge	MRAM Analysis
	[System]	Check duplicate Apply Cancel	Close

Items	ТОР	External device	Remarks
IP Address*Note 1) Note 2)	192.168.0.100	192.168.0.1	
Subnet Mask	255.255.255.0	255.255.255.0	
Gateway	192.168.0.1	192.168.0.1	

*Note 1) The network addresses of the TOP and the external device (the first three digits of the IP, <u>192</u>. <u>168</u>. <u>0</u>. 0) should match.

*Note 2) Do not use duplicate IP addresses over the same network.

 \ast The above settings are $\underline{examples}$ recommended by the company.

Items	Description
IP Address	Set an IP address to be used by the TOP to use over the network.
Subnet Mask	Enter the subnet mask of the network.
Gateway	Enter the gateway of the network.



(2) Communication option setting

■ [Main Screen > Control Panel > PLC]

	۵.	1001	PLC	×	
	🔞 Syster	Driver(ETH)	PLC1(Ezi-Servo PlusE) 🔻		
Run		Interface	Ethernet 💌		
		Protocol	Ez i ServoP IusE 🔹		
VNC	PLC	Bind IP	Auto		
		IP	192 🔹 168 🔹 0 🌲 1 🜲		
Viewer		Ethernet	TCP 💌		
		Port	2002 🜩		
	Ethernet	Timeout	1000 🜩 msec		
Seroop		Send Wait	0 🔷 msec		
shot	Infli				
	Diagnostic				
	[System]	Diagnostic	Ping Test	Apply Cancel	
	[039.com]	·			

Items	Settings	Remarks
Interface	Select "Ethernet".	Fined
Protocol	Select "EziServoPlusE".	Fixed
IP	Enter the IP address of the external device.	
TimeOut (ms)	Set the time for the TOP to wait for a response from an external device.	
CondWait (mc)	Set the waiting time between TOP's receiving a response from an external	
Senuwait (ms)	device and sending the next command request.	



3.3 Communication diagnostics

■ Check the interface setting status between the TOP and an external device.

- Touch the top of the TOP screen and <u>drag</u> it down. Touch "EXIT" in the pop-up window to go to the main screen.
- Check if the port (ETH1/ETH2) settings you want to use in [Control Panel > Ethernet] are the same as those of the external device.
- Diagnosis of whether the port communication is normal or not
- Touch "Communication diagnostics" in [Control Panel > PLC].

- The Diagnostics dialog box pops up on the screen and determines the diagnostic status.

ОК	Communication setting normal
Time Out Error	Communication setting abnormal
	- Check the cable, TOP, and external device setting status. (Reference: Communication diagnostics sheet)

■ Communication diagnostics sheet

- If there is a problem with the communication connection with an external terminal, please check the settings in the sheet below.

Items	Conte	nts	Ch	eck	Remarks	
System	How to connect the sys	stem	OK	NG	1 Custom configuration	
configuration	Connection cable name	2	OK	NG	1. System configuration	
ТОР	Version information		OK	NG		
	Port in use		OK	NG		
	Driver name		OK	NG		
	Other detailed settings		OK	NG		
	Relative prefix	Project setting	OK	NG	2. External device selection	
		Communication diagnostics	ОК	NG	3. Communication setting	
	Ethernet port setting	IP Address	OK	NG		
		Subnet Mask	OK	NG		
		Gateway	OK	NG		
External device	CPU name		OK	NG		
	Communication port na	ame (module name)	OK	NG		
	Protocol (mode)		OK	NG		
	Setup Prefix		OK	NG		
	Other detailed settings		OK	NG		
	Ethernet port setting	IP Address	OK	NG		
		Subnet Mask	OK	NG		
		Gateway	OK	NG		
	Check address range		ОК	NG	<u>4. Supported addresses</u> (For details, please refer to the PLC vendor's manual.)	



4. Supported addresses

■ The devices available in TOP are as follows:

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
INFO_DRIVER_VER	х	0 - 0	Read the version information on a connected external device.	16	R	
INFO_DRIVER_NAME	Х	0 - 0	Read the name of a connected external device.	String	R	
INFO_MOTOR_NO	Х	0 - 0	Read the number of a connected motor.	16	R	
SAVE_ROM_PARAM	0.0 - 0.0	х	Save the currently set parameter values and allocation values of I/O signals in the drive ROM memory.	1	W	
PARAM	0.0 – 32.31	0–32 Parameter Number	Read operation (R): Read the parameter of a registered word address number from the RAM memory.Write operation (W): Save the parameter value of a registered word address number in the RAM memory.	32	R/W	
LOAD_ROM_DIOMAP	0.0 - 0.0	Х	Read the setting status of the control IO signal and the level setting value of the signal from the ROM memory.	1	W	Note 1)
SERVO_ONOFF	0.0 - 0.0	х	Set Servo ON/OFF status. 0 : Servo OFF 1 : Servo ON	1	W	Note 1)
SERVO_ALMRST	0.0 - 0.0	Х	Reset Servo Alarm status.	1	W	Note 1)
ALM_STATUS	X	0 – 0	Request current alarm status and information. Alarm Type 0 : No Alarm 1 : OverCurrent 2 : OverSpeed 3 : StepOut 4 : OverLoad 5 : OverTemperature 6 : BackEMP 7 : MotorConnect 8 : EncoderConnect 9 : MotorPower 10 : Inposition 11 : SystemHalt 12 : ROMdevice 15 : Position Overflow	16	R	
MOVE_STOP	0.0 - 0.0	Х	Request to stop the motor which is currently running.	1	W	Note 1)
MOVE_ESTOP	0.0 - 0.0	х	Request to emergency stop the motor which is currently running.	1	W	Note 1)
MOVE_HOME	0.0 - 0.0	Х	Request to start homing operation under the condition of the currently set parameter.	1	W	Note 1)
MOVE_PAUSE	0.0 - 0.0	Х	Request to pause and unpause the current operating status. 0: Unpause 1: Pause	1	W	Note 1)
STATUS_FLAG	0.0 – 0.31	0 - 0	Request a flag value which indicates operating status. For information on the operating status flag, refer to the Bit setting section of the Fastech manual status Flag.	32	R	



Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
LOAD_ROM_PARAM	0.0 - 0.0	х	Read a specific parameter value of the ROM memory area.	1	W	
LOAD_ROM_PARAM_ NO	х	0 - 0	ROM parameter number to be read	16		Note 2)
ROM_PARAM	Х	0 - 0	Parameter data value which has been read	32		Note 2)

Ex) Read the 2nd parameter value of the ROM area to be saved in the ROM_PARAM device when LOAD_ROM_PARAM device write operation is carried out if the data value of LOAD_ROM_PARAM_NO device is 2.

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
DIO_MASK	0.0 – 22.31	0 – 22 Pin number	Read operation (R): Read the pin control IO setting status of a registered word address number.Write operation (W): Set the control IO signal to the pin of a registered word address number.	32	R/W	
DIO_LEVEL	0.0 – 22.31	0 – 22 Pin number	 Read operation (R): Read pin control IO signal level of a registered word address number. Write operation (W): Set the control IO signal level to the pin of a registered word address number. 0 : Active Low 1 : Active High 	32	R/W	

Device	Bit Address	Word Address	Comment		R/W	Remarks
COMP_OUT_TRIG	0.0 - 0.0	х	Create a control output signal (Compare Out) upon write operation.	1	W	Note 1)
COMP_OUT_POS	Х	0 - 0	Compare Trigger start position	32		Note 2)
COMP_OUT_PERIOD	Х	0 - 0	Compare Trigger Pulse cycle	32		Note 2)
COMP_OUT_WIDTH	Х	0 - 0	Compare Trigger Pulse width	32		Note 2)
COMP_OUT_STATUS	0.0 - 0.0	х	Current signal (Compare Out) output function reads the operating status. 0: Ended 1: Outputting	1	R	

Ex) Upon COMP_OUT_TRIG operation, the operation is requested based on the data values of COMP_OUT_POS, COMP_OUT_PERIOD, and COMP_OUT_WIDTH devices.



Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
DINPUT	0.0 – 0.31	0 – 0	 Read operation (R): Read the current input signal status of the control input terminal. Write operation (W): Set the input signal level of the control input terminal. If a specific bit value is 1, the corresponding input terminal signal becomes ON. 	32	R/W	
DINPUT_CLR	0.0 – 0.31	0 - 0	Set the input signal level of the control input terminal. If a specific bit value is 1, the corresponding input terminal signal becomes OFF.	32	W	
DOUTPUT	0.0 – 0.31	0 – 0	 Read operation (R): Read the current output signal status of the control output terminal. Write operation (W): Set the output signal level of the control output terminal. If a specific bit value is 1, the corresponding output terminal signal becomes ON. 	32	R/W	
DOUTPUT_CLR	0.0 – 0.31	0 - 0	Set the output signal level of the control output terminal. If a specific bit value is 1, the corresponding output terminal signal becomes OFF.	32	W	

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
USER_OUT_STATUS	0.0 – 8.16	0 – 8 PIN Number	Read the current PIN output status of a registered word address. 0 : STOP 2 : RUN	16	R	
USER_OUT_TIME	х	0 - 8	Output ON time set in the PIN of a registered word address	16	R	
USER_OUT_POS	x	0:00 – 8:59	Information on output location array set in the PIN of a registered word address	32	R	
USER_OUT_PCNT	х	0 - 8	Number of output location set in PIN of a registered word address	16	R	
SET_USER_OUT_TRIG	0 - 8	Х	Create an output at a specific location on the set output.	1	W	Note 1)
SET_USER_OUT_TIME	x	0 - 0	Output On time (Unit: ms, 1 – 65535)	16		Note 2)
SET_USER_OUT_POS	x	0:00 – 8:59	Output location array For word address 5:31 User Out number: 5 Output location array: 31	32		Note 2)
SET_USER_OUT_PCNT	х	0 - 0	Number of output positions (number of registered output location arrays)	16		Note 2)

Can be used after setting the output signal to User Out.



Ex) Upon SET_USER_OUT_TRIG operation, the operation is requested based on the data values of SET_USER_OUT_TIME, SET_USER_OUT_POS, SET_USER_OUT_PCNT devices.

Device	Bit Address	Word Address	Comment		R/W	Remarks
MOVE_ABS_TRIG	0.0 - 0.0	х	Request to start movement operation as much as the absolute value [pulse] position.	1	W	Note 1)
MOVE_ABS_POS	Х	0 - 0	Absolute position value for movement operation	32		Note 2)
MOVE_POS_SPD	Х	0 - 0	Speed value of position movement operation [pps]	32		Note 2)

Ex) Upon MOVE_ABS_TRIG operation, the device operates based on the data values of MOVE_ABS_POS and MOVE_POS_SPD devices.

Device	Bit Address	Word Address	Comment		R/W	Remarks
MOVE_INC_TRIG	0.0 - 0.0	х	Request to start movement operation as much as the relative value [pulse] position.	1	W	Note 1)
MOVE_INC_POS	Х	0 - 0	Relative position value for movement operation	32		Note 2)
MOVE_POS_SPD	Х	0 - 0	Speed value of position movement operation [pps]	32		Note 2)

Ex) Upon MOVE_INC_TRIG operation, the device operates based on the data values of MOVE_INC_POS and MOVE_POS_SPD devices.

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
MOVE_LIMIT+	0.0 - 0.0	х	Request to start LIMIT+ operation under the currently set parameter conditions. 0 : STOP 1 : LIMIT+ operation	1	w	Note 1)
MOVE_LIMIT-	0.0 - 0.0	х	Request to start LIMIT- operation under the currently set parameter conditions. 0 : STOP 1 : LIMIT- operation	1		Note 1)
MOVE_SPD	Х	0 - 0	Speed value of movement operation [pps]	32		Note 2)

Ex) Upon MOVE_LIMIT+,- operation, the device operates based on the data value of MOVE_SPD device.

*. When changing the direction during operation, the direction must be changed while in the STOP status.

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
MOVE_JOG+	0.0 - 0.0	х	Request to start JOG+ operation under the currently set parameter conditions. 0 : STOP 1 : JOG+ operation	1	W	Note 1)
MOVE_JOG-	0.0 - 0.0	х	Request to start JOG operation under the currently set parameter conditions. 0 : STOP 1 : JOG- operation	1		Note 1)
MOVE_SPD	Х	0 - 0	Speed value of movement operation [pps]	32		Note 2)

Ex) Upon MOVE_JOG+,- operation, the device operates based on the data value of MOVE_SPD device.

*. When changing the direction during operation, the direction must be changed while in the STOP status.



Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
MOVE_OVERRIDE_A	0.0 - 0.0	х	Request to change the target absolute position value	1	W	Note 1)
MOVE_ABS_POS	Х	0 - 0	Absolute position value for movement operation	32		Note 2)

Ex) Upon MOVE_OVERRIDE_ABS_TRIG operation, the device operates based on the data value of MOVE_ABS_POS device.

Device	Bit Address	Word Address	Comment		R/W	Remarks
MOVE_OVERRIDE_I NC_TRIG	0.0 - 0.0	х	Request to change the target relative position value [pulse] value during operation.	1	W	Note 1)
MOVE_INC_POS	Х	0 - 0	Relative position value for movement operation	32		Note 2)

Ex) Upon MOVE_OVERRIDE_INC_TRIG operation, the device operates based on the data value of MOVE_INC_POS device.

Device	Bit Address	Word Address	Comment		Comment		R/W	Remarks
MOVE_OVERRIDE_S	0.0 - 0.0	х	Request to change the operating speed value [pps]	1	W	Note 1)		
PD_TRIG			during operation.					
MOVE_SPD	Х	0 - 0	Speed value of movement operation [pps]	32		Note 2)		

Ex) Upon MOVE_OVERRIDE_SPD_TRIG operation, the device operates based on the data value of MOVE_SPD device.

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
			Read operation (R): request the value [pulse] of the			
			target position of that which is currently being followed			
CMD_POS	х	0 - 0	(Command Position)	32	R/W	
			Write operation (W): set a target position (Command			
			Position) value [pulse].			
	x	0 – 0	Read operation (R): request the current actual position			
			(Actual Position) value [pulse].			
ACT_POS				32	R/W	
			Write operation (W): set the current actual position			
			(Actual Position) value [pulse].			
			Request the difference value [pulse] between the current			
POS_ERR	Х	0 - 0	target position (Command Position) and the actual	32	R	
			position (Actual Position) value.			
CURRENT_SPD	Х	0 - 0	Request the current operating speed value [pps].		R	
CLEAR POS	00-00	х	Set the target position (Command Position) and actual	1	W	Note 1)
	0.0 0.0		position (Actual Position) values to 0.	1		



Device	Bit Address	Word Address	Comment		R/W	Remarks
LOAD_ROM_PT	0.0 - 0.0	х	Read all PT item values in the ROM memory area of the drive.	1	W	Note 1)
SAVE_ROM_PT	0.0 - 0.0	х	Store all PT item values in the ROM memory area of the drive.		W	Note 1)

Device	Bit Address	Word Address	Comment		R/W	Remarks
PT_RUN_TRIG	0.0 - 0.0	х	Start the operation of the position table starting from the designated PT number.	1	W	Note 1)
PT_NUMBER	х	0 - 0	PT number to start operation	16		Note 2)

Ex) Upon PT_RUN_TRIG operation, the device operates based on the data value of PT_NUMBER.

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
PT_ITEM	x	0–255 : 0–28	 Read operation (R): read a specific value (Offset) from the PT items in the RAM memory of the drive. Write operation (W): store a specific value (Offset) among the PT items in the RAM memory of the drive. Word Address 0–255: PT number 0–28: Word Offset of an item 	16 / 32	R/W	

Ex)

When PT_ITEM7:7 device is drawn to be registered, read the Decel Time value of the 7th PT upon read operation or save it upon write operation.

When PT_ITEM5:4 device is drawn to be registered, read the High Speed value of the 5th PT upon read operation or save it upon write operation.

Set the object Size to 32 for items of 32-bit size among the position table items.

*. Please refer to the position table items in the Fastech manual for specific item word offset value of PT.



Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
PUSH_MOVE_TRIG	0.0 - 0.0	х	Request to start push motion operation to maintain a fixed force.	1	W	Note 1)
PUSH_START_SPD	Х	0 - 0	- 0 Speed value of position movement starting [pps]			Note 2)
PUSH_POS_SPD	Х	0 - 0	Speed value of position movement operation [pps]			Note 2)
PUSH_ABS_POS	Х	0 - 0	Absolute position value of position movement	32		Note 2)
PUSH_POS_ACC	Х	0 - 0	Acceleration time of position movement [ms]	16		Note 2)
PUSH_POS_DEC	Х	0 - 0	Deceleration time of position movement [ms]	16		Note 2)
PUSH_TORQUE_RATIO	Х	0 - 0	Push motion torque ratio [%]	16		Note 2)
PUSH_MOTION_SPD	Х	0 - 0	Push motion operating speed value [pps]	32		Note 2)
PUSH_END_POS	Х	0 - 0	Push motion absolute position value	32		Note 2)
PUSH_MODE	Х	0 - 0	Push mode	16		Note 2)

Ex) Upon PUSH_MOVE_TRIG operation,

the device operates based on the data values of PUSH_START_SPD, PUSH_POS_SPD, PUSH_ABS_POS, PUSH_POS_ACC, PUSH_POS_DEC, PUSH_TORQUE_RATIO, PUSH_MOTION_SPD, PUSH_END_POS, and PUSH_MODE.

For details, refer to the Push Motion function in the Fastech manual.

*. Be sure to execute MOVE STOP(ESTOP) command must be executed before the next motion command.

Device	Bit Address	Word Address	Comment	Size (Bit)	R/W	Remarks
PUSH_STATUS	X	0 – 0	 Read the current push motion operation status. *. Push motion status 0 : Waiting status for general position movement 1 : In push motion, the work is not in contact. 2 : In contact with the work, and the force is maintained. 3 : The push motion has been completed, but the work is not in contact. In this case, be sure to execute the STOP (ESTOP) command before the next motion command. 	16	R	

Note 1) The action command address is not displayed in the general object address. <u>*. How to use action-only addresses</u> Note 2) This is a device for parameter setting for a write-only device to use a specific function.



Appendix

1. Action command address

Unlike general addresses, operation-only addresses are not visible in the Address when registering objects.

You can register an action-only address in the address editor which performs actions like the action function of Effect & Action in the Object Property.

The reverse action is not supported for action-only addresses.

* How to use action-only device

[Object Property Window] \rightarrow [Effect & Action] \rightarrow [Action] \rightarrow [Bit or Select Word] \rightarrow [Select Write-Only Device of External Device] \rightarrow [Set Action Condition]

Rectangle Property								×
PREVIEW	Shape	Text	Effect & Action					
	No		Condition		Effect		Action	
SAVE_ROM_PARAM	1		Touch Down		None	[PLC1	SAVE_ROM_PARAM	4:1:DEC]=ON
	🛧 Up		Down [0]			Ŧ Add [A] 🖉 Modify [M] × Delete [D]
	Condi Max Exc	tion ute Coun	Effect Action $nt: 1 \Rightarrow (0=\infty)$	In	terval : 0 🚔 (10	0ms) Delay T	ime : 0 불 (1	.00ms) 🕇
ID : 1 SEQ : 0 X : 105 • Y : 51 • Width : 139 • Height : 69 •	Bit			_ROM	1_PARAM	Group	Index : 0	× (100ms)
Security Level : 0 Create Security Log Ignore GlobalLock								
Hide Object								
Visible InterLock Icon								
Display on top when changed								
Memo :								
							ОК	Cancel