

# 35. EasyWatch

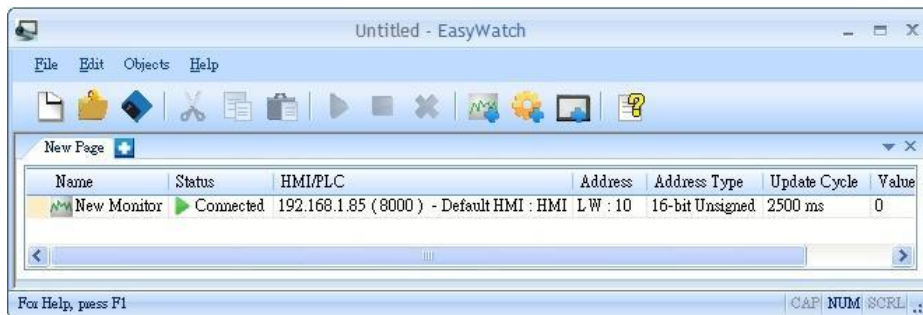
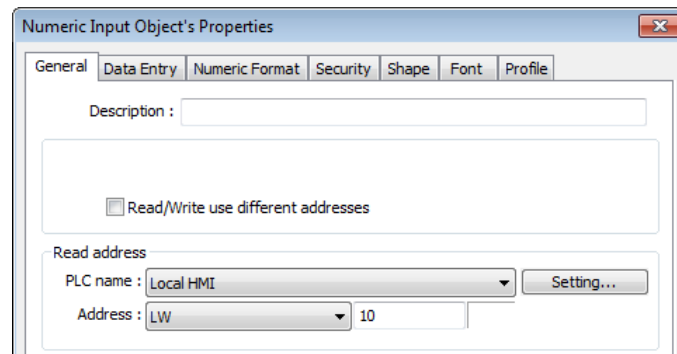
This chapter explains how to use EasyWatch.

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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.



### 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








Item	Description
File	<b>New:</b> Opens a new EasyWatch file.

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

### 35.2.2. Quick Selection Tools



Item	Description
 <b>New</b>	Opens a new EasyWatch file.
 <b>Open</b>	Opens an existing EasyWatch file.
 <b>Save</b>	Saves an EasyWatch file.
 <b>Cut</b>	Relocates the selected items to the clipboard.
 <b>Copy</b>	Copies the selected items to the clipboard.
 <b>Paste</b>	Pastes the items in the clipboard at the selected location.

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

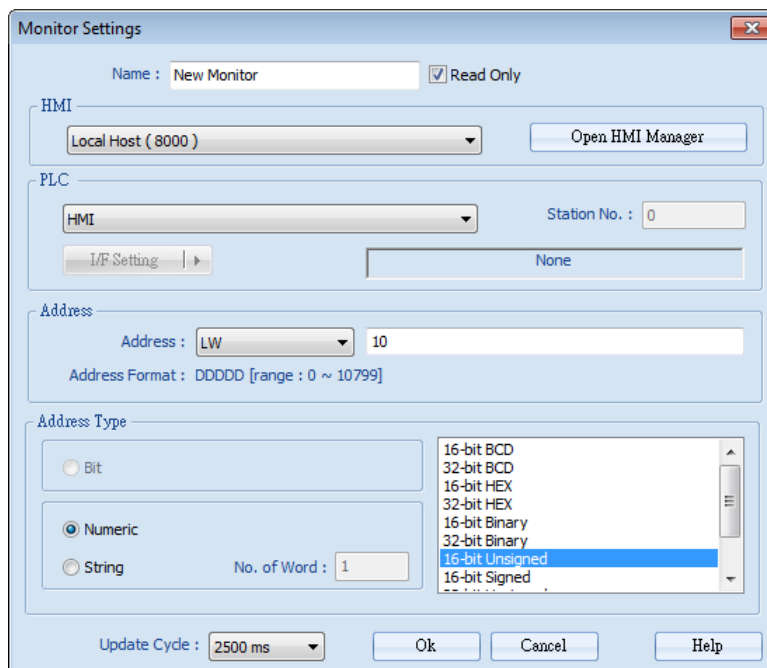
### 35.3. Monitor Settings

#### 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)

**PLC**  
HMI Station No. : 0

**Address**  
Address : LW 10  
Address Format : DDDD [range : 0 ~ 10799]

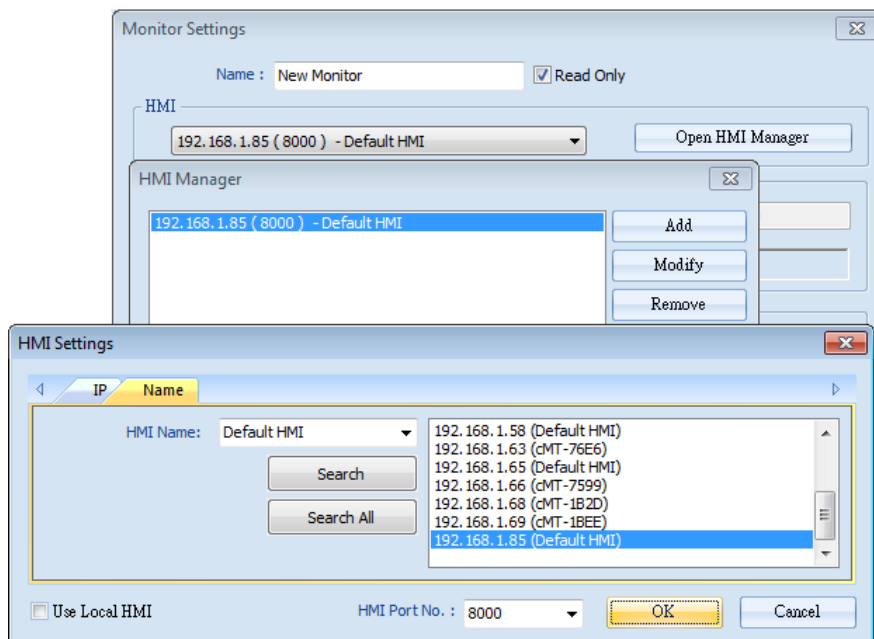
**Address Type**  
 Bit  
 Numeric No. of Word : 1  
 String  
 16-bit BCD  
 32-bit BCD  
 16-bit HEX  
 32-bit HEX  
 16-bit Binary  
 32-bit Binary  
 16-bit Unsigned  
 16-bit Signed

Update Cycle : 2500 ms

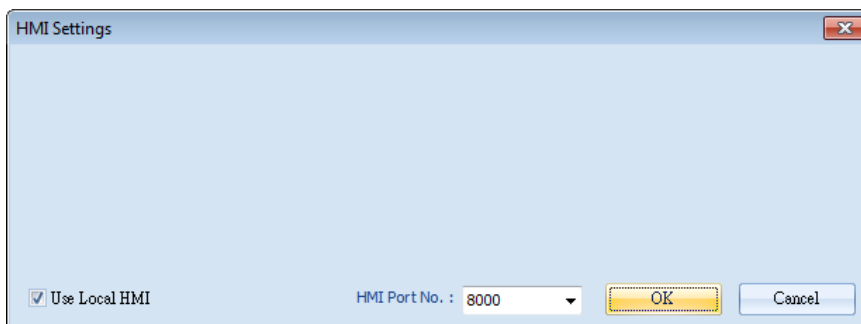
Setting	Description
<b>Name</b>	Enters an object name which is a unique name. <b>Read Only:</b> If an object is set to read only, its address value can't be edited.
<b>HMI</b>	Select a HMI to monitor.
<b>PLC</b>	Selects the desired PLC to monitor and sets its type, station number, and connection method.
<b>Address</b>	Selects the desired object address to monitor and sets its address type.
<b>Address Type</b>	When the address type is set, the available formats of the address can be selected. When executing, the address will be displayed according to the selected format.
<b>Update Cycle</b>	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

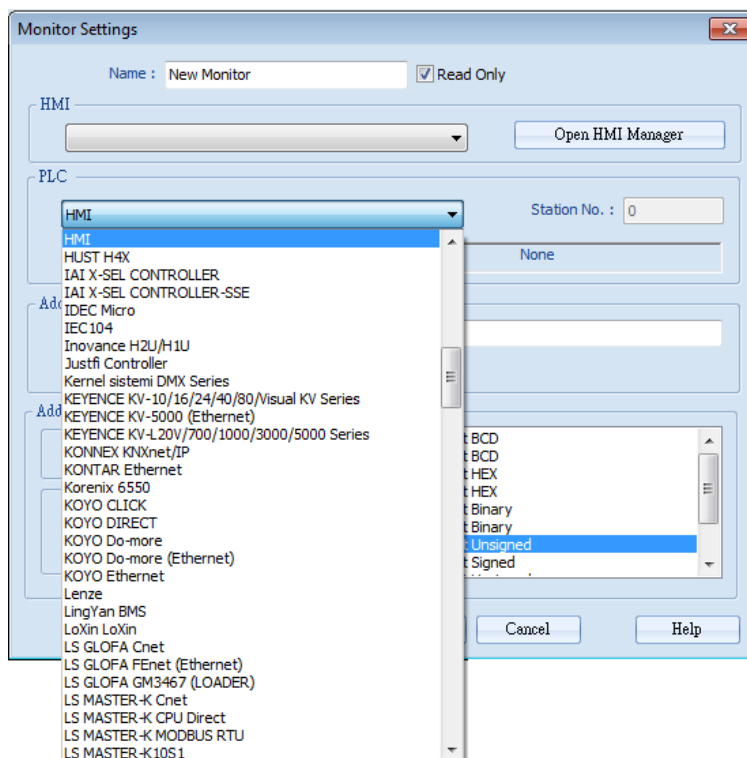
1. Select a target HMI. If the target HMI does not exist, click [Open HMI Manager] and click [Add] to search the HMI for adding.



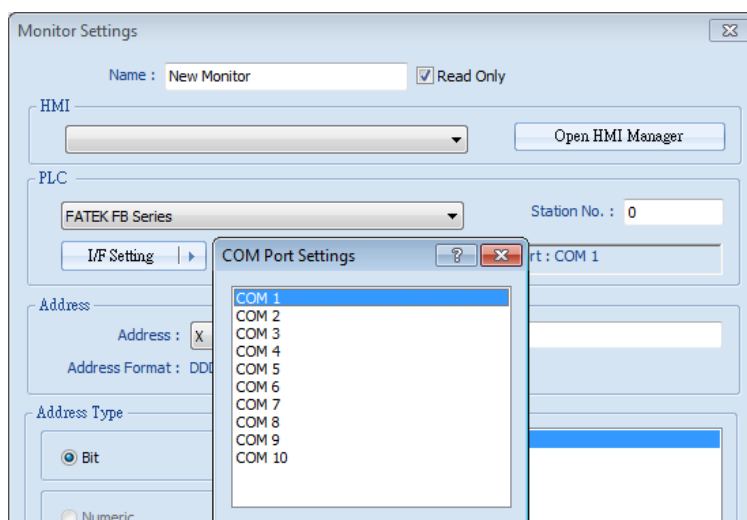
Or, select [Use Local HMI] checkbox to use the project on PC as a monitoring device.



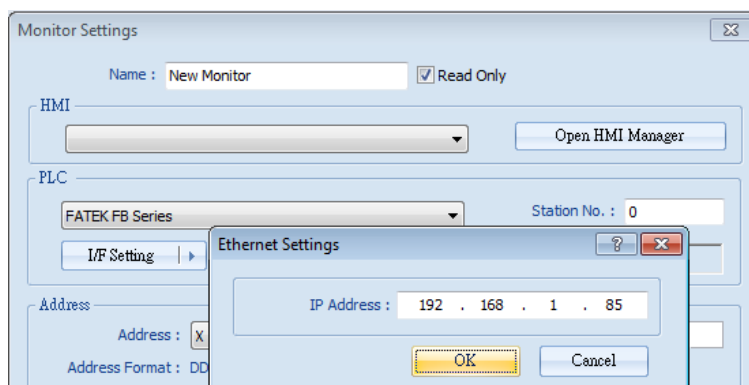
2. Select a target HMI or PLC. If one HMI is selected, you can directly control the local HMI.



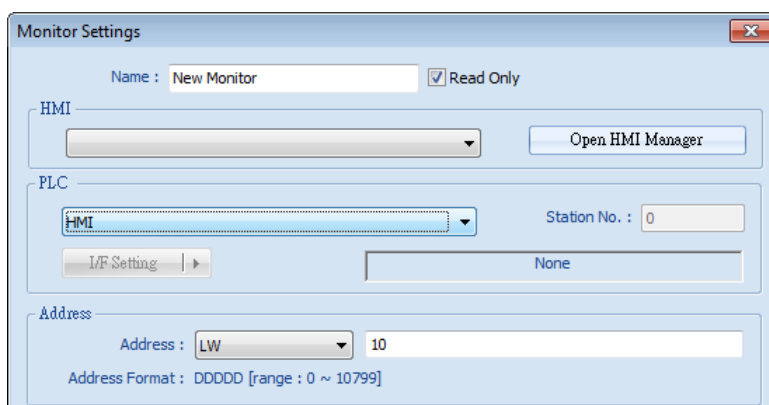
If one PLC is selected, click [I/F Setting] and select [Com Port] to choose a COM port.



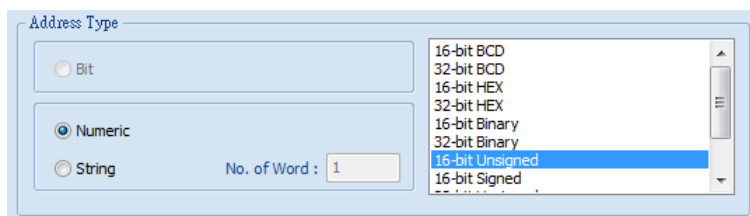
Or, click [I/F Setting] and select [Ethernet] to set the IP address.



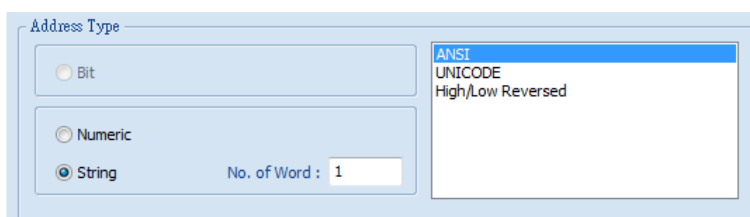
3. Set the object address and its address type for being monitored.



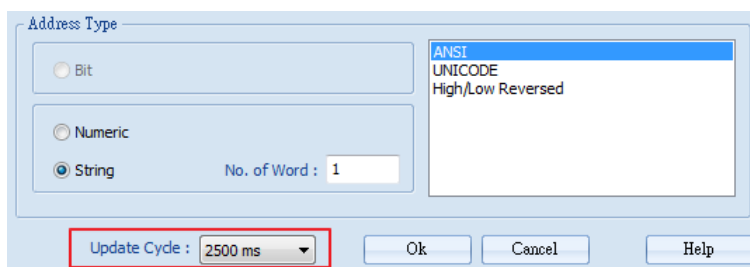
4. When a Word address is selected, set the address type to [Numeric] or [String].  
[Numeric]: Select the data format of the monitor address.



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



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





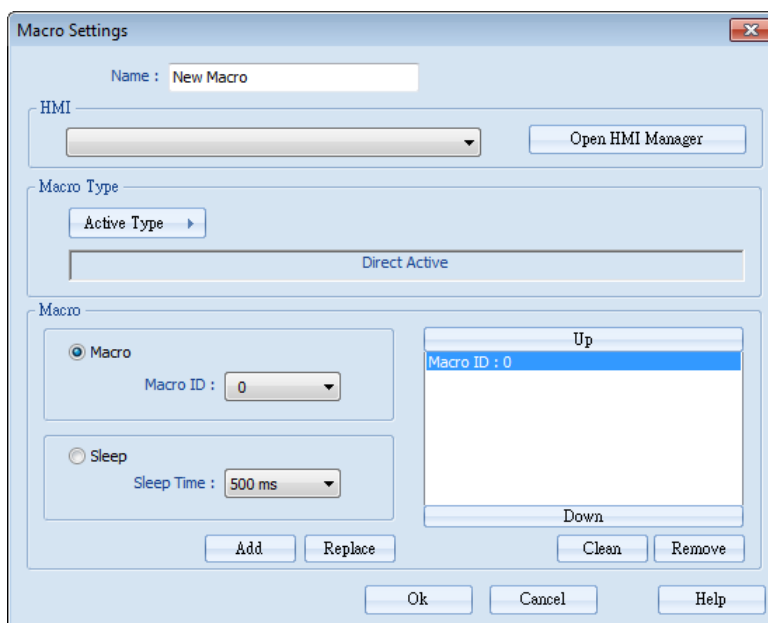
## 35.4. Macro Settings

### 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].

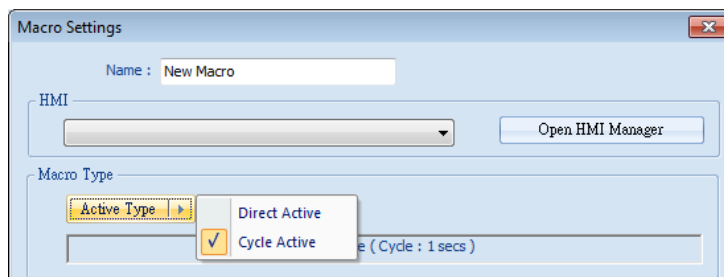
### 35.4.2. Macro Settings



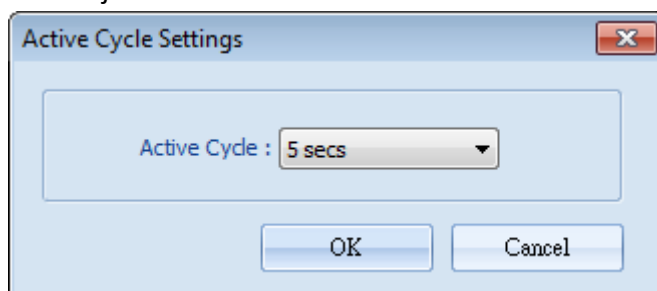
Setting	Description
<b>Name</b>	Enters an object name which is an unique name.
<b>HMI</b>	Selects a HMI to monitor.
<b>Macro Type</b>	The ways to execute the Macro included Direct Active and Cycle Active.
<b>Macro</b>	Each Macro Object can execute multiple macros. The time interval between the executions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

### 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”.
2. 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.

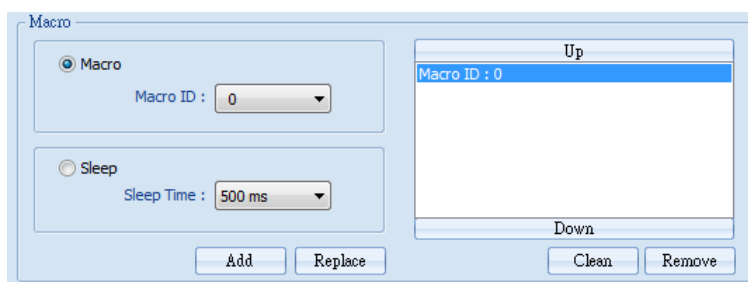


For example, if [Cycle Active] is set to 5 seconds, when executing a macro, the next time to execute the macro object will be 5 seconds later.

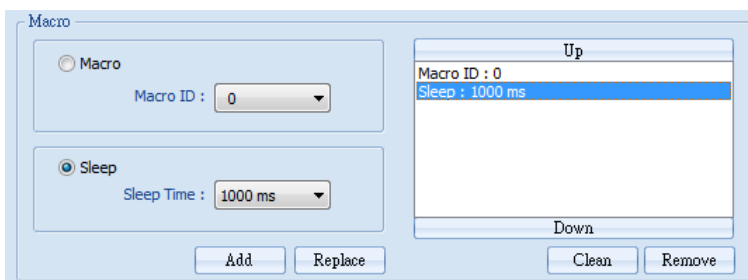


**3. Set Macro to [Macro] or [Sleep].**

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



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



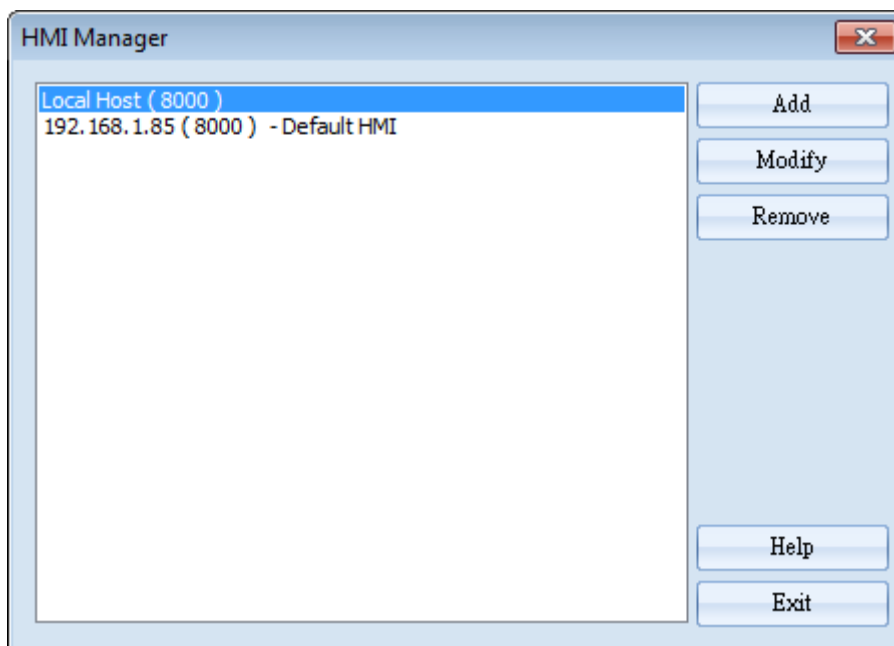
## 35.5. HMI Manager

### 35.5.1. Opening HMI Setting

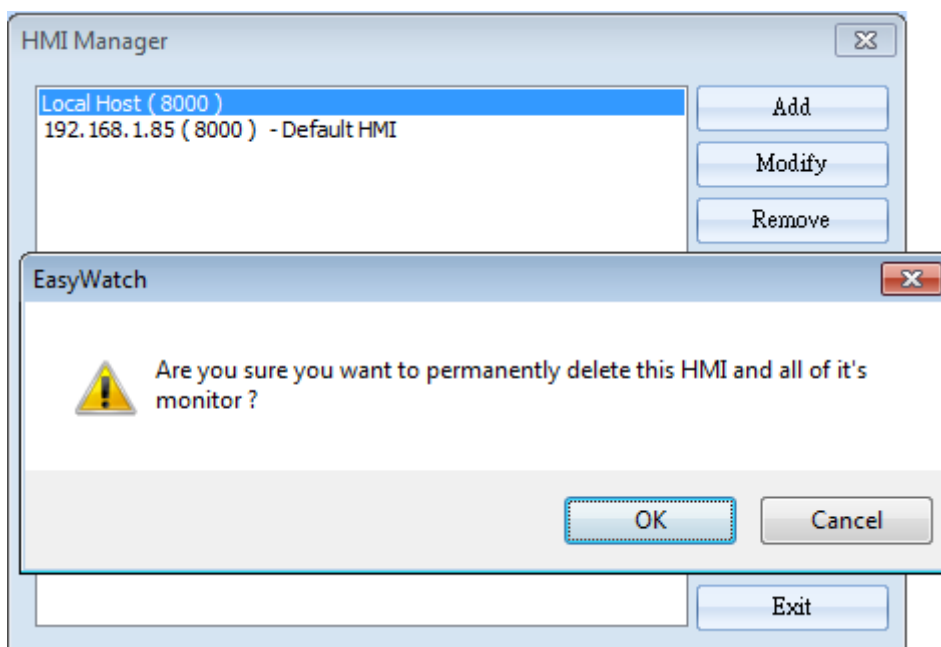
There are two ways to open the HMI Setting.

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

### 35.5.2. HMI Manager

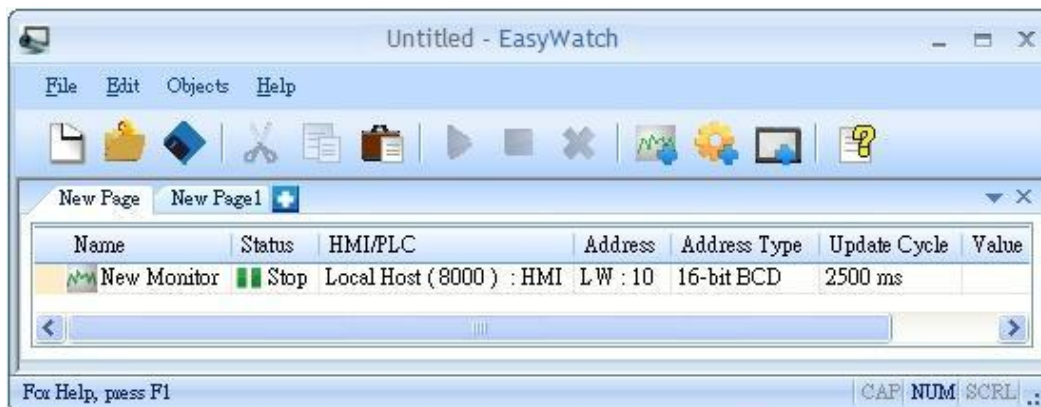


Setting	Description
<b>Add</b>	Select a target HMI. If the target HMI does not exist, add a new device, see “35.3.3 Steps to add a new monitor”.
<b>Modify</b>	Modify the settings of the HMI.
<b>Remove</b>	Remove the HMI.



## 35.6. Object List

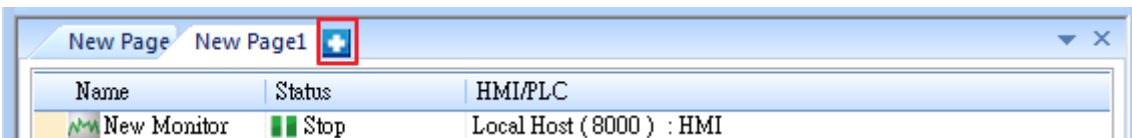
### 35.6.1. Object List Columns



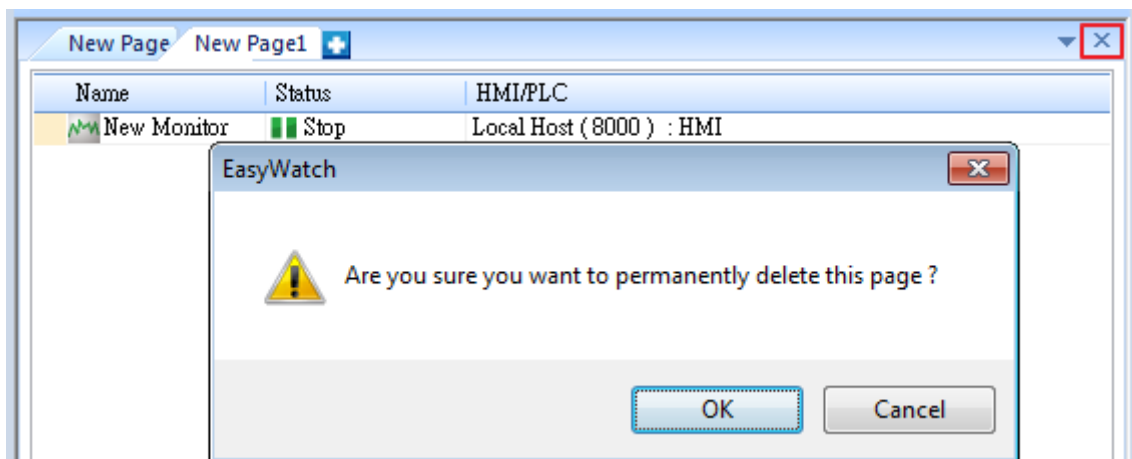
Setting	Description
<b>Name</b>	Displays the object name. The small icons of the names are for users to identify the objects.
<b>Status</b>	Displays the status of the objects: [Connecting], [Connected], and [Stop]. If HMI is not connected or Port No. is incorrect, the error message "HMI Not Found" will appear. For Monitor Objects, if the address is incorrect, "Address Error" message will appear.
<b>HMI / PLC</b>	Displays the information of HMI / PLC that is currently operated by the objects.
<b>Address</b>	For Monitor Objects, the relevant address setting is displayed.
<b>Address Type</b>	
<b>Update Cycle</b>	Set the update interval of the monitor object.
<b>Value</b>	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

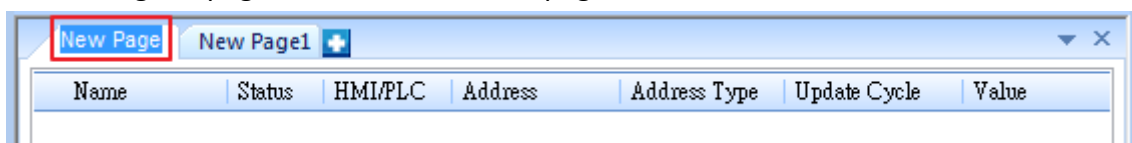
- Adding a new page: Click the icon to add a new page.



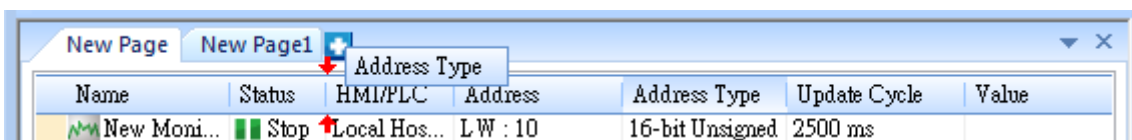
- Deleting a page: Click the icon and confirm the deletion.



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



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



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