35. EasyWatch

This chapter explains how to use EasyWatch.

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35.1. Overview

EasyWatch allows users to monitor values in HMI / PLC addresses via Ethernet from a PC, and it can be used for macro debugging and remote monitoring.

As shown in the example below, In EasyBuilder Pro, after creating a Numeric Input Object, you can set its address to LW-10, and set the same address in EasyWatch. The value of LW-10 will be shown in EasyWatch when connected.

1	Numeric Input	Object's Properties				—	
[General Data	Entry Numeric Format	Security Shape	Font	Profile		
	Description :						
	Read addres PLC name Address	Read/Write use different a ss : Local HMI : LW	uddresses ▼ 10		Setting		
2		Untitled - E	EasyWatch			-	= x
<u>File E</u> dit Object	s <u>H</u> elp						
🕒 🌰 🔷	る国日	ÊI► = ×	🖂 🥰 🗖	3 👻			
New Page 🚺							▼ ×
Name	Status	HMI/PLC		Address	Address Type	Update Cycle	Value
New Monitor	Connected	192.168.1.85 (8000) - 1	Default HMI : HMI	LW:10	16-bit Unsigned	2500 ms	0
<		- iii					>
or Help, press F1						CAP NUM	SCRL

Note

- Monitoring using EasyWatch will not be possible when the system register [LB-9044 (disable remote control)] or [System Parameter Settings] » [System Setting] » [Prohibit remote HMI connecting to this machine] is enabled.
- To connect EasyWatch from a cMT / cMT X HMI, go to [System Parameter Settings] » [Model] tab, select [Support iP/iE/XE/eMT/mTV communication protocol and EasyWatch] option, and then use the port number specified here.

35.2. Configuration

35.2.1. Basic Functions

ltem	Description
File	New: Opens a new EasyWatch file.



	Open: Opens an existing EasyWatch file.
	Save: Saves an EasyWatch file.
	Save As: Saves an EasyWatch file to .ewt format.
	Exit: Exits EasyWatch.
Edit	Cut: Relocates the selected items to the clipboard.
	Copy: Copies the selected items to the clipboard.
	Paste: Pastes the items in the clipboard at the selected location.
Objects	Add Object: Adds new Monitor or Macro objects.
	Delete Objects : Selects the objects to be deleted, a dialog box
	appears, click [Yes] to delete.
	Modify Object: Changes the settings of the selected object.
	HMI Manager: Adds, modifies, or removes HMI settings.
	Run: Executes the selected object.
	Stop: Stops executing the selected object.
Help	Help Topics: Reference of how to operate EasyWatch.
	About EasyWatch: EasyWatch version information.

35.2.2. Quick Selection Tools



Item	Description
New	Opens a new EasyWatch file.
Dpen	Opens an existing EasyWatch file.
Save	Saves an EasyWatch file.
Cut	Relocates the selected items to the clipboard.
🛅 Сору	Copies the selected items to the clipboard.
-	Pastes the items in the clipboard at the selected
Paste	location.

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Run	Executes the selected object.
Stop	Stops executing the selected object.
Elete	Deletes the selected object.
Add Monitor	Adds a new address monitor.
Add Marco	Adds a new macro.
	Opens HMI Manager to add, modify, or remove
Ш нмі	HMI settings.
Help Topics	Reference of how to operate the EasyWatch.

35.3. Monitor Settings

35.3.1. Adding a Monitor

There are two ways to create a Monitor Object.

- Select from the toolbar: [Objects] » [Add Object] » [Add Monitor].
- Select from the quick selection toolbar: [Add new address monitor].

35.3.2. Monitor Settings

Monitor Settings	
Name : New Monitor	Read Only
HMI	
Local Host (8000)	Open HMI Manager
PLC	
HMI	Station No. : 0
I/F Setting	None
Address	
Address : LW 🗾 10	
Address Format : DDDDD [range : 0 ~ 10799]	
Address Type	
🕞 Bit	16-bit BCD 32-bit BCD
	16-bit HEX 32-bit HEX
Numeric	16-bit Binary 32-bit Binary
String No. of Word : 1	16-bit Unsigned 16-bit Signed
Update Cycle : 2500 ms	Vk Cancel Help



Setting	Description
Name	Enters an object name which is an unique name. Read Only: If an object is set to read only, its address value can't be edited.
НМІ	Select a HMI to monitor.
PLC	Selects the desired PLC to monitor and sets its type, station number, and connection method.
Address	Selects the desired object address to monitor and sets its address type.
Address Type	When the address type is set, the available formats of the address can be selected. When executing, the address will bedisplayed according to the selected format.
Update Cycle	Sets the update interval of the monitoring object. If many objects are executed simultaneously, the errors or delays may appear.

35.3.3. Steps to Add a New Monitor

 Select a target HMI. If the target HMI does not exist, click [Open HMI Manager] and click [Add] to search the HMI for adding.

	Monitor Settings	22
		~
	Name : New Monitor	
	_ HMI	
	192. 168. 1.85 (8000) - Default HMI	
	HMI Manager 🖂	ר
	192.168.1.85 (8000) - Default HMI Add	
	Modify	
	Remove	
HMI Setting	s 🗾	
₫ IP	Name	
	HMI Name: Default HMI 192.168.1.58 (Default HMI) 192.168.1.63 (cMT-76E6) 192.168.1.65 (Default HMI)	
	Search 192.168.1.66 (cMT-7599) 192.168.1.66 (cMT-7599)	
	Search All 192, 168, 1,68 (CMI - 162D) 192, 168, 1,69 (CMT - 18EE)	
	192.168.1.85 (Default HMI)	
Use Loc	al HMI HMI Port No. : 8000 - OK Cancel	J

Or, select [Use Local HMI] checkbox to use the project on PC as a monitoring device.





2. Select a target HMI or PLC. If one HMI is selected, you can directly control the local HMI.

Monitor Settings	X
Name : New Monitor	Read Only
	Open HMI Manager
PLC	Station No. : 0
HUST H4X IAI X-SEL CONTROLLER IAI X-SEL CONTROLLER IAI X-SEL CONTROLLER IAI X-SEL CONTROLLER-SSE DEC Micro IEC104 Inovace H22//H1U Justfi Controller Kernel sistemi DMX Series KEYENCE KV-101/6/24/40/80/Visual KV Series Add KEYENCE KV-101/6/24/40/80/Visual KV Series KEYENCE KV-101/6/24/40/80/Visual KV Series KEYENCE KV-201/700/1000/3000/5000 Series KONTAR Ethernet) KONTAR Ethernet KOYO DINEK INXinet/IP KONTAR Ethernet KOYO Do-more KOYO Do-more (Ethernet) KOYO Do-more (Ethernet) KOYO Do-more (Ethernet) LO Do-more (Ethernet) LS GLOFA FENEt (Ethernet) LS GLOFA A CNet LS MASTER-K COPL Direct LS MASTER-K MODBUS RTU LS MASTER-K MODBUS RTU LS MASTER-K MODBUS RTU	E BCD tBCD tBCD tHEX tHEX tHEX tHEX tHEX tBinary tBi

If one PLC is selected, click [I/F Setting] and select [Com Port] to choose a COM port.

Monitor Settings			X
Name : New Mo	onitor	Read Only	
[HMI			
		-	Open HMI Manager
PLC			
FATEK FB Series		→ St	ation No.: 0
I/F Setting	COM Port Settings	? 💌 rt	: COM 1
_ Address	COM 1		
Address : X	COM 2 COM 3		
Address Format : DDI	COM 5		
Address Type	COM 7 COM 8		
Bit	COM 9 COM 10		
Numeric			

Or, click [I/F Setting] and select [Ethernet] to set the IP address.



Monitor Settings			Σ	X
Name : New M	onitor	Read Only		
HMI		- (Open HMI Manager	
FATEK FB Series		•	Station No. : 0	
I/F Setting >	Ethernet Settings		? 💌	
Address	IP Address :	192 . 168	. 1 . 85	ר
Address : X Address Format : DD		OK	Cancel	

3. Set the object address and its address type for being monitored.

Monitor Settings				×
Name :	New Monitor	Read Only		
C HMI				
		•	Open HMI Manager	
PLC				
HMI		•	Station No. : 0	
I/F Setting	•		None	
Address				
Address	s: LW 🔻	10		
Address Forma	it: DDDDD [range:0~107	99]		

When a Word address is selected, set the address type to [Numeric] or [String].[Numeric]: Select the data format of the monitor address.

		16-bit BCD	
🔿 Bit		32-bit BCD	
		16-bit HEX	
		32-bit HEX	E
Numeric		16-bit Binary	
() Numeric		32-bit Binary	
String	No. of Word : 1	16-bit Unsigned	
Obung	140. 01 1/0101	16-bit Signed	-

[String]: Select the data format from [ANSI], [UNICODE], and [High/Reversed]. Set [No. of Word] for reading the number of WORD.

Address Type ———			
🔘 Bit		ANSI UNICODE High/Low Reversed	
O Numeric			
String	No. of Word : 1		

 Set the update interval of the monitor object. The range can be set from 500ms to 5000ms.



EasyWatch

Address Type		ANSI	
O Bit		UNICODE High/Low Reversed	
Numeric			
String	No. of Word: 1		
Update Cycl	e : 2500 ms 🔻	Ok Cancel	Help



35.4. Macro Settings

35.4.1. Adding a Macro

There are two ways to create a Macro object.

- Select from the toolbar: [Objects] » [Add Object] » [Add Macro].
- Select from the quick selection toolbar: [Add new macro].

35.4.2. Macro Settings

Name : New Macro			
_ HMI			
		 Open H 	IMI Manager
- Macro Type			
Active Type 🕨			
	Direct Activ		
	Direct Activ	'e	
- Macro			
		IIn	
Macro		lacro ID : 0	
Macro ID : 0	-		
Macro ID : 0	•		
Macro ID : 0	_		
Macro ID : 0			
Macro ID : 0	s		
Macro ID : 0	s v	Down	
Macro ID : 0	s TReplace	Down Clear	n Remove

Setting	Description	
Name	Enters an object name which is an unique name.	
НМІ	Selects a HMI to monitor.	
Macro Type	The ways to execute the Macro included Direct Active and	
	Cuela Astina	
	Cycle Active.	
Macro	Each Macro Object can execute multiple macros. The time	
Macro	Each Macro Object can execute multiple macros. The time interval between the executions of two macros can be	

35.4.3. Steps to Add a New Macro

- 1. Select a target HMI. If the target HMI does not exist, add a new device, see "35.3.3 Steps to Add a New Monitor".
- Set Active Type under Macro Type to [Direct Active] or [Cycle Active].
 [Direct Active]: Directly executes Macro once.
 [Cycle Active]: Set the interval of executing Macro.



Macro Settings	×
Name : New Macro	
HMI Open HMI Manag	er
Macro Type Active Type Direct Active Cycle Active Cycle Active Cycle 2 (Cycle : 1 secs)	

For example, if [Cycle Active] is set to 5 seconds, when executing a macro, the next time to execute the macro object will be 5 seconds later.

Active Cycle Settings	×
Active Cycle : 5 secs	•
ОК	Cancel

3. Set Macro to [Macro] or [Sleep].

[Macro]: Select the Macro ID for execution, and click [Add] to add the Macro to the list.

Macro Macro ID : 0	Up Macro ID : 0
Sleep Sleep Time : 500 ms	Down
Add Replace	Clean Remove

[Sleep]: Set the time interval between the executions of two Macros. Click [Add] or [Replace] to add or replace the Macros from the list.

Macro Macro Macro ID : 0	Up Macro ID : 0 Sleep : 1000 ms
Sleep Sleep Time : 1000 ms	Down
Add Replace	Clean Remove

35.5. HMI Manager

35.5.1. Opening HMI Setting

There are two ways to open the HMI Setting.

- Select from the toolbar: [Objects] » [HMI Manager].
- Select from the quick selection toolbar: [Open HMI manager].



35.5.2. HMI Manager





35.6. Object List

35.6.1. Object List Columns

2	Untitled - EasyWatch _ 🗖 🗙					
<u>File E</u> dit Objects	Help					
🕒 ┢ 🔶 🛛	🔏 🛅 🕨 💻 🗶 🌌 🤽 🗔 😤					
New Page New Page	1 • ×					
Name S	tatus HMI/PLC Address Address Type Update Cycle Value Stop Local Host (8000) : HMI LW : 10 16-bit BCD 2500 ms					
<	8					
For Help, press F1	CAP NUM SCRL					
Setting	Description					
Name	Displays the object name. The small icons of the names					
	are for users to identify the objects.					
Status	Displays the status of the objects: [Connecting],					
	[Connected], and [Stop]. If HMI is not connected or Port					
	No. is incorrect, the error message "HMI Not Found" will					
	appear. For Monitor Objects, if the address is incorrect,					
	"Address Error" message will appear.					
HMI / PLC	Displays the information of HMI / PLC that is currently					
	operated by the objects.					
Address	For Monitor Objects, the relevant address setting is					
Address Type	displayed.					
Update Cycle	Set the update interval of the monitor object.					
Value	For Monitor Object, if the status shows [Connected], the					
	current HMI address value will be displayed. Modifying					
	the value is also available when the Read-Only checkbox					
	is unselected. For Macro Object, if set to [Direct Active],					
	there will be an [Active] button in this column for clicking					
	to directly execute a macro.					





35.6.2. Editing Object List

• Adding a new page: Click the icon to add a new page.

New Page Ne	ew Page1 💽	▼ X	c
Name	Status	HMI/PLC	
New Monito	or 📲 Stop	Local Host (8000) : HMI	

• Deleting a page: Click the icon and confirm the deletion.

New Page N	ew Page1 💽		▼ ×		
Name	Status	HMI/PLC			
🔥 🗠 New Monite	or 📲 Stop	Local Host (8000) : HMI			
	EasyWatch				
	Are you sure you want to permanently delete this page ?				
		OK Cancel			

• Renaming the page: Double-click on the page name and enter a new name.

New Page	New Page1						-	×
Name	Status	HMI/PLC	Address	Address Type	Update Cycle	Value		

• Positioning the column headers: Drag and drop the column headers to the desired location.

_	New Page New Page1						•	×	
	Name	Status	HMI/PLC Ad	ldress	Address Type	Update Cycle	Value		
	📈 New Moni	💵 Stop 🕯	Local Hos LW	V:10	16-bit Unsigned	2500 ms			

Click the icon to watch the demonstration film. Please confirm your internet connection before playing the film.

