Technical Announcement					
Issued by	IMSBU HMI	Author (s)	Tina, Lee	Security Classification	☑ General ☐ Confidential
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Recipient	Product Manager, BU Sales Representative, Global Service Partners				

Purpose:

After updating, the DOPSoft software version of DOP series product is 2.00.05:

- Firmware version of DOP-B model: 3.0092
- Firmware version of DOP-W model: 3.0073
- Firmware version of DOP-H model: 3.0092
- Firmware version of HMC model: 3.0160

Descriptions:

1. Applicable model: DOP-B / DOP-W / DOP-H / HMC series
2. Correcting items of software/firmware:

2.1 Fixed bug: HMI is lagging when switching language
2.2 Fixed bug: Changes on “CSV Format” option cannot be stored
2.3 Fixed bug: HMI shows communication error after connecting to PLC for a while
2.4 Fixed bug: HMI’s screen is frozen after connecting to multiple PLCs over network for a while
2.5 Fixed bug: Customized Modbus TCP Server port cannot be used
2.6 Fixed bug: WPL V2.40 file format is not supported
2.7 Fixed bug: Screen data printed in horizontal direction by ePrinter is skew
2.8 Fixed bug: HMI cannot get IP address while it is running already
2.9 Fixed bug: HMI cannot retain recipe data after power down and up when non-volatile storage is set to HMI
2.10 Fixed bug: Certain operations performing writing data to USB storage will cause HMI screen frozen, e.g. exporting recipe to USB storage and copying files from HMI to USB in “System Menu”
2.11 Fixed bug: Executing “Alarm Moving Sign” in “Alarm Setup” or “Alarm Moving Sign” element will cause HMI screen frozen
2.12 Fixed bug: After user switch language and examine “Alarm History Table”, entering “System Menu” or downloading projects will cause HMI failed
2.13 Fixed bug: “Auto Update” cannot function on “B03S211” and “B03E211” when booting
2.14 Fixed bug: Position offset is observed when pressing on HMI screen

2.15 Fixed bug: Executing macro “EXHISTORY” will cause HMI fail when “Non-volatile” storage of “History Buffer” is set to HMI and “Export CSV File” is checked
2.16 Fixed bug: When HMI macro accesses controller Allen Bradley Ethernet IP(Controllogix, Compactlogix) (Use Tags)’s address, HMI will have “Run out of Mem” error
2.17 HMI fails when controller Siemens S7 200 SMART (ISO TCP)’s address Q0.0 is set ON
2.18 Fixed bug: When HMI runs as PLC in “Online Simulation Mode” with wrong connection setup, it shows “Run out of memory” error
2.19 Fixed bug: FlashTransfer shows errors when it reads data whose size is more than 16 words in “Historical Buffer”

3. Newly added function of software / firmware:

3.1 FTP Server function
3.2 Advanced alarm function
3.3 The alarm export and import file format now supports Excel
3.4 Button of Sound Setting is now available in DOP-W series HMI
3.5 Full screen and Time slider control
3.6 Tag function is now supported by element and macro
3.7 When entering the password in DOP-W series HMI, users no longer need to select the security level
3.8 After scanning the barcode, there is no need to write the data into its address by pressing the Enter button
3.9 DOP-B10VS511 VGA Input supports scanning frequency of 60 Hz
3.10 Number of M device supported by HMC series HMI increases to 8192
3.11 DVP 12SE and DVP EH3 / DVP EH3-L models support PLC upload/download function
3.12 Network type HMIs, including DOP-B, DOP-H and HMC support HMI Doctor function for online self-verification

3.13 Add PLC Controllers

4. Location for downloading the software:

http://www.deltaww.com/services/DownloadCenter2.aspx?secID=8&pid=2&tid=0&CID=06&itemID=060302&typeID=1&downloadID=,&title=Select%20Product%20Series&dataType=8;&check=1&hl=en-US

2.1 Fixed bug: HMI is lagging when switching language

Before	When switching to different languages, HMI will not respond for a while before the change takes effect.
After	Switching language becomes fast with no delay.

2.2 Fixed bug: Changes on “CSV Format” option cannot be stored

Before	In【Options】→【Alarm Setup】, check【CSV Format】and hit OK. When user comes back to【Alarm Setup】,【CSV Format】is still unchecked.
After	Once the option is set, changes on “CSV Format” will be applied.

2.3 Fixed bug: HMI shows communication error after connecting to PLC for a while

Before	HMI shows communication error: “No TCP connection”after connecting to PLC for a while. Rebooting HMI is required to re-establish the connection.
After	Connection between HIM and PLC becomes stable

2.4 Fixed bug: HMI’s screen is frozen after connecting to multiple PLCs over network for a while

Before	HMI’s screen is frozen after connecting to multiple PLCs over network for a while.
After	HMI’s screen will not delay after connecting to multiple PLCs over network for a while.

2.5 Fixed bug: Customized Modbus TCP Server port cannot be used

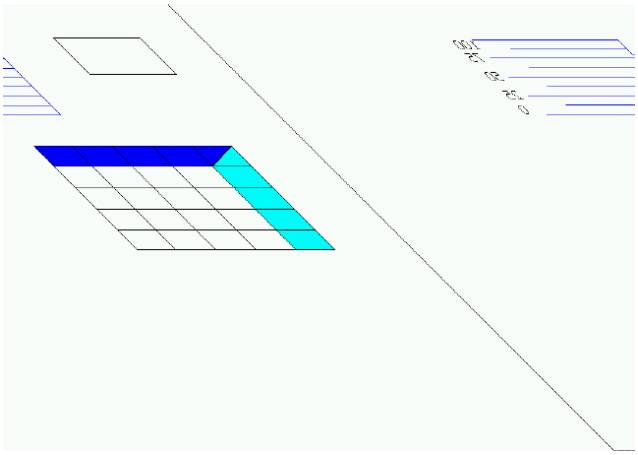
Before	【Modbus TCP Server Port】set in【Options】→【Configuration】→【Network App】 cannot be used to connect to HMI
After	【Modbus TCP Server Port】set in【Options】→【Configuration】→【Network App】 can be used to connect to HMI

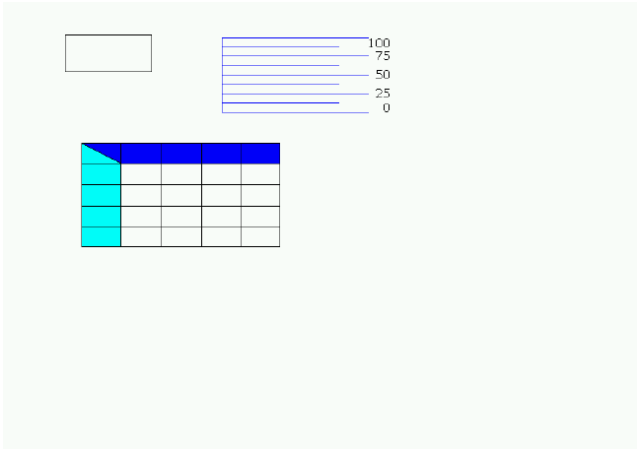
2.6 Fixed bug: WPL V2.40 file format is not supported

Before	WPL V2.40 file format is not supported. ● On HMI, by using【System Menu】→【Up/Download】→【Transfer Mode】HMI will not

	be able to download WPL V2.40 file and show warning “Not support this version” ● Macro “PLCDOWNLOAD” cannot download WPL V2.40 file with return value 0
After	WPL V2.40 file format is supported. ● On HMI, by using【System Menu】→【Up/Download】→【Transfer Mode】HMI will be able to download WPL V2.40 file without error message ● Macro “PLCDOWNLOAD” can download WPL V2.40 file with return value 1

2.7 Fixed bug: Screen data printed in horizontal direction by ePrinter is skew

Before	On W-series, after user sets printer as ePrinter in 【Configuration】→【Print】→【Printer】 and direction “horizontal”, the printing result will be skew. 
After	On W-series, after user sets printer as ePrinter in 【Configuration】→【Print】→【Printer】 and direction “horizontal”, the printing result looks as same as screen data.

2.8 Fixed bug: HMI cannot get IP address while it is running already

Before	HMI can only obtain IP address during booting (screen shows “Initializing”). If HMI Ethernet cable is plugged after booting, HMI cannot refresh it’s IP address until rebooting.
After	HMI can get IP address as soon as Ethernet cable is plugged-in.

2.9 Fixed bug: HMI cannot retain recipe data after power down and up when non-volatile storage is set to HMI

Before	Modification to recipe will not retain after power down and up when non-volatile storage is set to HMI.
After	When “Non-volatile storage” is set to HMI, actually, all recipe data will be stored. However, the time interval of writing data to storage is 4 second. If modification and switch-off happens at the moment in between two writing cycles, all data will be lost.

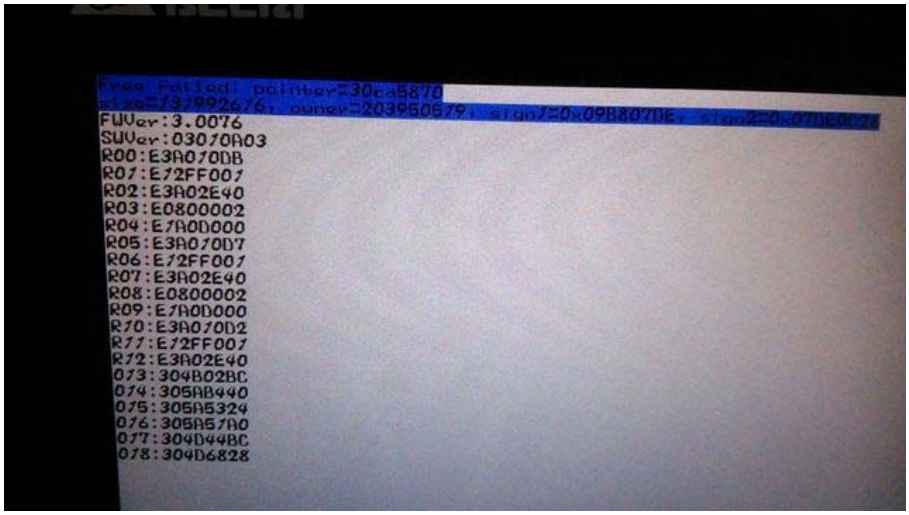
2.10 Fixed bug: Certain operations performing writing data to USB storage will cause HMI screen frozen, e.g. exporting recipe to USB storage and copying files from HMI to USB in “System Menu”

Before	Certain operations performing writing data to USB storage will cause HMI screen frozen, e.g. exporting recipe to USB storage and copying files from HMI to USB in “System Menu”.
After	HMI works normally with writing data operations to USB storage.

2.11 Fixed bug: Executing “Alarm Moving Sign” in “Alarm Setup” or “Alarm Moving Sign” element will cause HMI screen frozen

Before	Enable “Alarm Moving Sign” in “Alarm Setup” or create an “Alarm Moving Sign” element on HMI screen. If there is any alarm triggered or cleared, HMI screen will become frozen.
After	Both alarm moving sign work well without any problem when alarms are trigged or cleared.

2.12 Fixed bug: After user switch language and examine “Alarm History Table”, entering “System Menu” or downloading projects will cause HMI failed

Before	After user switch language and examine “Alarm History Table”, entering “System Menu” or downloading projects will cause HMI failed. 
After	After user switch language and examine “Alarm History Table”, entering “System Menu” or downloading projects will not cause HMI failed.

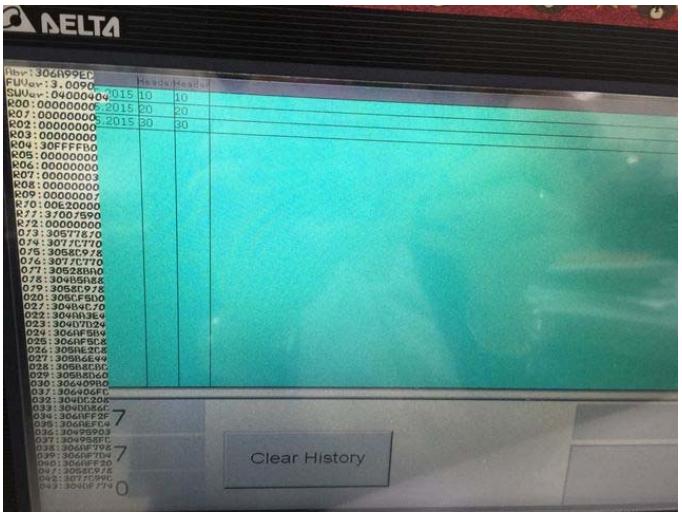
2.13 Fixed bug: “Auto Update” cannot function on “B03S211” and “B03E211” when booting

Before	Booting speed of “B03S211” and ”B03E211” are too fast for system to detect USB storage so that “Auto Update” cannot function.
After	“B03S211” and ”B03E211” can detect USB storage during booting and make “Auto Update” work.

2.14 Fixed bug: Position offset is observed when pressing on HMI screen

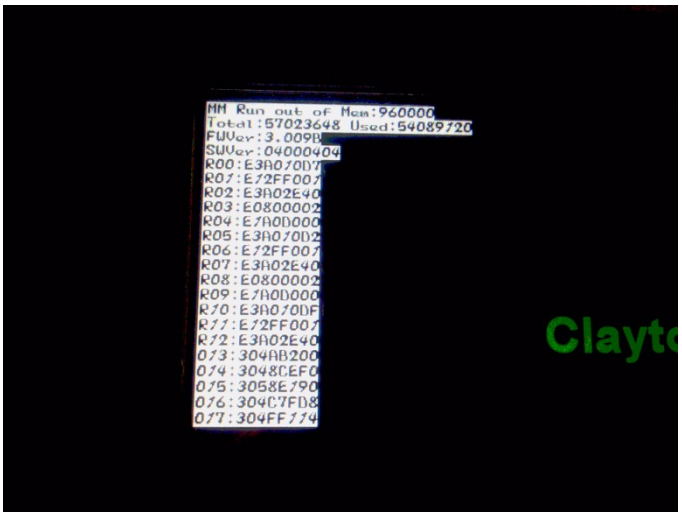
Before	When touch force in “System Menu” is set lower, there will be significant offset between touched point and the point HMI recognized.
After	With any setting of touch force, HMI can recognize touched point on the screen precisely.

2.15 Fixed bug: Executing macro “EXHISTORY” will cause HMI fail when “Non-volatile” storage of “History Buffer” is set to HMI and “Export CSV File” is checked

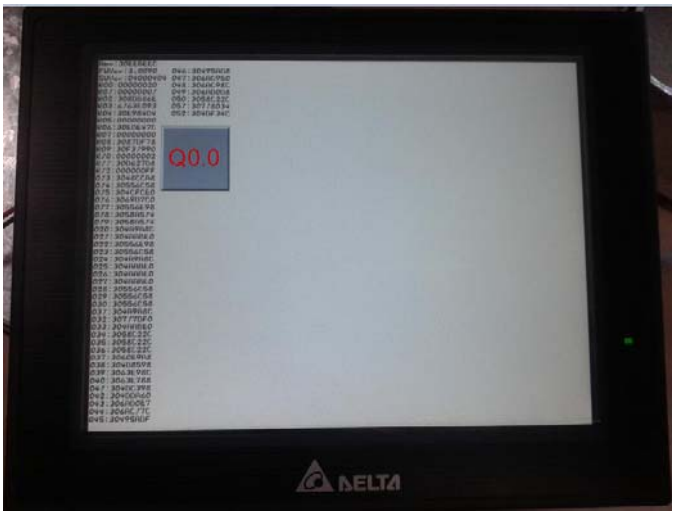
Before	Fixed bug: Executing Macro “EXHISTORY” will cause HMI fail when “Non-volatile” storage of “History Buffer” is set to HMI and “Export CSV File” is checked. 
After	With the same settings, macro “EXHISTORY”’s execution will not cause HMI failed and will export a .dat file containing history buffer data.

2.16 Fixed bug: When HMI macro accesses controller Allen Bradley Ethernet IP(Controllogix, Compactlogix) (Use Tags)’s address, HMI will have “Run out of Mem” error

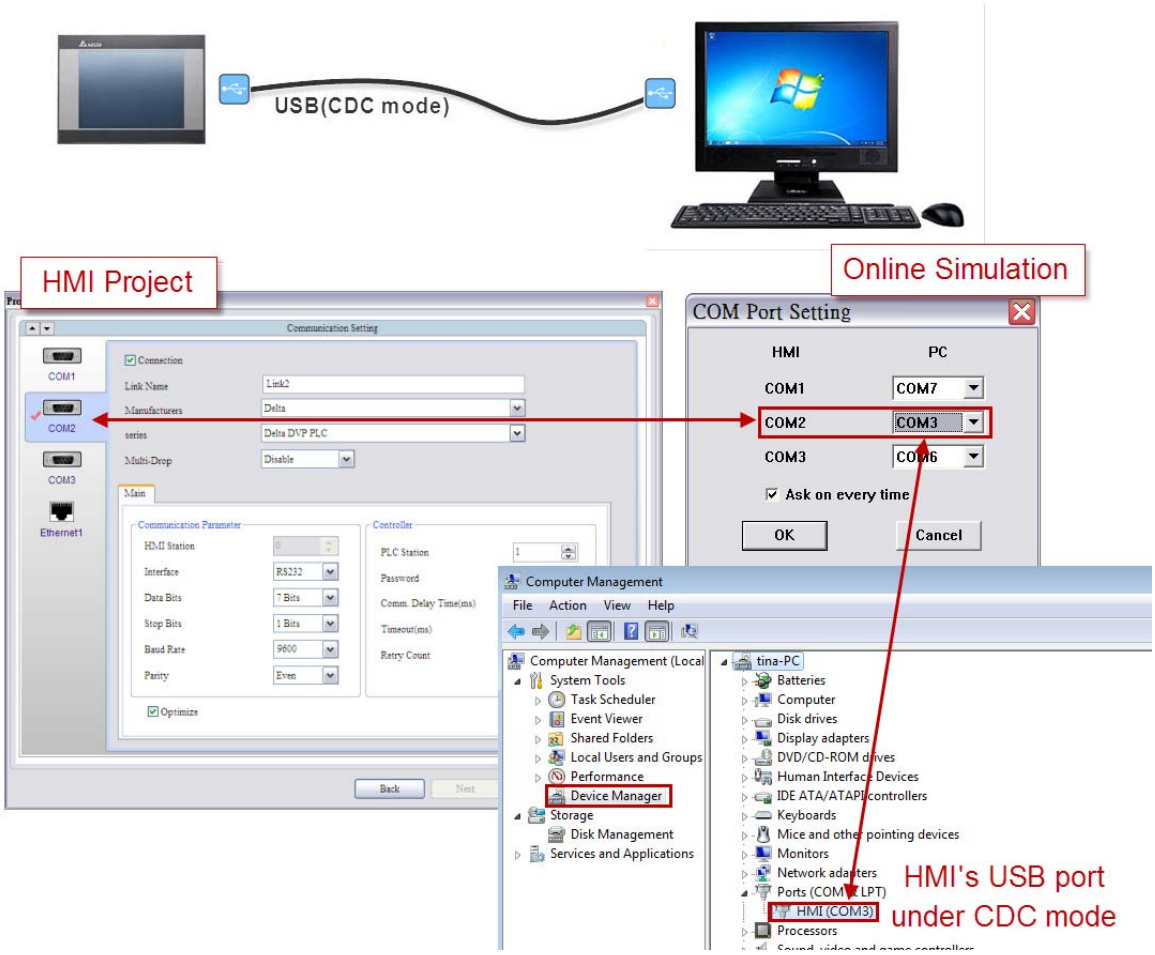
Before	When HMI macro accesses controller Allen Bradley Ethernet IP(Controllogix, Compactlogix) (Use Tags)’s address for a while, HMI will have “Run out of Mem” error.

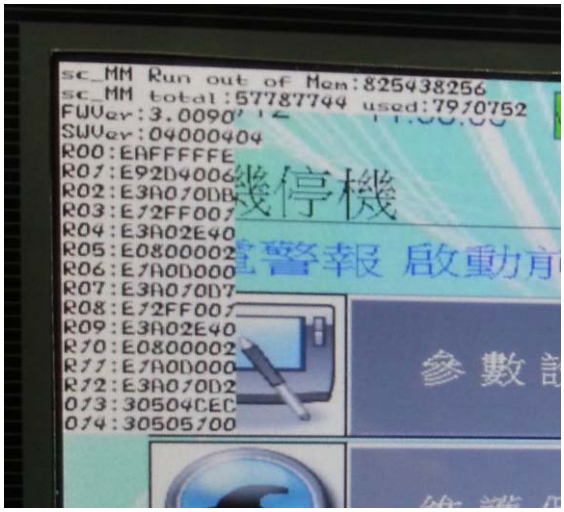
	
After	HMI will not show the same error while its macro accesses controller Allen Bradley Ethernet IP(Controllogix, Compactlogix) (Use Tags)'s address.

2.17 HMI fails when controller Siemens S7 200 SMART (ISO TCP)'s address Q0.0 is set ON

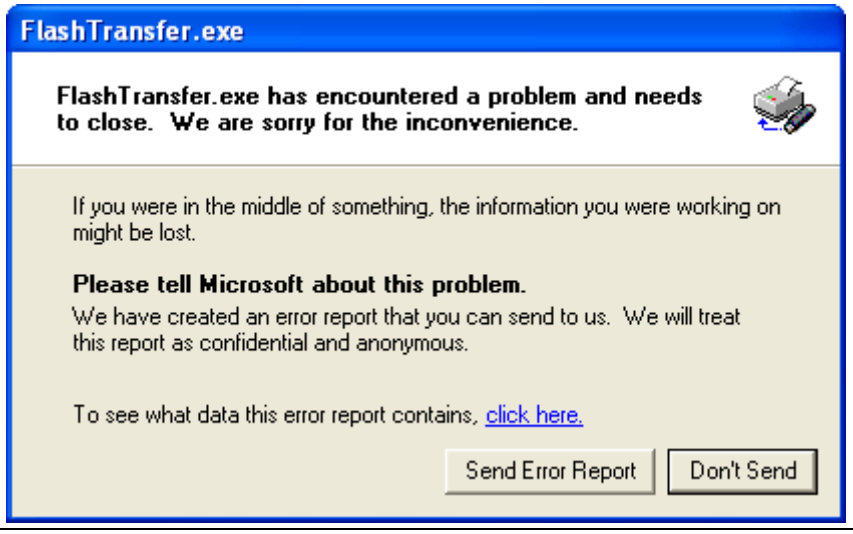
Before	When HMI connects to network controller Siemens S7 200 SMART (ISO TCP) and use a button element to write Q0.0, setting the address ON causes HMI fail. 
After	With the same configuration, either setting Q0.0 to ON or OFF will not cause any problem.

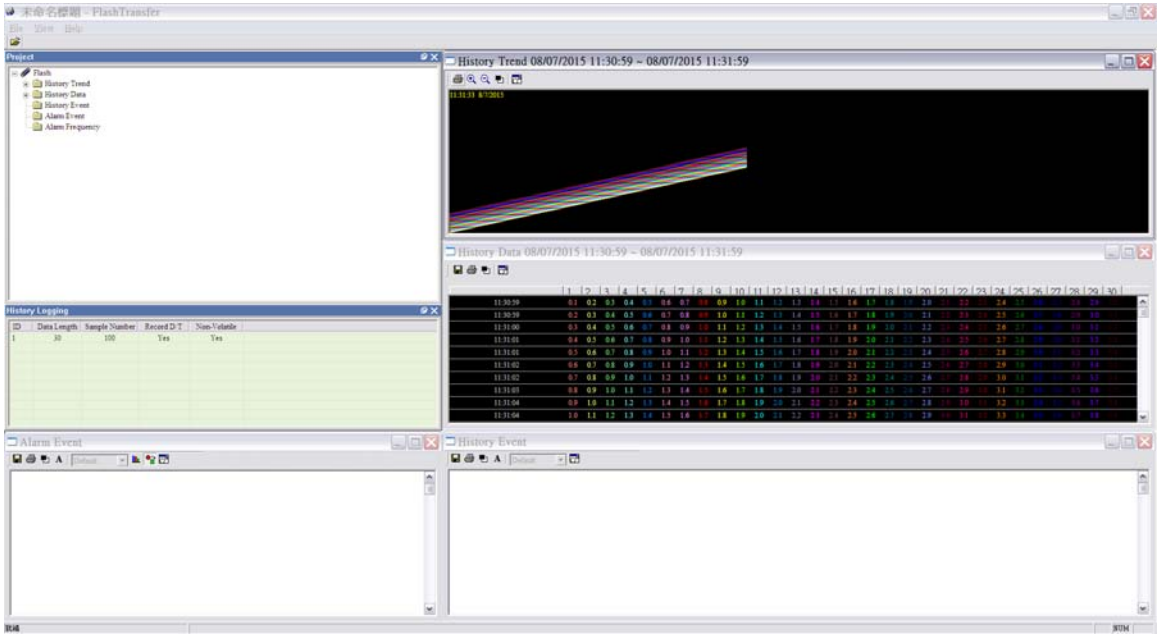
2.18 Fixed bug: When HMI runs as PLC in “Online Simulation Mode” with wrong connection setup, it shows “Run out of memory” error

Before	When HMI runs as PLC in “Online Simulation Mode”, typical setup is connecting the wire from PC to HMI’s COM port. However, if the wire is connected to HMI’s USB port under CDC mode instead (User can find an HMI device in COM in Windows Device Manager), HMI will show “Run out of memory” error. Wrong connection setup：  HMI shows “Run out of memory”：

2.19 Fixed bug: FlashTransfer shows errors when it reads data whose size is more than 16 words in “Historical Buffer”

Before	FlashTransfer shows an error when it reads data whose size is more than 16 words in “Historical Buffer”. 
After	FlashTransfer can read data with size of 16 words in “Historical Buffer”.


Project
History Trend 08/07/2015 11:30:59 ~ 08/07/2015 11:31:59
History Data 08/07/2015 11:30:59 ~ 08/07/2015 11:31:59
History Logging
Alarm Event
History Event

3.1 FTP Server Function

FTP Server enables users to download alarms, historical information and recipe from USB Disk or SD storage device to PC. It also allows users to upload the file from PC to USB Disk or SD storage device.

Supported HMI

- Network type

Supported connection methods

- Software for file transmission
- Windows explorer
- DOS command line

Connection limit

- Maximum 3 on-line clients at the same time.
- FTP Server will be automatically disconnected when you leave it unused for 90 seconds.

Logon methods

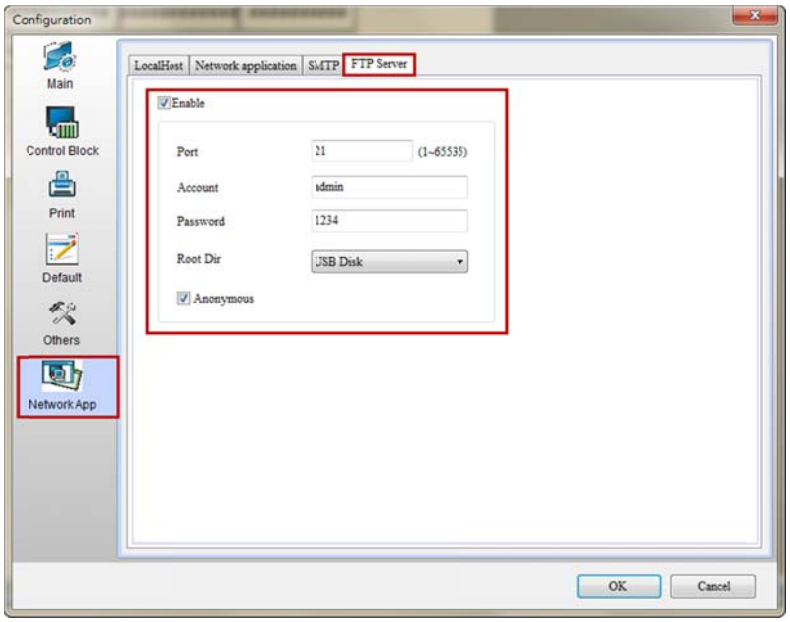
- Anonymous logon
  - Users cannot add directory.
  - Users cannot upload files.
  - Users cannot download files.
  - Users cannot delete files.
  - Users can change the filenames.
- Account logon
  - Users can add directory.
  - Users can upload / download files.
  - Users can delete files.
  - Users can change the filenames.

File transmission rules

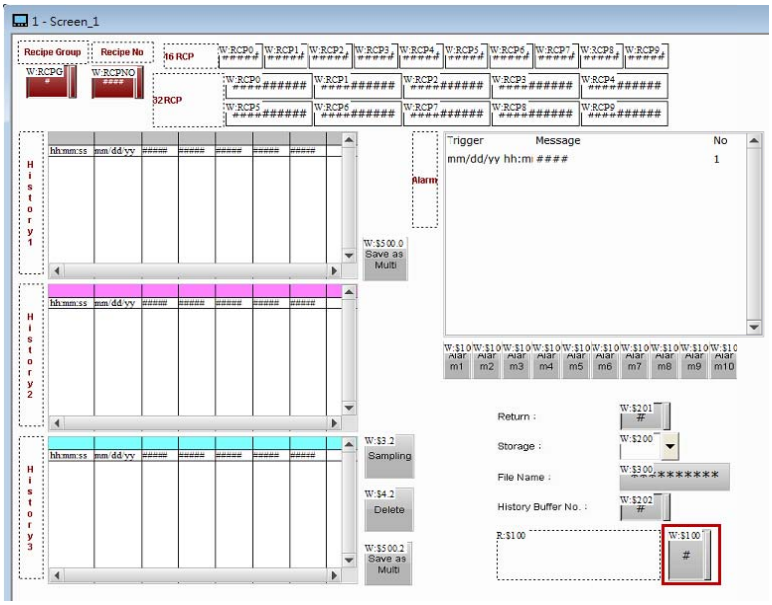
- Transmission flow is unlimited.
- During the file transmission, if the connection is failed, the file is stopped being transmitted. However, once the connection is OK, the system will continue to transmit the file again.
- No file size limit for transmission.
- Length limit of the filename is 260 bytes.
- It is allowed to change the filename.
- Chinese file name is supported.

- File encryption is not supported.
- It supports positive and negative mode for connection
- During FTP transmission, users can go to or exit the operation from system directory.

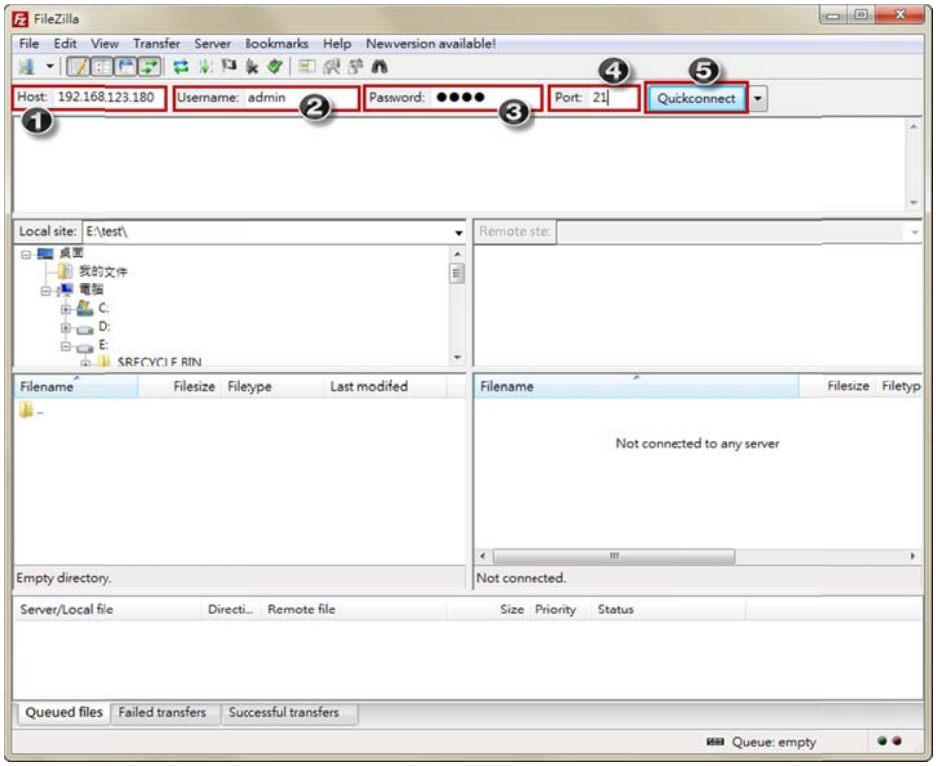
Step 1: Go to [Option] → [Configuration] → [Network App] → [FTP Server] and set the value for FTP Server connection.



Step 2: Edit the information of alarms, history and recipe and set the non-volatile area to USB or SD storage device. Then, download the screen and insert the USB Disk to HMI. Trigger the [Save as Multi] button and select USB as the external device with the filename of ALL. And set $100 address to 1 to export the 16-bit recipe.

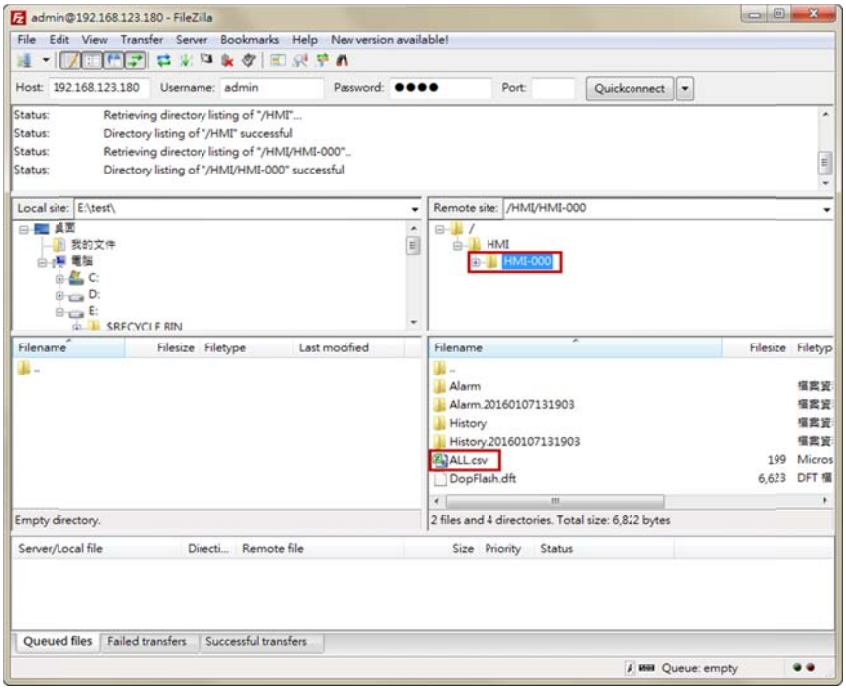


Step 3: Use FTP Client software to upload/download the file or use Windows Explorer or DOS Command line for connection. In the following steps, FileZilla, the software for file transmission is applied as the example. This software is free to download at https://filezilla-project.org/download.php.
Please run FileZilla software after installation.

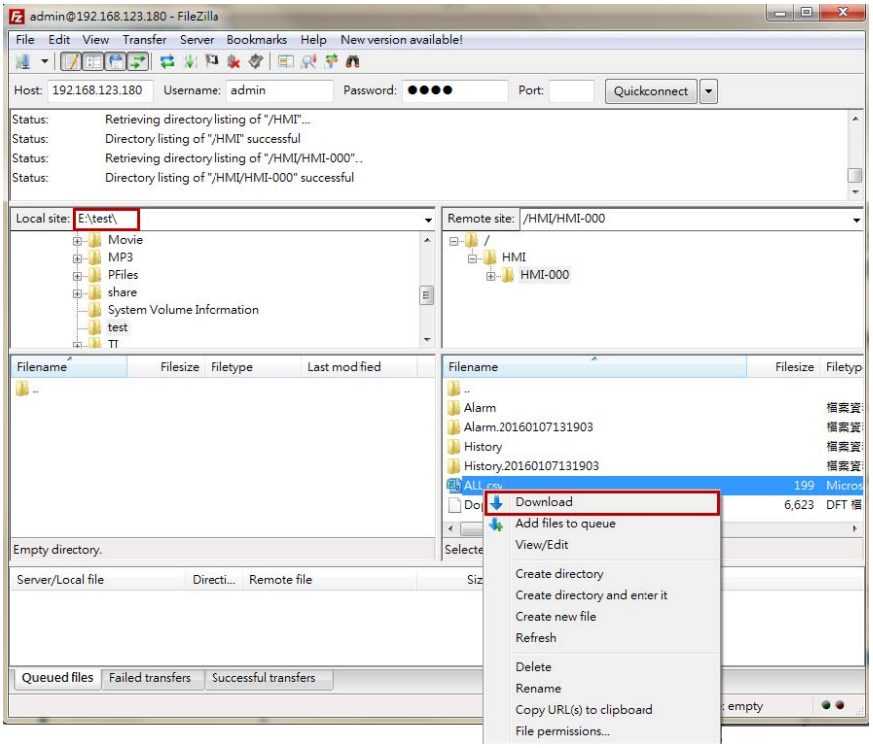


No.	Name	Descriptions
❶	Host	Enter HMI's IP address. In this example, we enter 192.168.123.180.
❷	Username	Enter the username, admin, which is identical with the one set in the software.
❸	Password	Enter the same password, 1234 that is the same as the software setting.
❹	Port	Enter the port, 21 (identical to the software setting.)
❺	Quickconnect	Before enabling this button, please make sure the setting of column 1 ~ 4 is complete.

Step 4: After the connection is built, the screen will be shown as below.



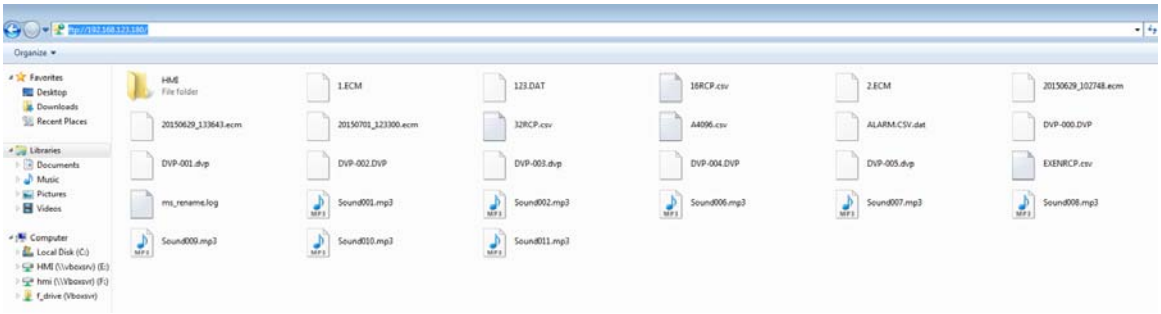
Download the ALL.csv recipe file exported in Step 2 to the specified path in PC via FileZilla.



- The connection method of Windows Explorer:

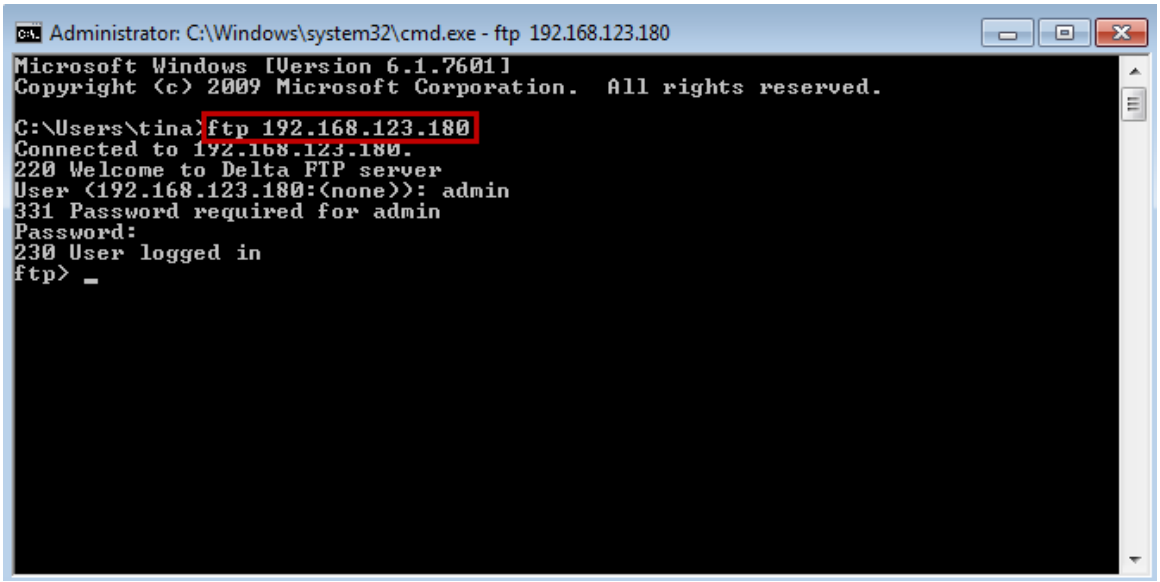
  Please open Windows Explorer and enter ftp://192.168.123.180/. Then, enter your account and password to log on FTP.

  You can see all files that stored in USB.

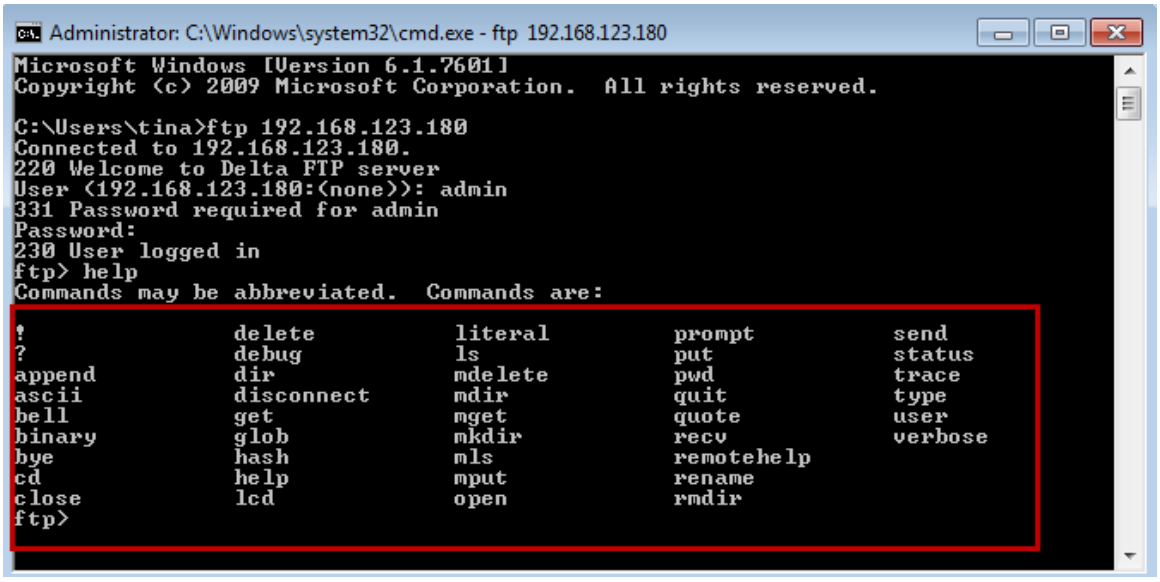


- DOS Command line

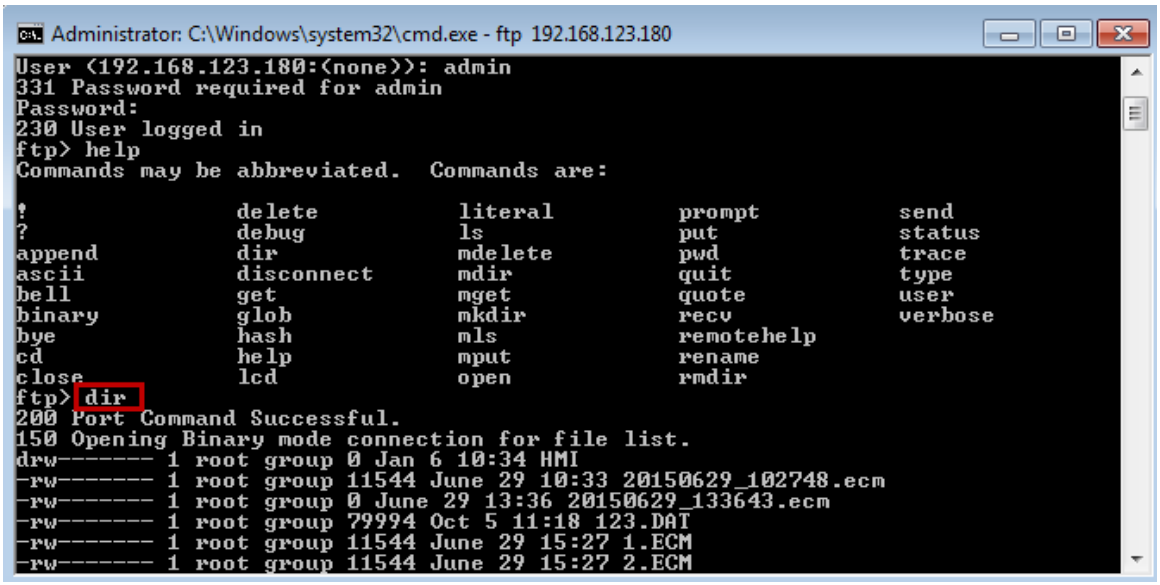
  Enter ftp 192.168.123.180 in Command Prompt (cmd) and enter your user name, admin and password, 1234 to connect to FTP.



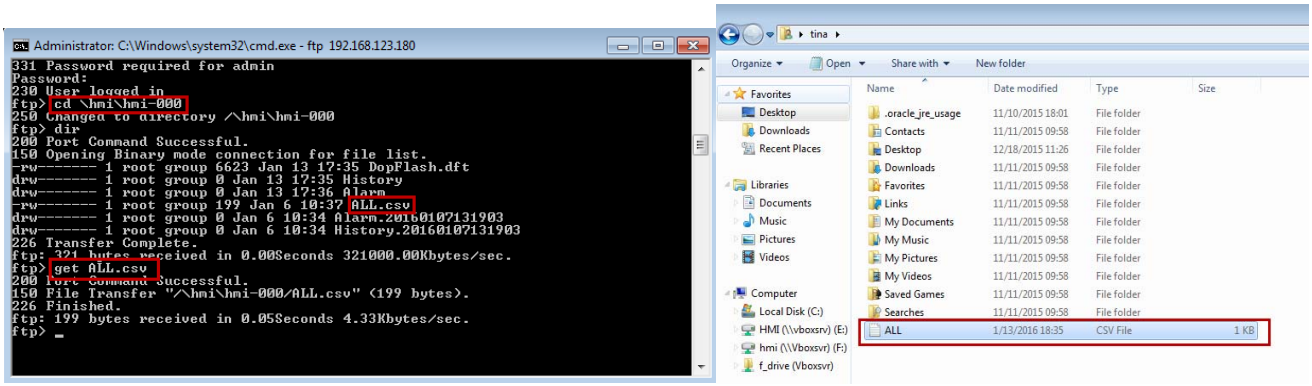
With ftp command, users can view all supported commands via the help function.



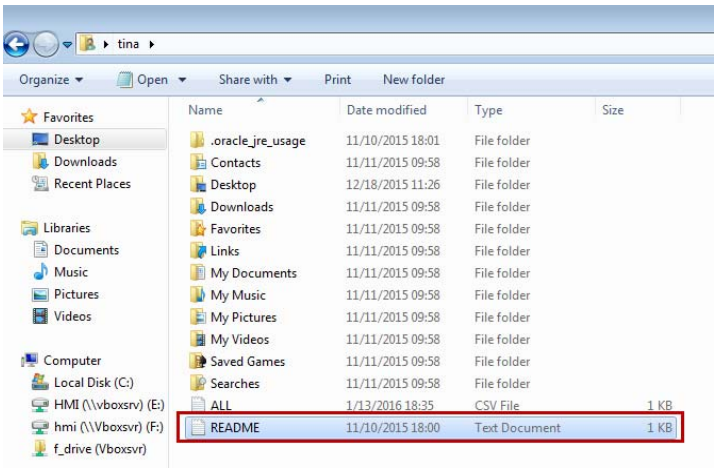
Enter dir command. And the screen will show all files that currently stored in USB.

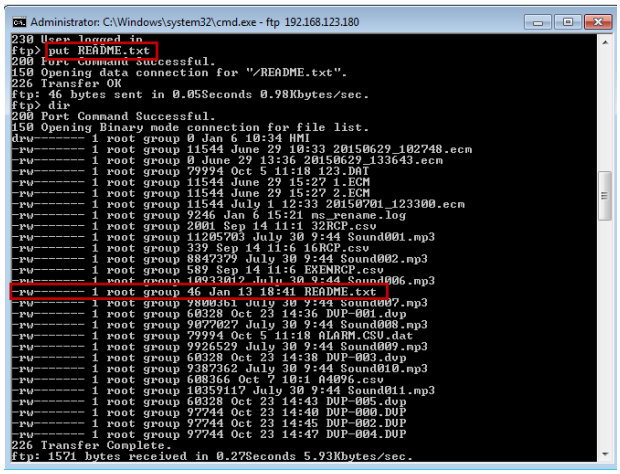


Please use get command if you wish to download the file from USB or SD card.



Please apply put command if you wish to upload the file from PC to USB or SD card.





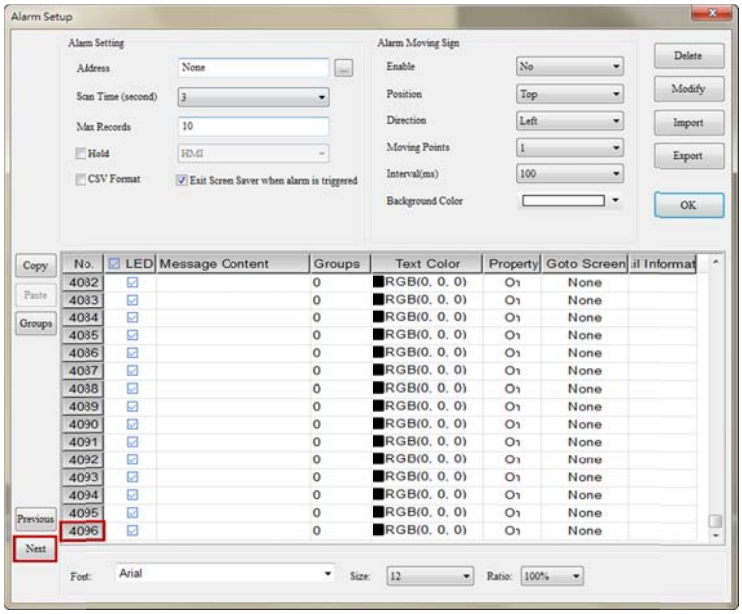
3.2 Advanced alarm function

Followings are the descriptions of advanced alarm function.

■ DOP-B / DOP-H / HMC Series

The alarm number is increased to 4096.

- Users can switch to alarm number 2049 ~ 4096 by clicking on the [Next] button.
- Users can switch to alarm number 1 ~ 2048 by clicking on the [Previous] button.



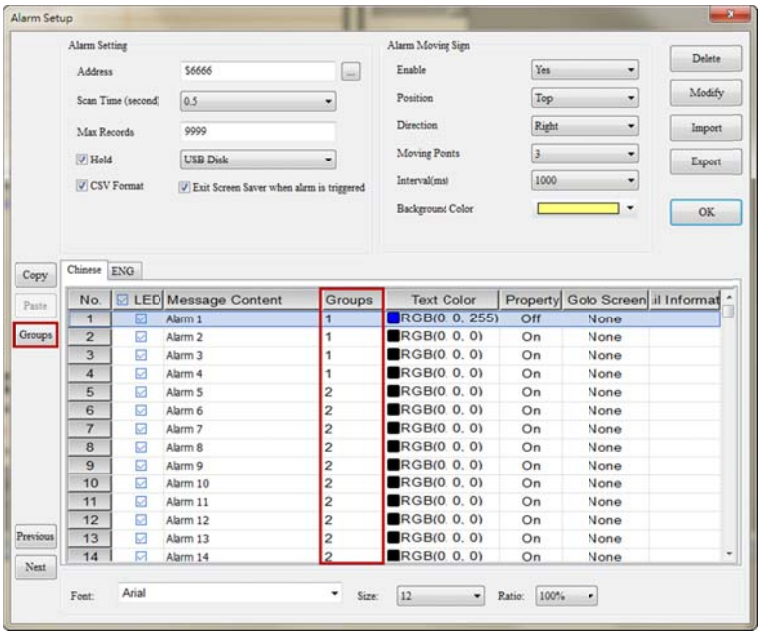
Alarm Group Setting

- For easy search and browse, users can specify the displaying alarm information that is classified in one group.
- The [Groups] button enables users to set the group number.
- Range for setting the group number is from 0 to 4095.

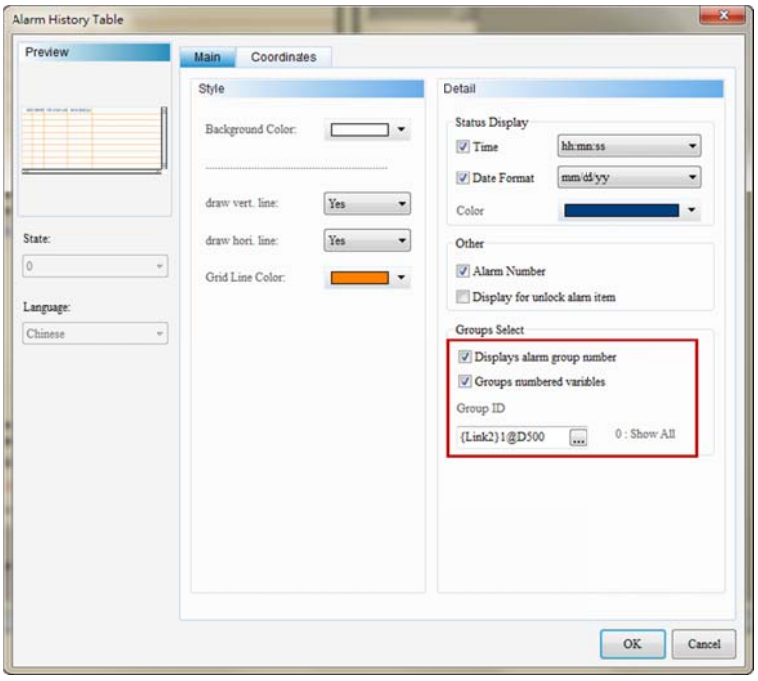
- Alarm History Table, Active Alarm List, Alarm Frequency Table and Alarm Moving Sign all allow users to specify group number variable in order to display the group number. When the variable is 0, the screen will display all alarms; when the variable is 1, the screen will only display the alarm number in group 1.

Here we take DOP-B10E615 as the example for further descriptions.

Step 1: Create the alarm screen and view all alarms. Users can set the group number in batch from alarm number 1 to 4096 by pressing the [Groups] button.

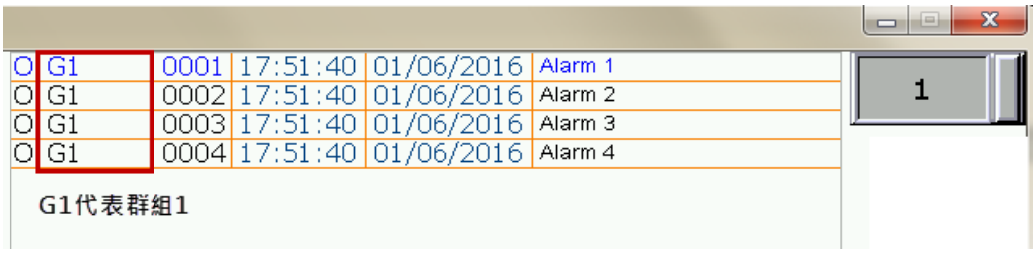


Step 2: Create the Alarm History Table. Check [Display alarm group number] and [Groups numbered variables]. Then set the group ID to D500. Create one numeric entry element and set its address to D500.

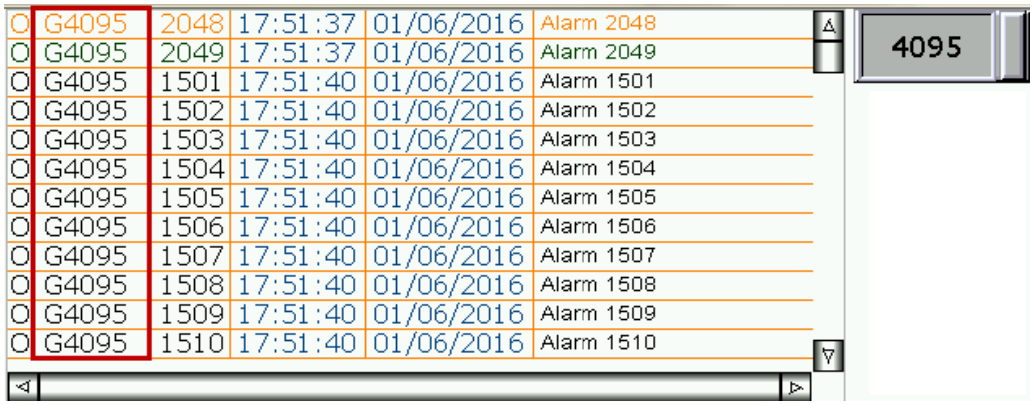


Step 3: After downloading the screen to the HMI, trigger the button of ALL ON. If D500 is set to 0, it will display the alarm number from 1 to 4096.

If D500 is set to 1, it only displays the alarm number in group G1.



If D500 is set to 4095, it only displays the alarm number in group G4095.



Other elements such as Active Alarm List, Alarm Frequency Table and Alarm Moving Sign apply the same method to display the group number.

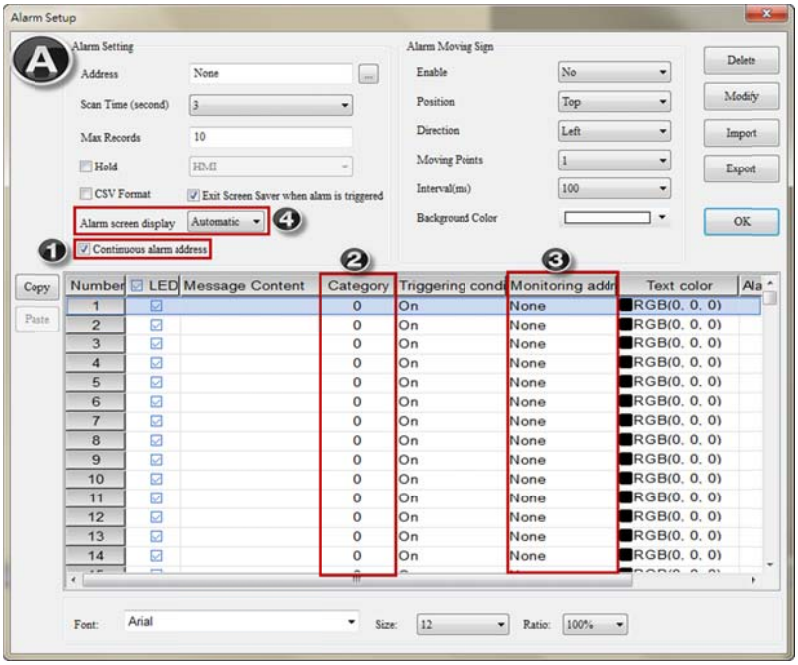
■ DOP-W Series

The advanced alarm function in DOP-W series HMI allows users to display the alarm by the setting of Active address, Sort address and Filter address.

Followings are the detailed descriptions of global alarm setting and functions provided by Alarm History Table.

Global alarm setting can be divided into two categories, which are continuous alarm address (A) and non-continuous alarm address (B).

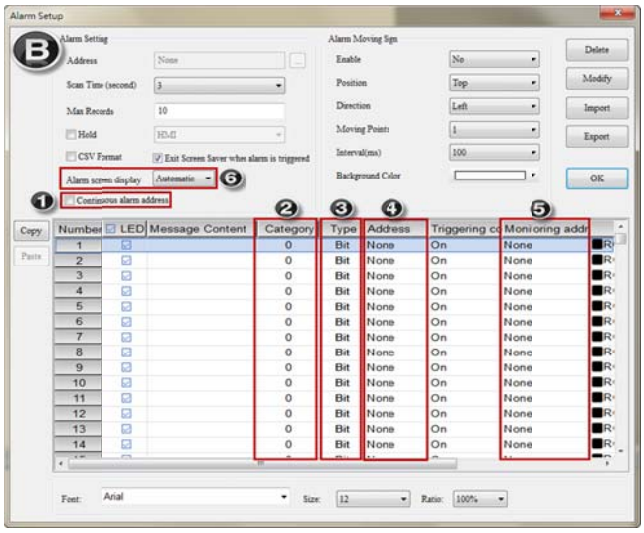
- A: Check [Continuous alarm address]



Number	Name	Descriptions
❶	Continuous Alarm Address	The default setting of this function is enabled. Its address setting should be identical to the alarm address that is set before.
❷	Category	This represents the category of alarm number, which is similar to grouping. The supporting range is between 1 and 255.
❸	Monitoring Address	It can be used to display the alarm message set by users. Add “%d1” after the alarm content you entered and when the value of monitoring address is 10, the alarm information shown in Alarm History Table will be Alarm10.

Number	Name	Descriptions
❹	Alarm Screen Display	It has two types, automatic and manual. When it sets to Automatic: If the alarm is triggered, the alarm screen will immediately pop up. When it sets to Manual: The display of alarm screen is controlled by setting the Action address to 2.

- B: Not to check [Continuous alarm address]



Number	Name	Descriptions
❶	Continuous Alarm Address	Uncheck this selection and the Read address will be disabled. According to the alarm type (Bit or Word), each alarm address can be triggered individually.
❷	Category	It represents the alarm category, which is similar to alarm group. The supported group range is between 1 and 255.
❸	Type	The type can be Bit or Word. Bit: Define the Bit address for triggering alarms Word: Define the Word address for triggering alarms
❹	Address	The triggering method is determined by its type, Bit or Word. When the type is Bit, please enter the Bit address to trigger the alarm. When the type is Word, the alarm can be triggered according to the conditional statement.

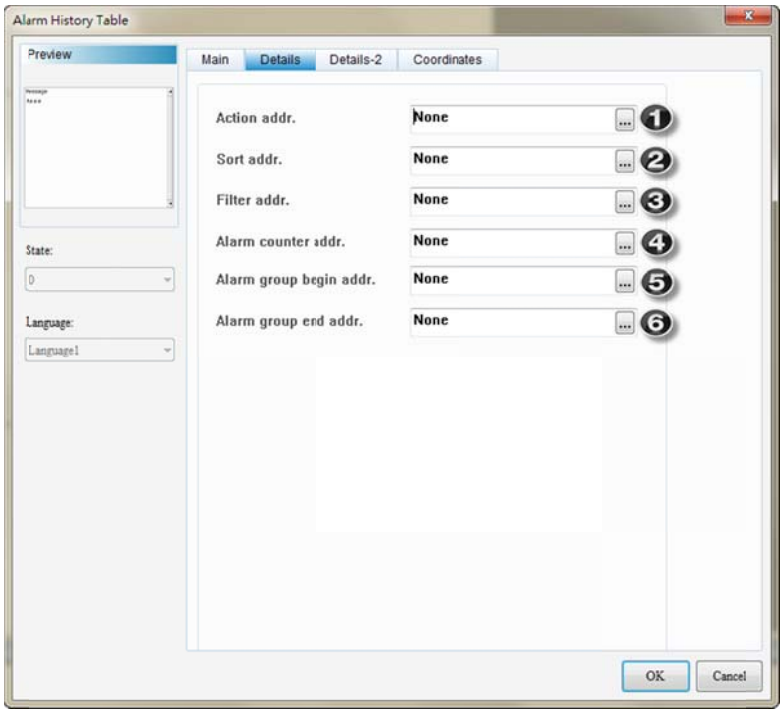
Conditional	Descriptions
=	equal to
>	greater than
<	less than
>=	greater than or equal to
<=	less than or equal to

Number	Name	Descriptions			
			>,<	out of the range	
			<=,<=	within the range	
❺	Monitoring Address	It is used to display alarm messages set by users. Add “%d1” after the alarm content you entered and when the value of monitoring address is 10, the alarm information shown in Alarm History Table will be Alarm10.			
❻	Alarm Screen Display	When it sets to Automatic: When the alarm is triggered, the alarm screen will immediately pop up. When it sets to Manual: The display of alarm screen is controlled by setting the Action address to 2.			

We have two pages in Alarm History Table, Details and Details-2.

- Details

  The control address provided in Details page allows users to arrange and select the alarm according to the set items.

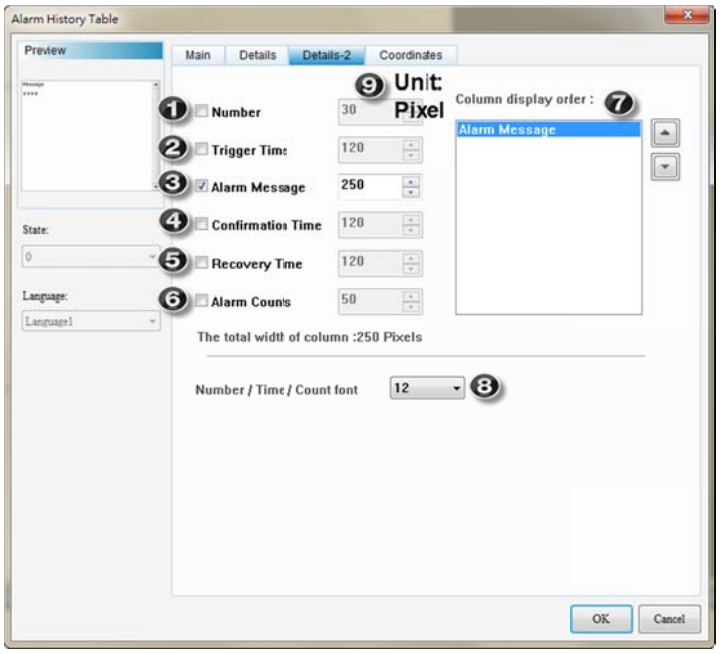


<table>
<tr><th>No.</th><th>Name</th><th>Descriptions</th></tr>
<tr><td>❶</td><td>Action address</td><td>Action address allows the specified alarm can be displayed and acknowledged.
<table>
<tr><th>Value</th><th>Descriptions</th></tr>
<tr><td>0</td><td>Default status. No action will be done.</td></tr>
<tr><td>1</td><td>Acknowledge the selected alarm in Alarm History Table.</td></tr>
<tr><td>2</td><td>If the selected alarm has alarm screen and the screen display is set to Manual, when the value is 2, it will display the alarm screen.</td></tr>
</table></td></tr>
<tr><td>❷</td><td>Sort address</td><td>The sort address will arrange and display the item specified by users.
<table>
<tr><th>Value</th><th>Descriptions</th></tr>
<tr><td>0</td><td>Default status. No action will be done.</td></tr>
<tr><td>1</td><td>Arrange the item according to the Trigger Time</td></tr>
<tr><td>2</td><td>Arrange the item according to the Acknowledge Time</td></tr>
<tr><td>3</td><td>Arrange the item according to the Recovery Time</td></tr>
<tr><td>4</td><td>Arrange the item according to the alarm counts</td></tr>
<tr><td>5</td><td>Arrange the item according to the alarm type</td></tr>
<tr><td>6</td><td>Arrange the item according to the alarm number</td></tr>
</table></td></tr>
</table>

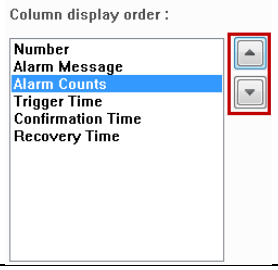
<table>
<tr><th>No.</th><th>Name</th><th>Descriptions</th></tr>
<tr><td>❸</td><td>Filter address</td><td>Filter address allows users to sift the specified items.
<table>
<tr><th>Value</th><th>Descriptions</th></tr>
<tr><td>0</td><td>Default status. It displays all triggered alarms.</td></tr>
<tr><td>1</td><td>Hide the alarm with the function of [Recovery Time] and [Confirmation Time].</td></tr>
<tr><td>2</td><td>Hide the alarm with the function of [Recovery Time].</td></tr>
<tr><td>3</td><td>Hide the alarm with the function of [Recovery Time] or [Confirmation Time].</td></tr>
<tr><td></td><td>Hide the alarm with the function of [Confirmation Time].</td></tr>
<tr><td>5</td><td>It has to work with [Alarm Counter Address].
The displayed Alarm count is generated in accordance with the value of [Alarm Counter Address]. If the displayed alarm count is smaller than this value, then it will not show this alarm.</td></tr>
<tr><td>6</td><td>It has to work with [Alarm group begin address] and [Alarm group end address].
When the alarm number is not within the range set by these two addresses, then the alarm will not be displayed.</td></tr>
</table></td></tr>
<tr><td>❹</td><td>Alarm Counter address</td><td>It has to work with [Filter address].
Only when the value of [Filter address] is 5, can the user enter the number of Alarm count.
<table>
<tr><th>Example</th><th>Behavior</th></tr>
<tr><td>The Alarm count is 1, 2 or 3.</td><td>Enter 1 and the Alarm History Table will display the alarm which alarm count is more than 1; Enter 2 and the Alarm History Table will display the alarm which alarm count is more than 2; Enter 3, the Alarm History Table will display the alarm which alarm count is more than 3.</td></tr>
</table></td></tr>
<tr><td>❺</td><td>Alarm group begin address</td><td rowspan="2">It has to work with [Filter address].
Only when the value of [Filter address] is 5, can the user enter the alarm type number.
<table>
<tr><th>Example</th><th>Behavior</th></tr>
<tr><td>The number of alarm type is 1 and 5</td><td>Set [Alarm group begin address] to 1 and [Alarm group end address] to 3, the Alarm History Table will only display the alarms that belong to type 1.
Set [Alarm group begin address] to 1 and [Alarm group end address] to 5, the Alarm History Table will display the alarms that belong to type 1 and 5.</td></tr>
</table></td></tr>
<tr><td>❻</td><td>Alarm group end address</td></tr>
</table>

- Details-2

The page allows users to check the display information of Alarm History Table, arrange the column sequence and adjust the column width and font size.



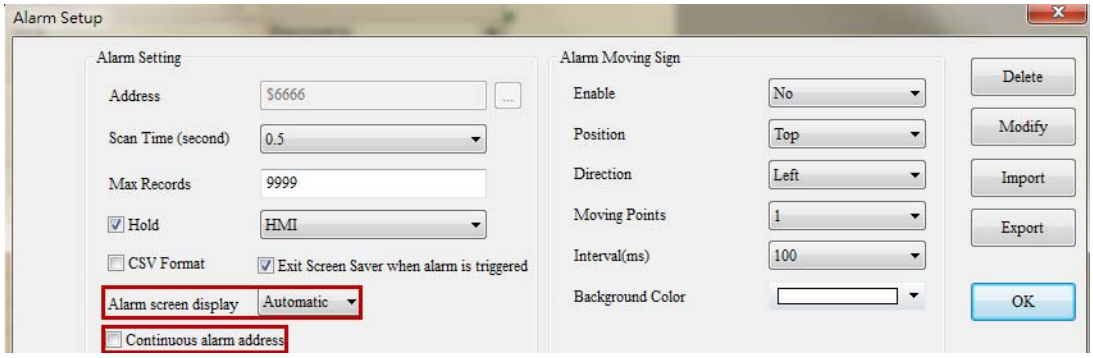
No.	Name	Descriptions
❶	Number	Check this item and the Alarm History Table will display the alarm number.
❷	Trigger Time	Check this item and the Alarm History Table will show the alarm triggering time. Note: Please select the time format and date format in [Main] page to display the trigger time.
❸	Alarm Message	Check this item to display the alarm message in Alarm History Table.
❹	Confirmation Time	Check this item and the Alarm History Table will show the Acknowledged alarm information. Note: Please select the time format and date format in [Main] page to display the confirmation time.
❺	Recovery Time	Check this item and the Alarm History Table will show the Recovery alarm information. Note: Please select the time format and date format in [Main] page to display the recovery time.
❻	Alarm Counts	Check this item and the Alarm History Table will display alarm triggering times.

No.	Name	Descriptions
❼	Column display order	Users can use the Up and Down button to arrange the displaying order. 
❽	Number / Time / Count font	Users can determine the displayed number, time and font size for alarm count.
❾	Column Width	Check the column that you desire to display and adjust the width. Its unit is Pixel.

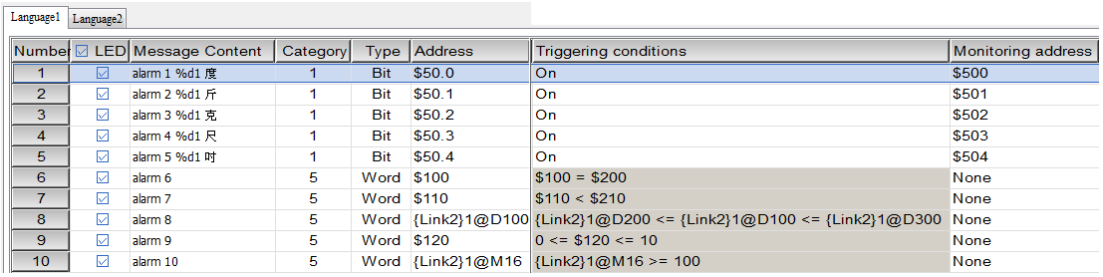
The function of Continuous alarm address is identical to the previous alarm setting. Thus, we take non-continuous alarm address as the example.

Step 1: Go to [Options] > [Alarm Setup] and see the parameters setting as below.

- Uncheck [Continuous alarm address].
- Select [Automatic] as Alarm screen display.



- Set up 10 alarms. Refer to the setting below:

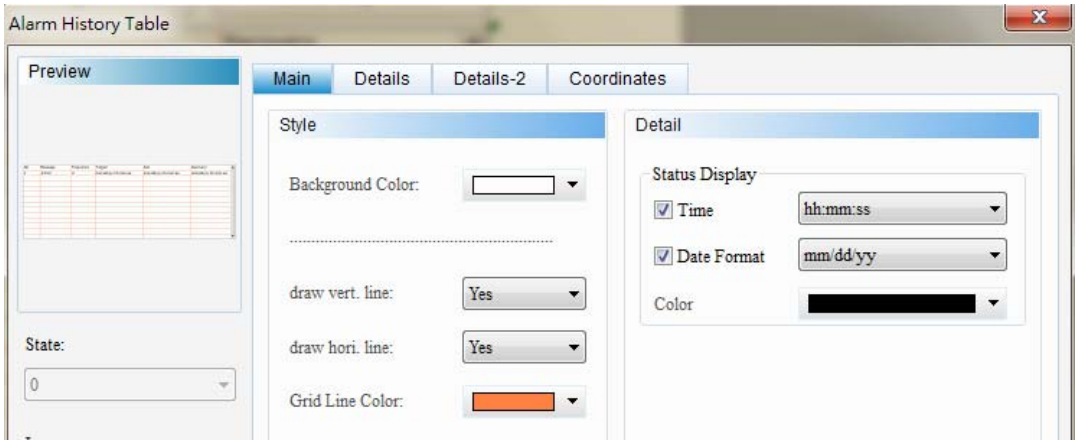


Language1 | Language2

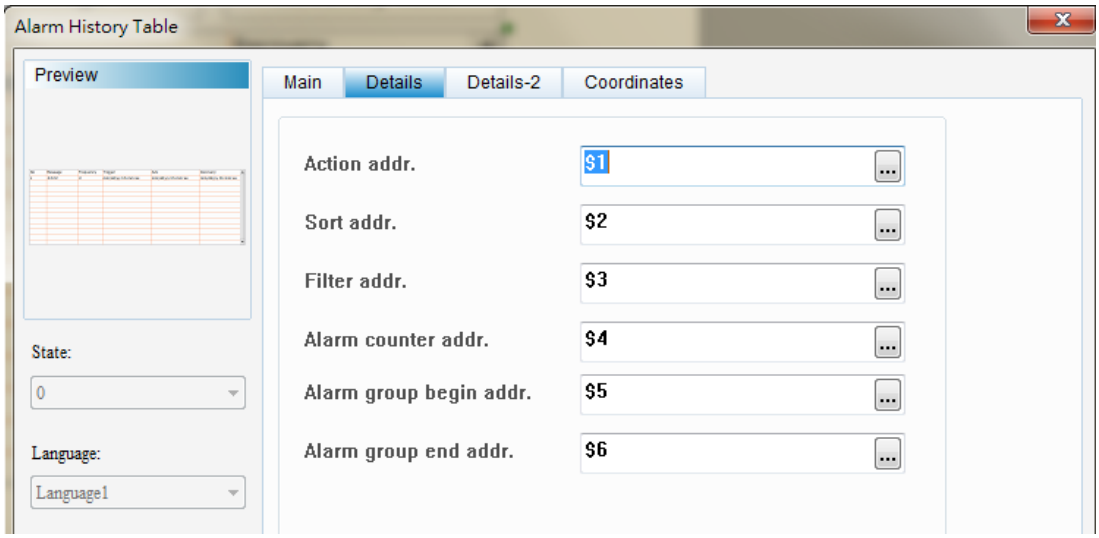
Number	LED	Message Content	Category	Type	Address	Triggering conditions	Monitoring address
1	☑	alarm 1 %d1 度	1	Bit	$50.0	On	$500
2	☑	alarm 2 %d1 斤	1	Bit	$50.1	On	$501
3	☑	alarm 3 %d1 克	1	Bit	$50.2	On	$502
4	☑	alarm 4 %d1 尺	1	Bit	$50.3	On	$503
5	☑	alarm 5 %d1 吋	1	Bit	$50.4	On	$504
6	☑	alarm 6	5	Word	$100	$100 = $200	None
7	☑	alarm 7	5	Word	$110	$110 < $210	None
8	☑	alarm 8	5	Word	{Link2}1@D100	{Link2}1@D200 <= {Link2}1@D100 <= {Link2}1@D300	None
9	☑	alarm 9	5	Word	$120	0 <= $120 <= 10	None
10	☑	alarm 10	5	Word	{Link2}1@M16	{Link2}1@M16 >= 100	None

Step 2: Create an Alarm History Table

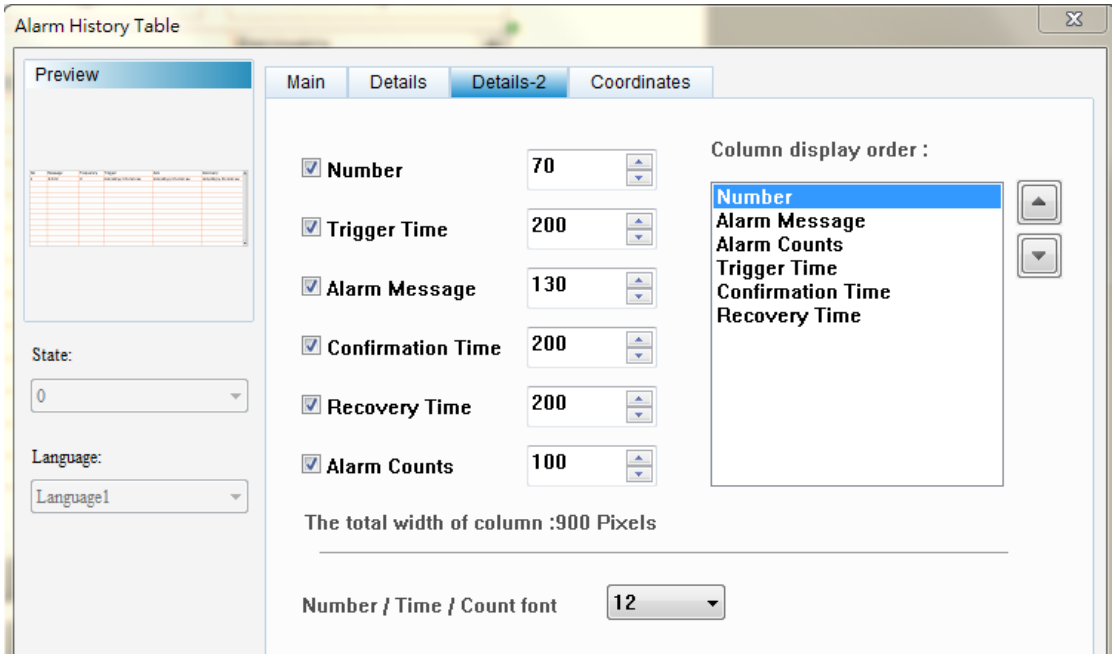
- See the general setting of Main page below:



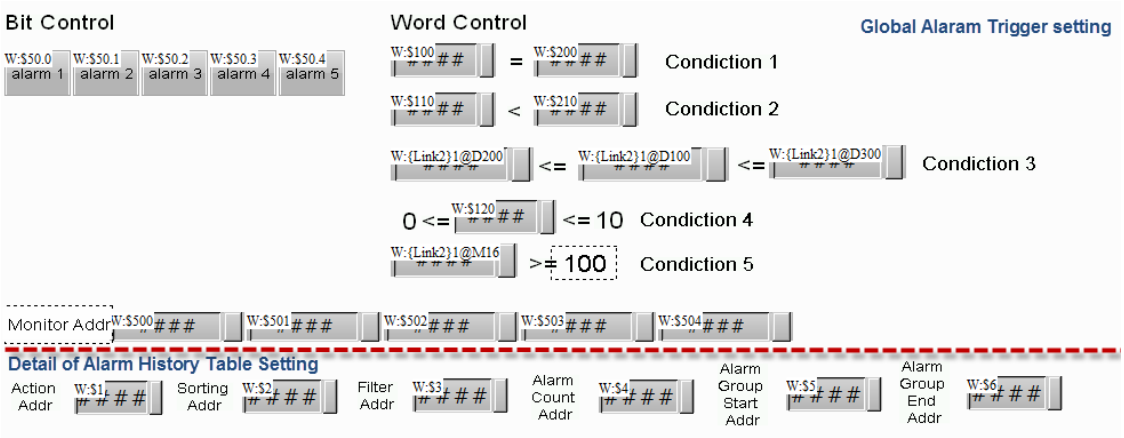
- See the setting of Details page below:



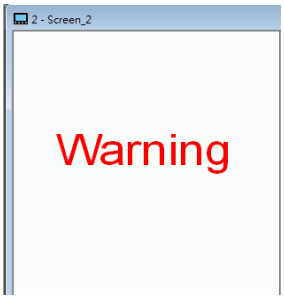
- See the setting of Details-2:



Step 3: Create the numeric entry element and maintained button of alarm setting and Alarm History Table.



Step 4: Create one alarm screen as the sub-screen. Then, go to [Options] > [Alarm Setup] to set the screen of alarm number 1 and number 6 as screen 2.



Language1 Language2

Number	LED	Message Content	Category	Type	Address	Triggering conditions	Monitoring address	Alarm screen
1	☑	alarm 1 %d1 度	1	Bit	$50.0	On	$500	2 - Screen_2
2	☑	alarm 2 %d1 斤	1	Bit	$50.1	On	$501	None
3	☑	alarm 3 %d1 克	1	Bit	$50.2	On	$502	None
4	☑	alarm 4 %d1 尺	1	Bit	$50.3	On	$503	None
5	☑	alarm 5 %d1 吋	1	Bit	$50.4	On	$504	None
6	☑	alarm 6	5	Word	$100	$100 = $200	None	2 - Screen_2
7	☑	alarm 7	5	Word	$110	$110 < $210	None	None
8	☑	alarm 8	5	Word	{Link2}1@D100	{Link2}1@D200 <= {Link2}1@D100 <= {Link2}1@D300	None	None
9	☑	alarm 9	5	Word	$120	0 <= $120 <= 10	None	None
10	☑	alarm 10	5	Word	{Link2}1@M16	{Link2}1@M16 >= 100	None	None

Step 5: Please go to [Initial Macro] to write the command, which is shown as below. When the HMI screen is opened, alarm 6 ~ 10 is on.

6	☑	alarm 6	5	Word	$100	$100 = $200
7	☑	alarm 7	5	Word	$110	$110 < $210
8	☑	alarm 8	5	Word	{Link2}1@D100	{Link2}1@D200 <= {Link2}1@D100 <= {Link2}1@D300
9	☑	alarm 9	5	Word	$120	0 <= $120 <= 10
10	☑	alarm 10	5	Word	{Link2}1@M16	{Link2}1@M16 >= 100

*[&Initial Macro]

*[&Initial Macro]

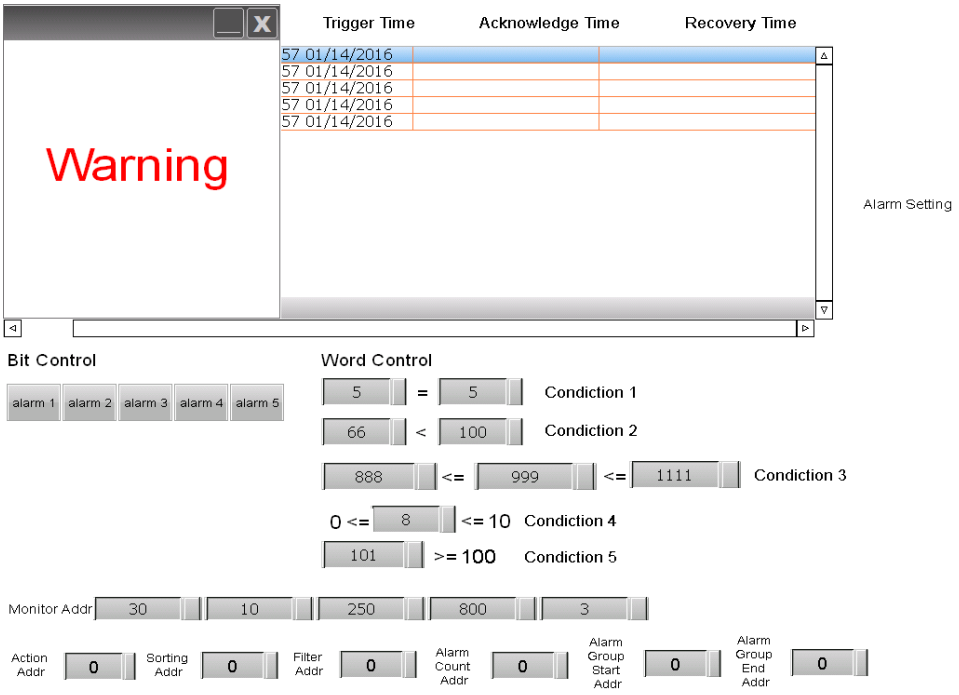
```
#Word Control
#Condiction1 $100 = $200
$100 = 5
$200 = 5
#Word Control
#Condiction2 $110 < $210
$110 = 66
$210 = 100
#Word Control
#Condiction3 {Link2}1@D200 <= {Link2}1@D100 <= {Link2}1@D300
{Link2}1@D200 = 888
{Link2}1@D100 = 999
{Link2}1@D300 = 1111
#Word Control
#Condiction4 0 <= $120 <= 10
$120 = 8
#Word Control
#Condiction5 {Link2}1@M16 >= 100
{Link2}1@M16 = 101

#Monitoring Address
$500 = 30
$501 = 10
$502 = 250
$503 = 800
$504 = 3
```

Step 6: Please compile and download all screens to the HMI.

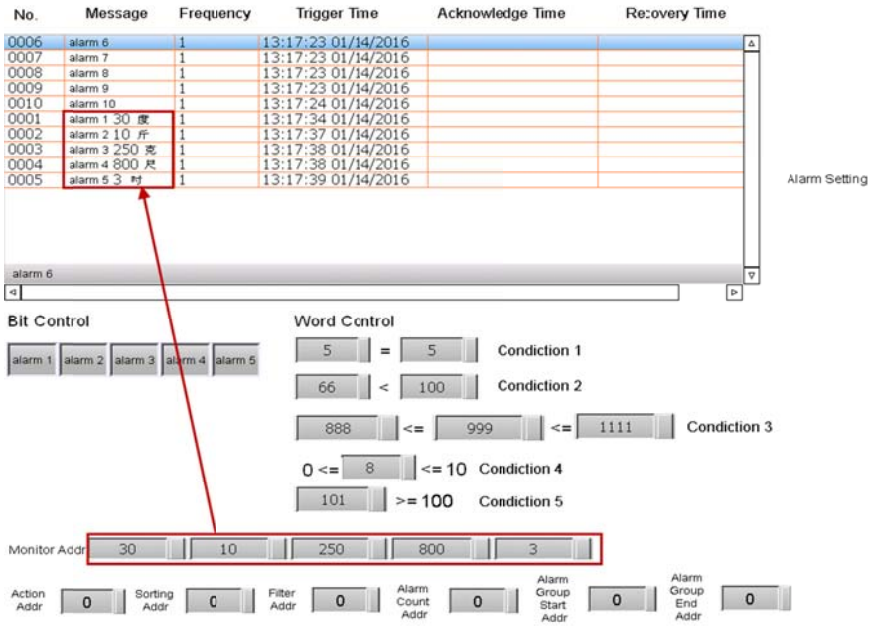
Step 7: After enabling the HMI screen, see the functions below:

- Alarm screen display
  - In this example, [Alarm screen display] is set to [Automatic]. When the condition of alarm 6 is established, the alarm is On and the alarm screen shows automatically.
  - If [Alarm screen display] is set to [Manual], you need to set [Action Address] to 2 to display the alarm screen.

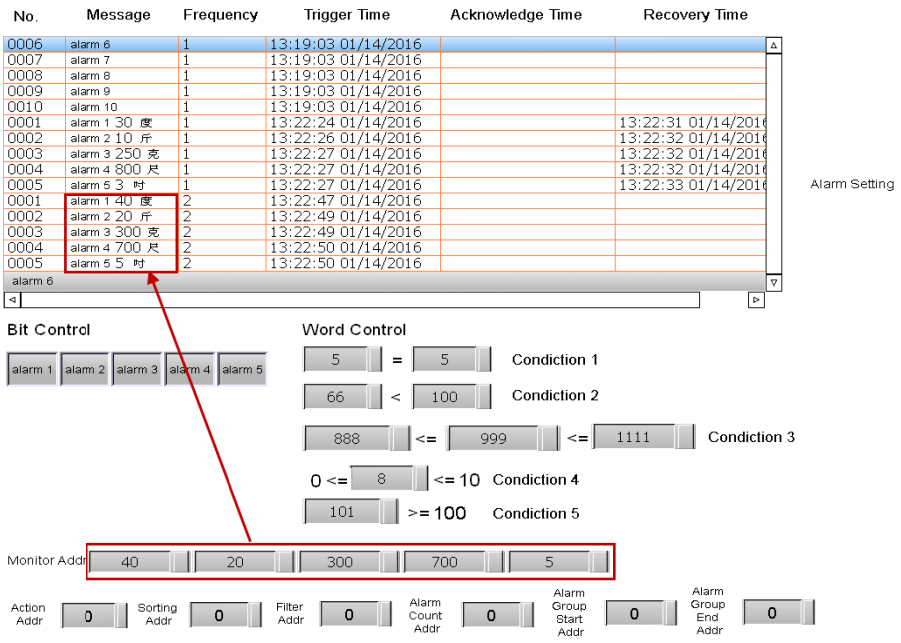


  - Please close the alarm screen.

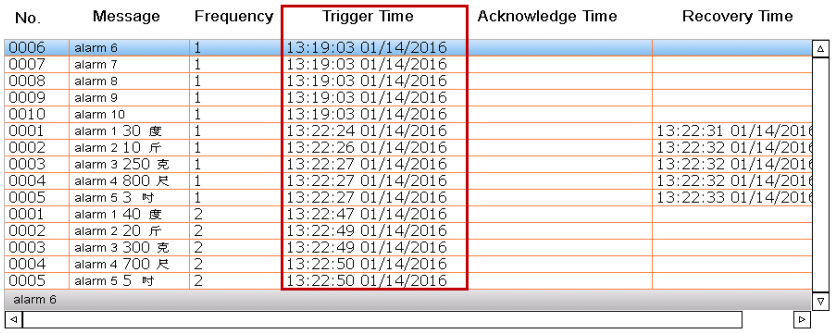
- Trigger alarm 1 ~ 5 by Bit Control
  - Bit address triggers alarm 1 to 5. The Alarm History Table displays the alarm message set by users.



  - If you change the value of [Monitoring address], please trigger alarm 1 to 5 again. The displayed alarm message will be changed in accordance with the value.



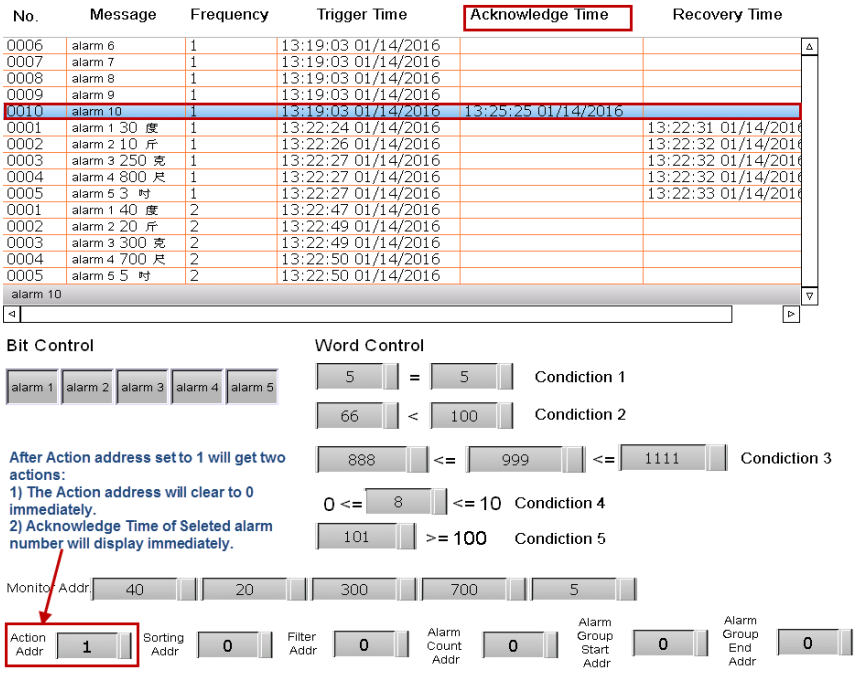
- Trigger Time
  - When the condition of triggering the alarm by Bit address or Word address is established, the Alarm History Table will display the time and date that alarm has been triggered.



No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016		
0007	alarm 7	1	13:19:03 01/14/2016		
0008	alarm 8	1	13:19:03 01/14/2016		
0009	alarm 9	1	13:19:03 01/14/2016		
0010	alarm 10	1	13:19:03 01/14/2016		
0001	alarm 1 30 度	1	13:22:24 01/14/2016		13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016		13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016		13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016		13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016		13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016		
0002	alarm 2 20 斤	2	13:22:49 01/14/2016		
0003	alarm 3 300 克	2	13:22:49 01/14/2016		
0004	alarm 4 700 尺	2	13:22:50 01/14/2016		
0005	alarm 5 5 吋	2	13:22:50 01/14/2016		

alarm 6

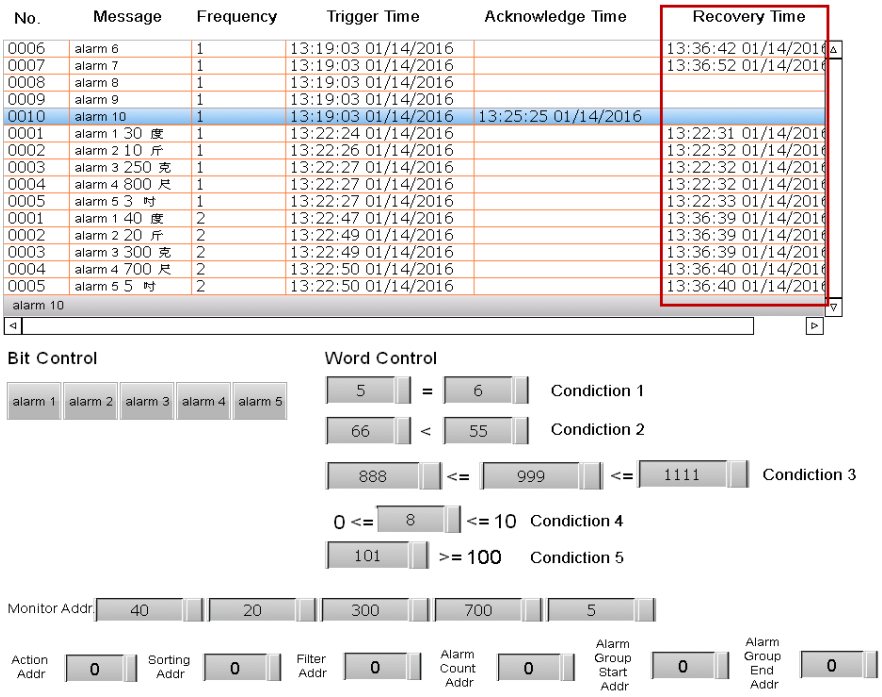
- Acknowledge Time
  - To display the Acknowledge Time, please set Action address to 1.



No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016		
0007	alarm 7	1	13:19:03 01/14/2016		
0008	alarm 8	1	13:19:03 01/14/2016		
0009	alarm 9	1	13:19:03 01/14/2016		
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016		13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016		13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016		13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016		13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016		13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016		
0002	alarm 2 20 斤	2	13:22:49 01/14/2016		
0003	alarm 3 300 克	2	13:22:49 01/14/2016		
0004	alarm 4 700 尺	2	13:22:50 01/14/2016		
0005	alarm 5 5 吋	2	13:22:50 01/14/2016		

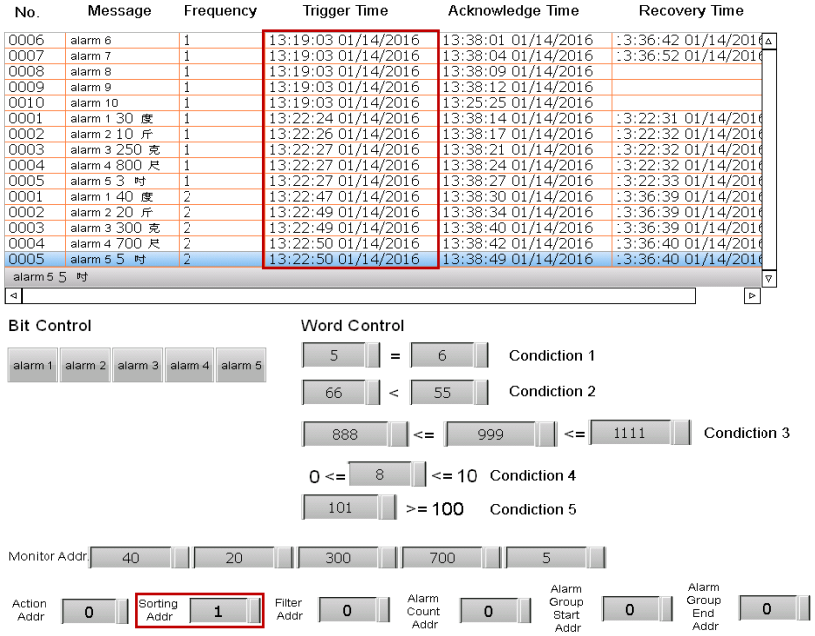
alarm 10

- Recovery Time
  - If the condition of triggering the alarm by Bit address or Word address is not established (such as Condition1 and Condition 2, see the figure below), then the Alarm History Table will display the Recovery Time.



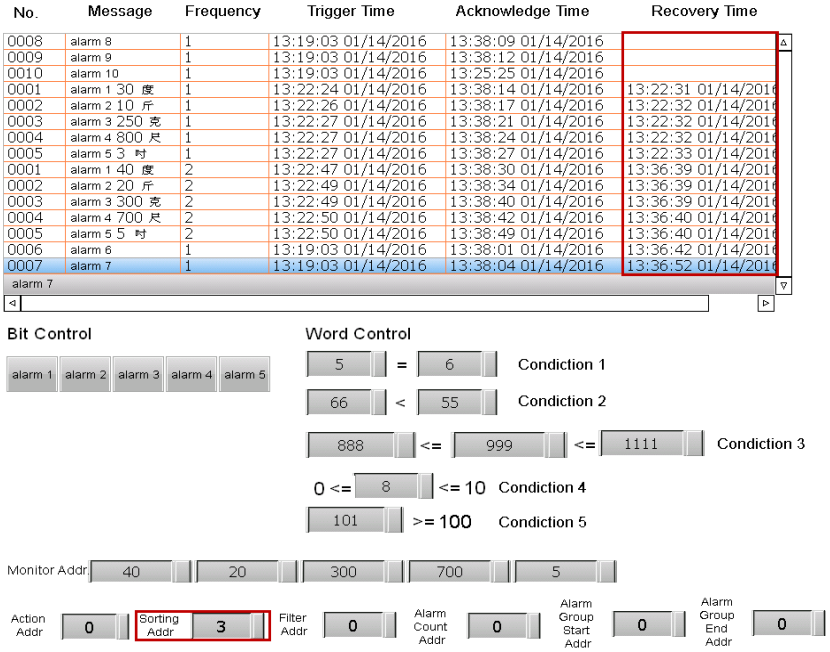
- Action Address
  - When Action Address is set to 0, the Alarm History Table has no action.
  - When Action Address is set to 1, it will display the Acknowledge Time. (We've already introduced Acknowledge Time before)
  - When Action Address is set to 2 and [Alarm screen display] is set to [Manual], the system will display the alarm screen. (We've already introduced Alarm Screen before)

- Sort Address
  - When the value of Sort Address is 0, the Alarm History Table will not do any sorting.
  - When the value of Sort Address is 1, the alarm will be displayed according to the [Trigger Time].

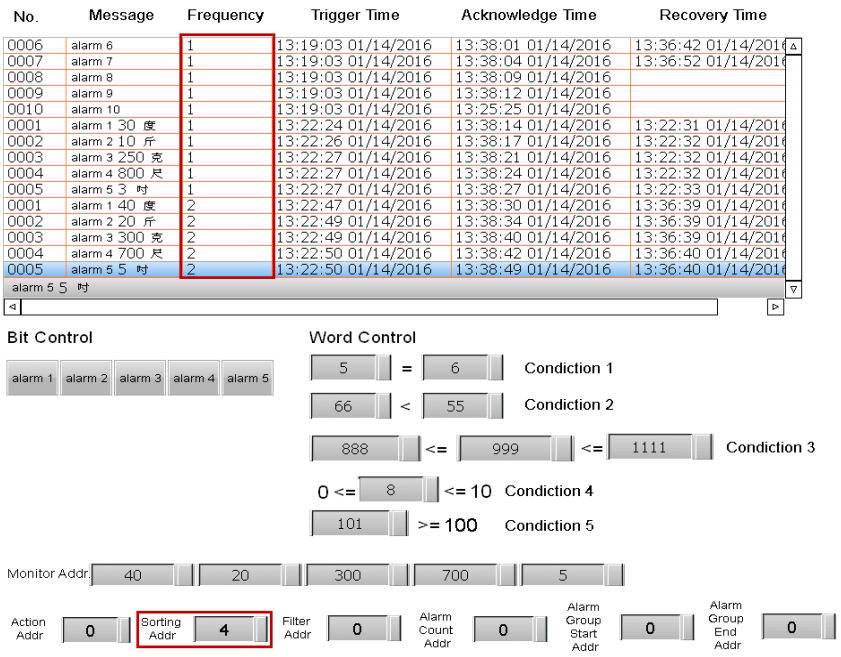


  - When the value of Sort Address is 2, the alarm will be displayed according to the [Acknowledge Time].

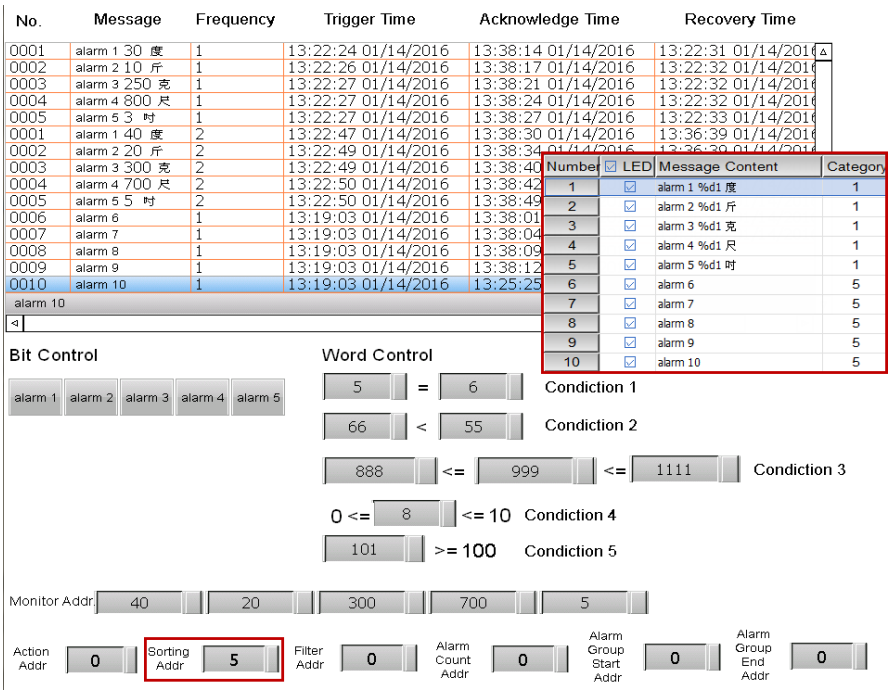
- When the value of Sort Address is 3, the alarm will be displayed according to the [Recovery Time].
- Since alarm No. 8 to 10 have not been cleared, these three will not be listed in Recovery Time.



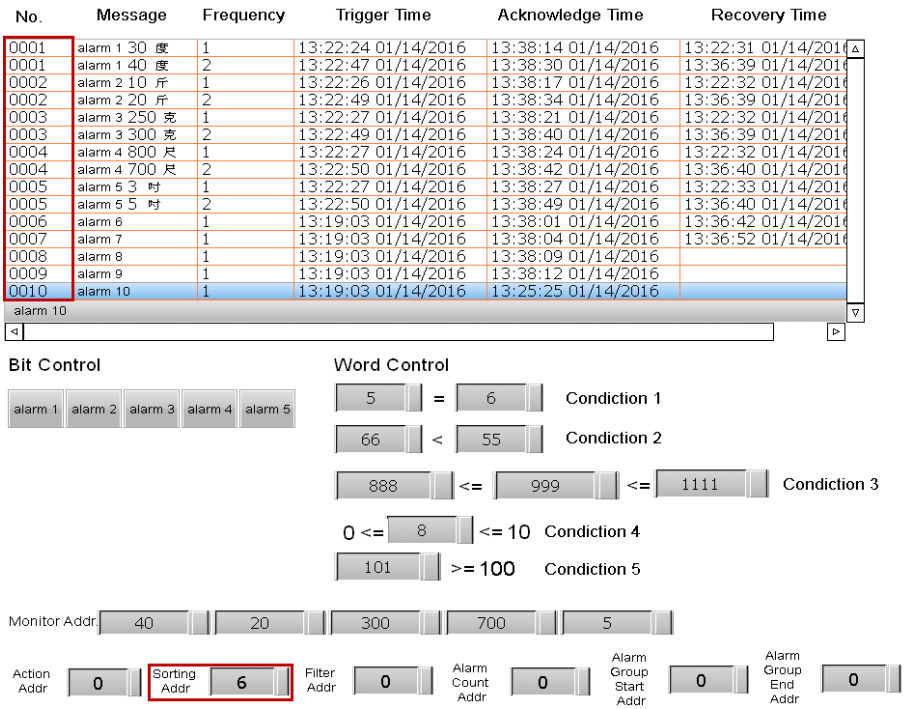
- When the value of Sort Address is 4, the alarm will be displayed in ascending order (from least to greatest) according to the [Frequency].



- When the value of Sort Address is 5, the alarm will be displayed in ascending order (from least to greatest) according to the [Category].



- When the value of Sort Address is 6, the alarm will be displayed in ascending order (from least to greatest) according to the [No.]



- Filter Address
  - When the value of Filter Address is 0, the Alarm History Table will display all alarms that had been triggered.
  - When the value of Filter Address is 1, the Alarm History Table will hide the alarms that have set with the function of [Recovery Time] and [Acknowledge Time].

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	

- When the value of Filter Address is 2, the Alarm History Table will hide the alarms that have set with the function of [Recovery Time].

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

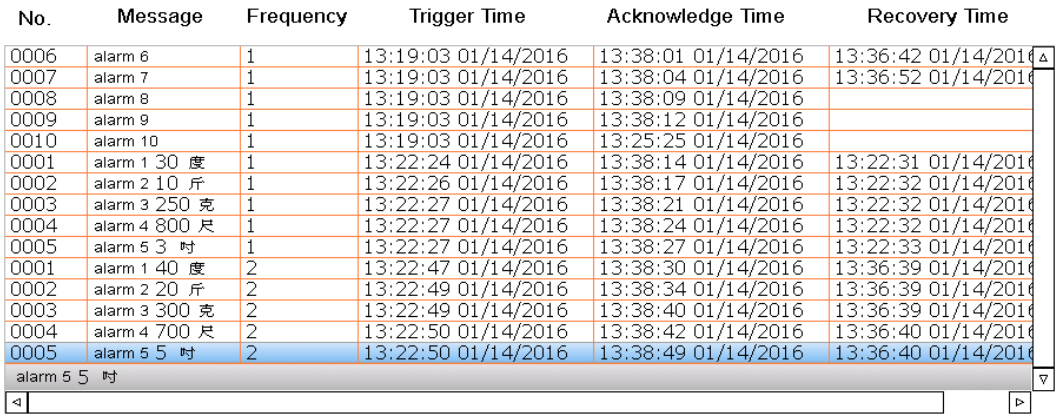
alarm 5 5 吋

After

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	

- When the value of Filter Address is 3, the Alarm History Table will hide the alarms that have set with the function of [Recovery Time] or [Acknowledge Time].

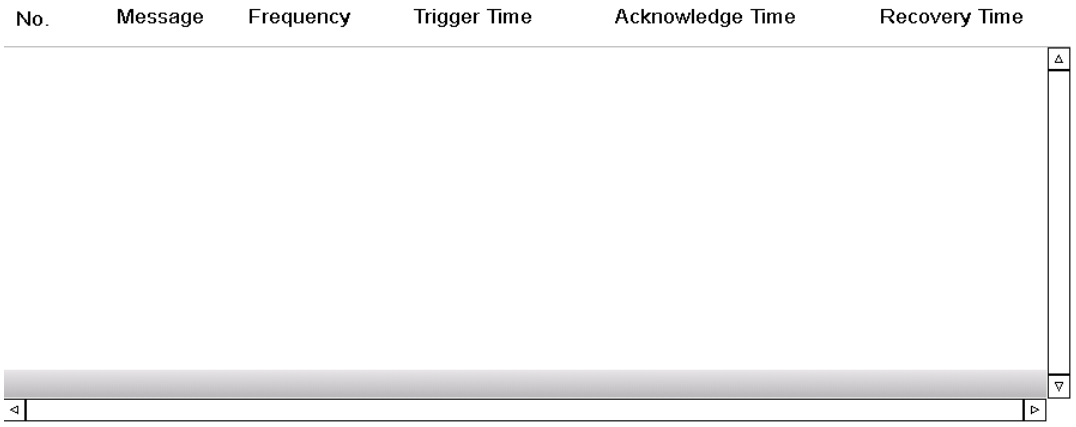
Before



No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After



No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time

- When the value of Filter Address is 4, the Alarm History Table will hide the alarms that have set with the function of [Acknowledge Time].

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time

- When the value of Filter Address is 5, please set [Alarm count address] to 1.

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After

The Alarm History Table will hide the alarms which frequency are less than 1.
Since the example below has no alarm that frequency is less than 1, all alarms will be displayed.

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

- When the value of Filter Address is 5, please set [Alarm count address] to 2.

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After

The Alarm History Table will hide the alarms which frequency are less than 2.

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

- When the value of Filter Address is 6, please set [Alarm group begin address] to 1 and [Alarm group end address] to 3.

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After

If the alarm number is not within the setting range of [Alarm group begin address] and [Alarm group end address], the alarm will not be displayed.

Number	LED	Message Content	Category
1	☑	alarm 1 %d1 度	1
2	☑	alarm 2 %d1 斤	1
3	☑	alarm 3 %d1 克	1
4	☑	alarm 4 %d1 尺	1
5	☑	alarm 5 %d1 吋	1
6	☑	alarm 6	5
7	☑	alarm 7	5
8	☑	alarm 8	5
9	☑	alarm 9	5
10	☑	alarm 10	5

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

- When the value of Filter Address is 6, please set [Alarm group begin address] to 3 and [Alarm group end address] to 5.

Before

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	
0001	alarm 1 30 度	1	13:22:24 01/14/2016	13:38:14 01/14/2016	13:22:31 01/14/2016
0002	alarm 2 10 斤	1	13:22:26 01/14/2016	13:38:17 01/14/2016	13:22:32 01/14/2016
0003	alarm 3 250 克	1	13:22:27 01/14/2016	13:38:21 01/14/2016	13:22:32 01/14/2016
0004	alarm 4 800 尺	1	13:22:27 01/14/2016	13:38:24 01/14/2016	13:22:32 01/14/2016
0005	alarm 5 3 吋	1	13:22:27 01/14/2016	13:38:27 01/14/2016	13:22:33 01/14/2016
0001	alarm 1 40 度	2	13:22:47 01/14/2016	13:38:30 01/14/2016	13:36:39 01/14/2016
0002	alarm 2 20 斤	2	13:22:49 01/14/2016	13:38:34 01/14/2016	13:36:39 01/14/2016
0003	alarm 3 300 克	2	13:22:49 01/14/2016	13:38:40 01/14/2016	13:36:39 01/14/2016
0004	alarm 4 700 尺	2	13:22:50 01/14/2016	13:38:42 01/14/2016	13:36:40 01/14/2016
0005	alarm 5 5 吋	2	13:22:50 01/14/2016	13:38:49 01/14/2016	13:36:40 01/14/2016

alarm 5 5 吋

After

If the alarm number is not within the setting range of [Alarm group begin address] and [Alarm group end address], the alarm will not be displayed.

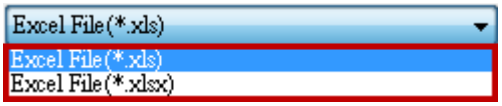
Number	LED	Message Content	Category
1	☑	alarm 1 %d1 度	1
2	☑	alarm 2 %d1 斤	1
3	☑	alarm 3 %d1 克	1
4	☑	alarm 4 %d1 尺	1
5	☑	alarm 5 %d1 吋	1
6	☑	alarm 6	5
7	☑	alarm 7	5
8	☑	alarm 8	5
9	☑	alarm 9	5
10	☑	alarm 10	5

No.	Message	Frequency	Trigger Time	Acknowledge Time	Recovery Time
0006	alarm 6	1	13:19:03 01/14/2016	13:38:01 01/14/2016	13:36:42 01/14/2016
0007	alarm 7	1	13:19:03 01/14/2016	13:38:04 01/14/2016	13:36:52 01/14/2016
0008	alarm 8	1	13:19:03 01/14/2016	13:38:09 01/14/2016	
0009	alarm 9	1	13:19:03 01/14/2016	13:38:12 01/14/2016	
0010	alarm 10	1	13:19:03 01/14/2016	13:25:25 01/14/2016	

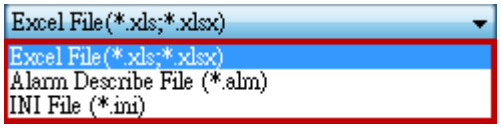
3.3 The alarm export and import file format now supports Excel

The previous supported format does not allow users to edit the file. DOPSoft 2.00.05 provides Excel file format so that users can edit the alarm information.

Export file format only supports Excel file format, such as “.xls” and “.xlsx”.

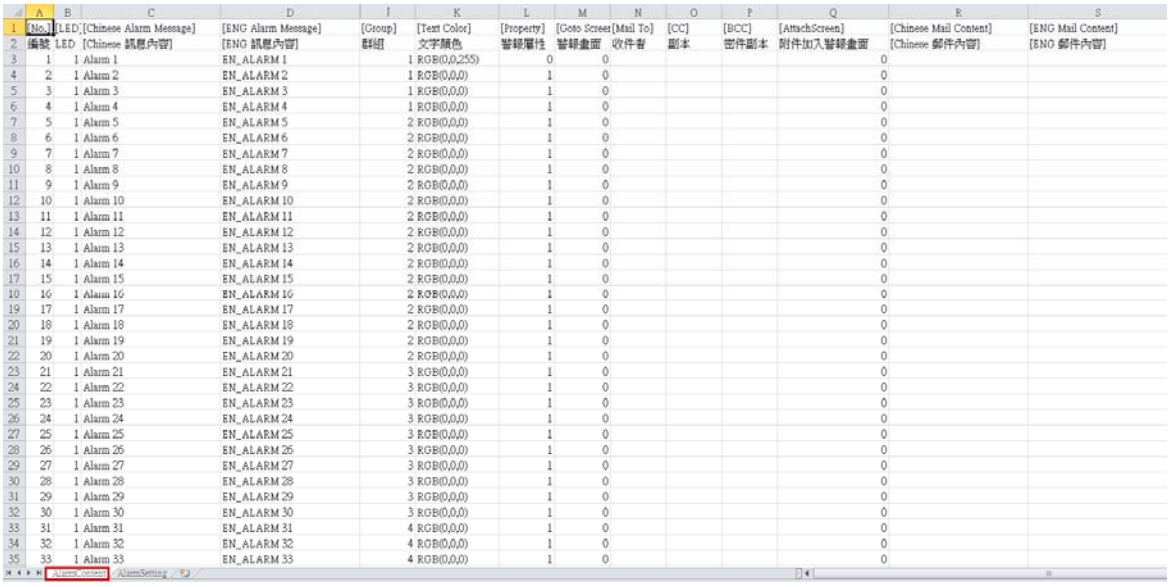


As for the import file format, it supports “.ini”, “.alm” and “Excel” file format.



Below shows the Excel file exported by DOP-B series HMI.

- Alarm Content



	A	B	C	D	I	K	L	M	N	O	P	Q	R	S
1	[No.]	[LED]	[Chinese Alarm Message]	[ENG Alarm Message]	[Group]	[Text Color]	[Property]	[Goto Screen]	[Mail To]	[CC]	[BCC]	[AttachScreen]	[Chinese Mail Content]	[ENG Mail Content]
2	編號	LED	[Chinese 訊息內容]	[ENG 訊息內容]	群組	文字顏色	警報屬性	警報畫面	收件者	副本	密件副本	附件加入警報畫面	[Chinese 郵件內容]	[ENG 郵件內容]
3	1	1	Alarm 1	EN_ALARM 1		1 RGB(0,0,255)	0	0				0		
4	2	1	Alarm 2	EN_ALARM 2		1 RGB(0,0,0)	1	0				0		
5	3	1	Alarm 3	EN_ALARM 3		1 RGB(0,0,0)	1	0				0		
6	4	1	Alarm 4	EN_ALARM 4		1 RGB(0,0,0)	1	0				0		
7	5	1	Alarm 5	EN_ALARM 5		2 RGB(0,0,0)	1	0				0		
8	6	1	Alarm 6	EN_ALARM 6		2 RGB(0,0,0)	1	0				0		
9	7	1	Alarm 7	EN_ALARM 7		2 RGB(0,0,0)	1	0				0		
10	8	1	Alarm 8	EN_ALARM 8		2 RGB(0,0,0)	1	0				0		
11	9	1	Alarm 9	EN_ALARM 9		2 RGB(0,0,0)	1	0				0		
12	10	1	Alarm 10	EN_ALARM 10		2 RGB(0,0,0)	1	0				0		
13	11	1	Alarm 11	EN_ALARM 11		2 RGB(0,0,0)	1	0				0		
14	12	1	Alarm 12	EN_ALARM 12		2 RGB(0,0,0)	1	0				0		
15	13	1	Alarm 13	EN_ALARM 13		2 RGB(0,0,0)	1	0				0		
16	14	1	Alarm 14	EN_ALARM 14		2 RGB(0,0,0)	1	0				0		
17	15	1	Alarm 15	EN_ALARM 15		2 RGB(0,0,0)	1	0				0		
18	16	1	Alarm 16	EN_ALARM 16		2 RGB(0,0,0)	1	0				0		
19	17	1	Alarm 17	EN_ALARM 17		2 RGB(0,0,0)	1	0				0		
20	18	1	Alarm 18	EN_ALARM 18		2 RGB(0,0,0)	1	0				0		
21	19	1	Alarm 19	EN_ALARM 19		2 RGB(0,0,0)	1	0				0		
22	20	1	Alarm 20	EN_ALARM 20		2 RGB(0,0,0)	1	0				0		
23	21	1	Alarm 21	EN_ALARM 21		3 RGB(0,0,0)	1	0				0		
24	22	1	Alarm 22	EN_ALARM 22		3 RGB(0,0,0)	1	0				0		
25	23	1	Alarm 23	EN_ALARM 23		3 RGB(0,0,0)	1	0				0		
26	24	1	Alarm 24	EN_ALARM 24		3 RGB(0,0,0)	1	0				0		
27	25	1	Alarm 25	EN_ALARM 25		3 RGB(0,0,0)	1	0				0		
28	26	1	Alarm 26	EN_ALARM 26		3 RGB(0,0,0)	1	0				0		
29	27	1	Alarm 27	EN_ALARM 27		3 RGB(0,0,0)	1	0				0		
30	28	1	Alarm 28	EN_ALARM 28		3 RGB(0,0,0)	1	0				0		
31	29	1	Alarm 29	EN_ALARM 29		3 RGB(0,0,0)	1	0				0		
32	30	1	Alarm 30	EN_ALARM 30		3 RGB(0,0,0)	1	0				0		
33	31	1	Alarm 31	EN_ALARM 31		4 RGB(0,0,0)	1	0				0		
34	32	1	Alarm 32	EN_ALARM 32		4 RGB(0,0,0)	1	0				0		
35	33	1	Alarm 33	EN_ALARM 33		4 RGB(0,0,0)	1	0				0		

- Alarm Setting

	A	B	C	D
1	[Language]	[Font]	[Size]	Ratio]
2		字型:	大小:	缩放:
3	Chinese	Arial	12	100
4	ENG	MV Boli	22	150
5				
6	Alarm Setting	警報設定		
7	Address	讀取位址	$6666	
8	Scan Time	取樣週期(秒)	0.500000	
9	Max Records	最多可存筆數	9999	
10	Hold	啟用斷電保持	1	
11	Hold Place	斷電保持於	2	
12	CSV	輸出CSV	1	
13	Exit Screen Saver	警報發生時離開螢幕保	1	
14				
15				
16				
17	Alarm Moving Sign	警報走馬燈		
18	Enable	啟動	1	
19	Position	視屏顯示位置	0	
20	Direction	移動方式	1	
21	Moving Points	每次移動點數	3	
22	Interval	間隔時間(毫秒)	1000	
23	BackgroundColor	背景顏色	RGB(255,255,128)	

AlarmContent AlarmSetting

Below shows the Excel file exported by DOP-W series HMI.

- Alarm Content

	A	B	C	D	E	H	I	K	M	N	O	P	Q	R	S
1	[No.]	[LED]	[Language1 Alarm Message]	[Language2 Alarm Message]	[Category]	[Trigger]	[Watch]	[Text Color]	[Goto Scree	[Mail To]	[CC]	[BCC]	[AttachScreen]	[Language1 Mail Content]	[Language2 Mail Content]
2	編號	LED	[Language1 訊息內容]	[Language2 訊息內容]	類別	觸發條件	監看位址	文字顏色	警報畫面	收件者	副本	密件副本	附件加入警報畫面	[Language1 郵件內容]	[Language2 郵件內容]
3	1		1 alarm 1 %d1 度			1 ON	$500	RGB(0,0,0)	2					0	
4	2		1 alarm 2 %d1 斤			1 ON	$501	RGB(0,0,0)	0					0	
5	3		1 alarm 3 %d1 克			1 ON	$502	RGB(0,0,0)	0					0	
6	4		1 alarm 4 %d1 尺			1 ON	$503	RGB(0,0,0)	0					0	
7	5		1 alarm 5 %d1 吋			1 ON	$504	RGB(0,0,0)	0					0	
8	6		1 alarm 6			5 $100 = $20(	None	RGB(0,0,0)	2					0	
9	7		1 alarm 7			5 $110 < $21(	None	RGB(0,0,0)	0					0	
10	8		1 alarm 8			5 (Link2)1 @1	None	RGB(0,0,0)	0					0	
11	9		1 alarm 9			5 0 <= $120 <	None	RGB(0,0,0)	0					0	
12	10		1 alarm 10			5 (Link2)1 @1	None	RGB(0,0,0)	0					0	
13	11		1			0 ON	None	RGB(0,0,0)	0					0	
14	12		1			0 ON	None	RGB(0,0,0)	0					0	
15	13		1			0 ON	None	RGB(0,0,0)	0					0	
16	14		1			0 ON	None	RGB(0,0,0)	0					0	
17	15		1			0 ON	None	RGB(0,0,0)	0					0	
18	16		1			0 ON	None	RGB(0,0,0)	0					0	
19	17		1			0 ON	None	RGB(0,0,0)	0					0	
20	18		1			0 ON	None	RGB(0,0,0)	0					0	
21	19		1			0 ON	None	RGB(0,0,0)	0					0	
22	20		1			0 ON	None	RGB(0,0,0)	0					0	
23	21		1			0 ON	None	RGB(0,0,0)	0					0	
24	22		1			0 ON	None	RGB(0,0,0)	0					0	
25	23		1			0 ON	None	RGB(0,0,0)	0					0	
26	24		1			0 ON	None	RGB(0,0,0)	0					0	
27	25		1			0 ON	None	RGB(0,0,0)	0					0	
28	26		1			0 ON	None	RGB(0,0,0)	0					0	
29	27		1			0 ON	None	RGB(0,0,0)	0					0	
30	28		1			0 ON	None	RGB(0,0,0)	0					0	
31	29		1			0 ON	None	RGB(0,0,0)	0					0	
32	30		1			0 ON	None	RGB(0,0,0)	0					0	
33	31		1			0 ON	None	RGB(0,0,0)	0					0	
34	32		1			0 ON	None	RGB(0,0,0)	0					0	
35	33		1			0 ON	None	RGB(0,0,0)	0					0	

AlarmContent AlarmSetting

- Alarm Setting

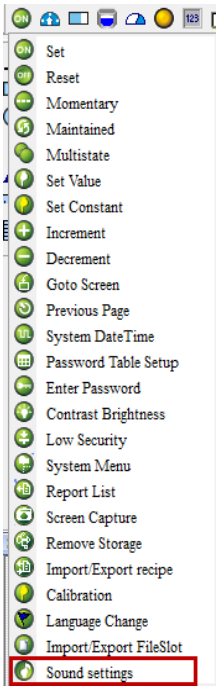
	A	B	C	D
1	[Language]	[Font]	[Size]	[Ratio]
2		字型:	大小:	縮放:
3	Language1	Arial	12	100
4	Language2	Arial	12	100
5				
6	Alarm Setting	警報設定		
7	Address	讀取位址	$6666	
8	Scan Time	取樣週期(秒)	0.500000	
9	Max Records	最多可存筆數	9999	
10	Hold	啟用斷電保持	1	
11	Hold Place	斷電保持於	0	
12	CSV	輸出CSV	0	
13	Exit Screen Saver	警報發生時離開螢幕保	1	
14	Screen Display Mode	警報畫面顯示	0	
15	Continue Address	警報位址連續	0	
16				
17	Alarm Moving Sign	警報走馬燈		
18	Enable	啟動	0	
19	Position	視屏顯示位置	0	
20	Direction	移動方式	0	
21	Moving Points	每次移動點數	1	
22	Interval	間隔時間(毫秒)	100	
23	BackgroundColor	背景顏色	RGB(252,252,252)	

AlarmContent AlarmSetting

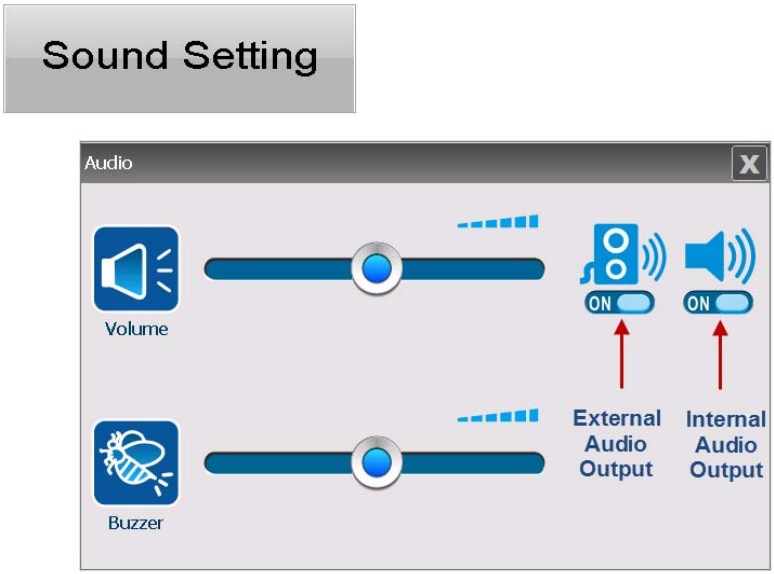
3.4 Button of Sound Setting is now available in DOP-W series HMI

DOP-W127B and DOP-157B series HMIs have built-in function of 1.5 watt audio output. This newly added function allows users to control the external and internal audio output switch respectively. Before that, users have to go to system directory to adjust the volume. Now, with the Sound Setting button, users can directly adjust the volume on the edit screen.

Right click on [Button] element and select [Sound settings]. Then, create this button by dragging it to the screen.



Then, users can direclty adjust the volume and control the switch of external and internal audio output on HMI screen.

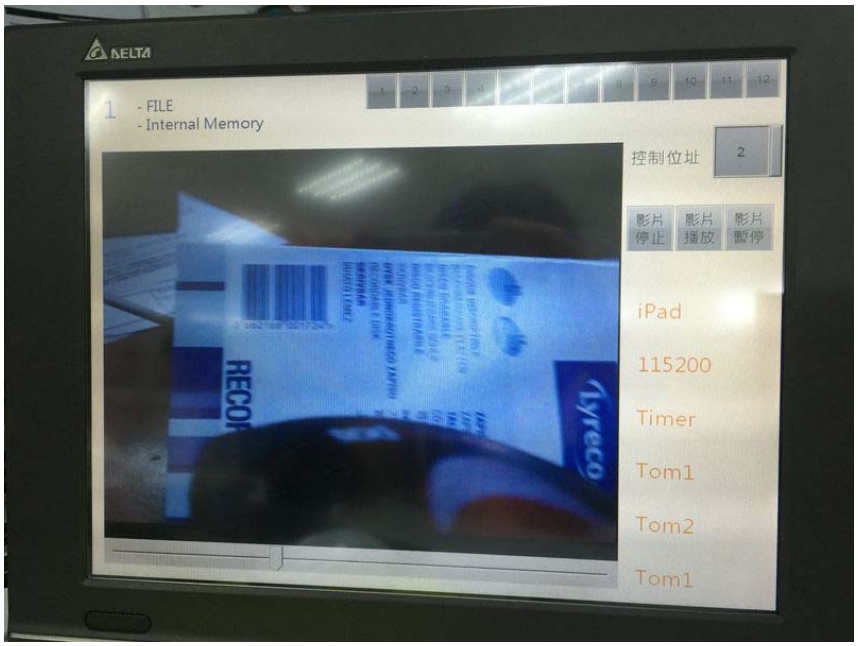


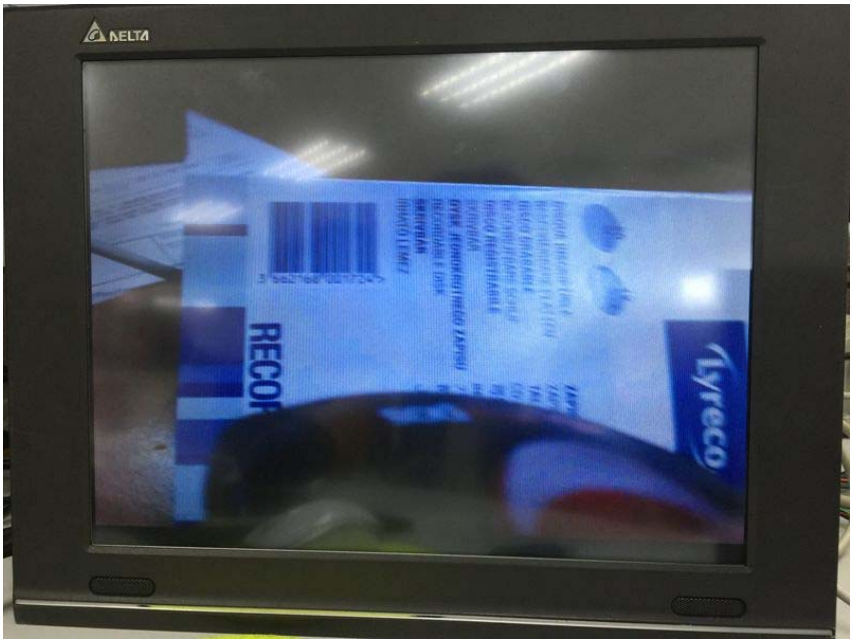
3.5 Full screen and Time slider control

DOP-W series HMI supports Full screen play and Time slider control now.

Full screen:

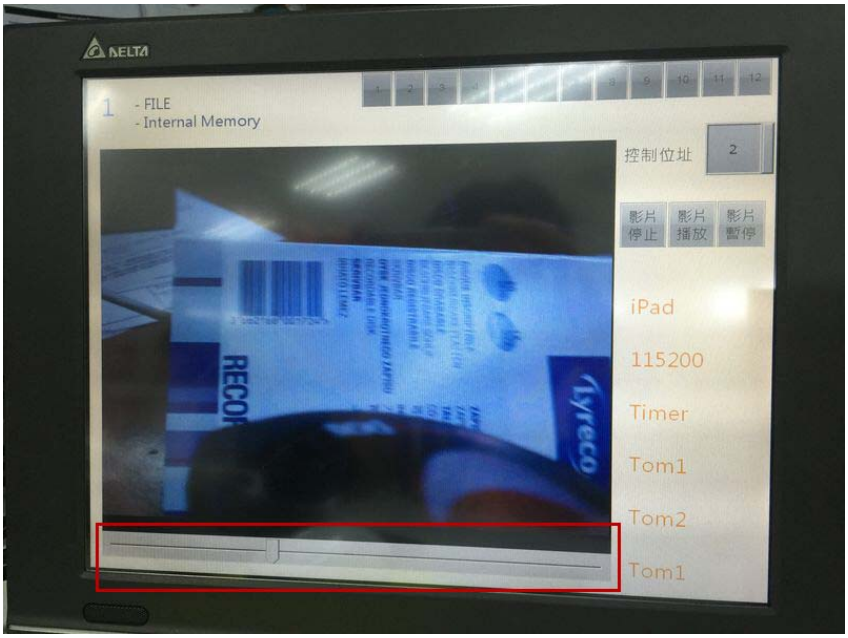
Users can play the video in full screen by touching the video element. Touch the element again to resume the video to the original size.





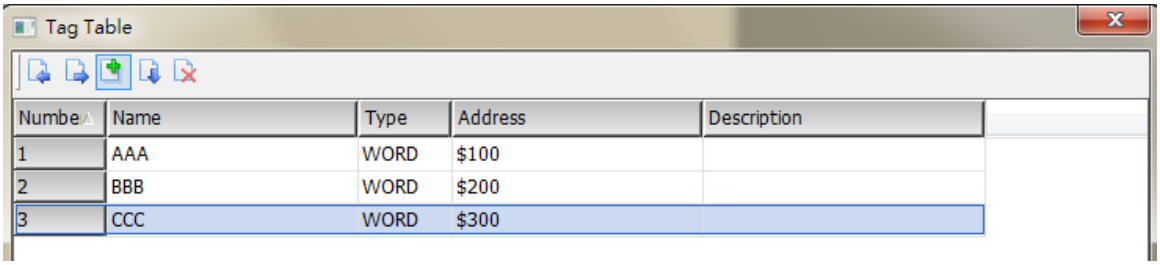
Time Slider Control:

This function is not supported when you play the video in full screen.

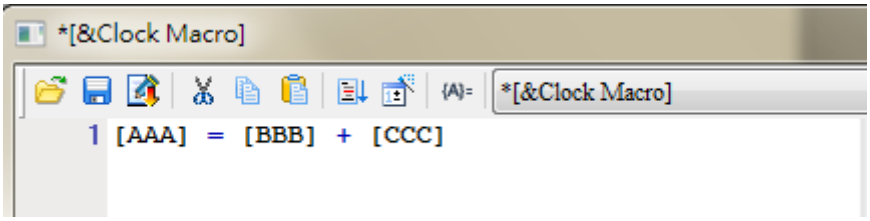


3.6 Tag function is now supported by element and macro

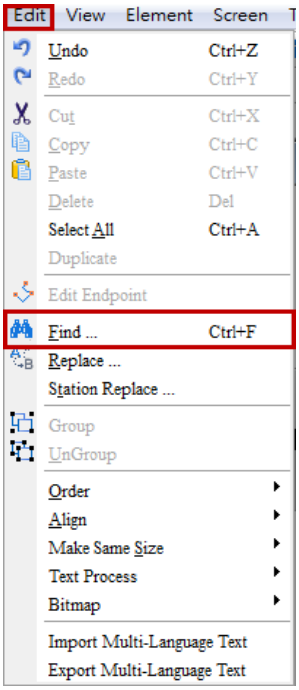
Step 1: Go to [Options] > [Tag Table] to add Tag.

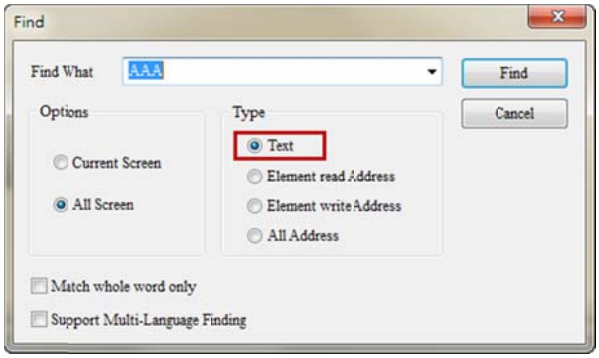


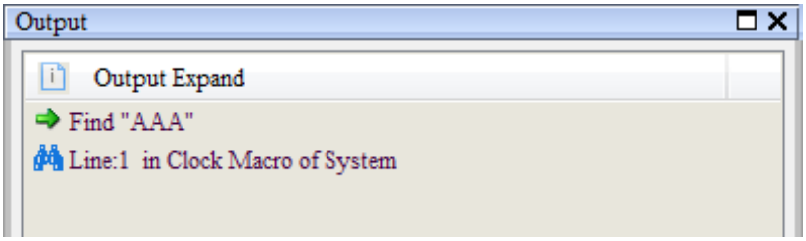
Step 2: Apply Tag function in macro.



Step 3: Go to [Edit] > [Find] and enter the Tag name. Select [Text] as the Type. Then, you will be able to find the related macros in Output window.



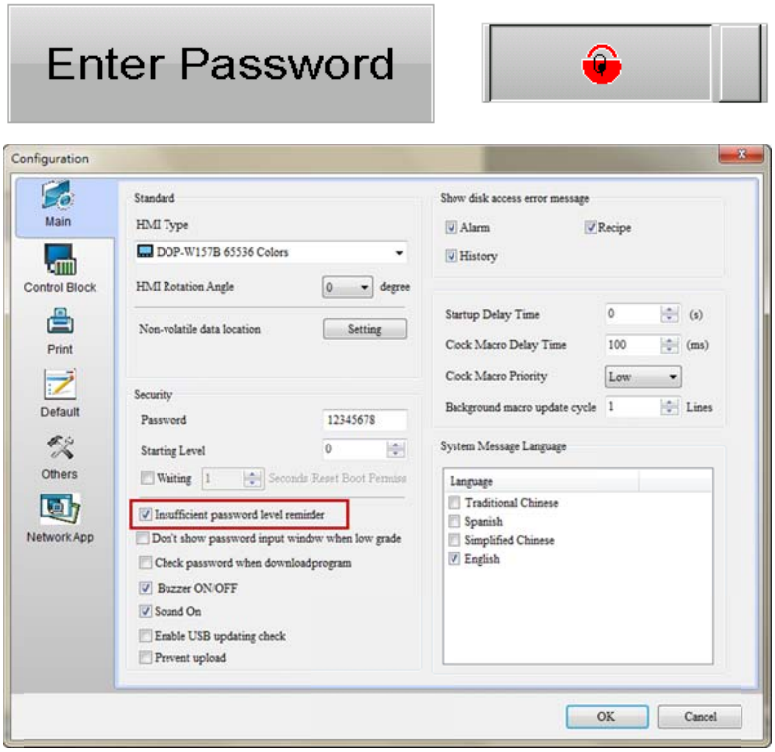




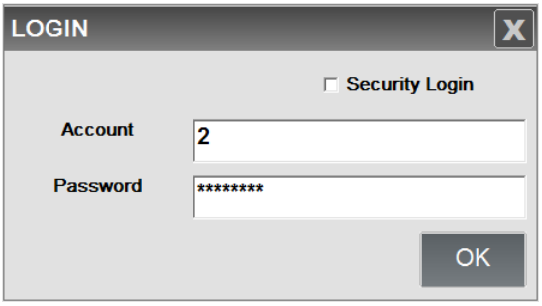
3.7 When entering the password in DOP-W series HMI, users no longer need to select the security level. When logging in DOP-W series HMI, users only have to enter the account and password. There is no need to select the security level beforehand. Furthermore, when you log into the highest level, you just need to check “Security login” and enter the password.

See the example below:

Step 1: Create the [Password] button and [numeric entry] element. Set the numeric entry element to level 2. Go to [Options] > [Configuration] and check [Insufficient password level reminder].



Step 2: When you create the element, please download the screen to the HMI. Execut the numeric entry element and you will be requested to enter the account and password. (The default account is 2 and password is 22222222.)



Step 3: Then, the system can identify your user level as 2 according to the account and password you entered.

If you wish to log into the highest level, please check [Security Login]. You just need to enter the password (The default password is 12345678). See the screen shown as below.

3.8 After scanning the barcode, there is no need to write the data into its address by pressing the Enter button.

Before	Users have to firstly touch the Barcode element and scan the barcode when it glitters. Then, press the Barcode element again to access the information.
After	Touch the Barcode element. When the element glitters, users can directly scan the barcode and write the data into its address.

3.9 DOP-B10VS511 VGA Input supports 60Hz of scanning frequency

Before	B10VS511 only supports the scanning frequency of 800*600 50Hz
After	B10VS511 supports two types of scanning frequency, 800*600 50Hz and 800*600 60Hz. Users can connect to non-DMV device, such as PC to display the screen on B10VS511.

3.10 Number of M device supported by HMC series HMI increases to 8192.

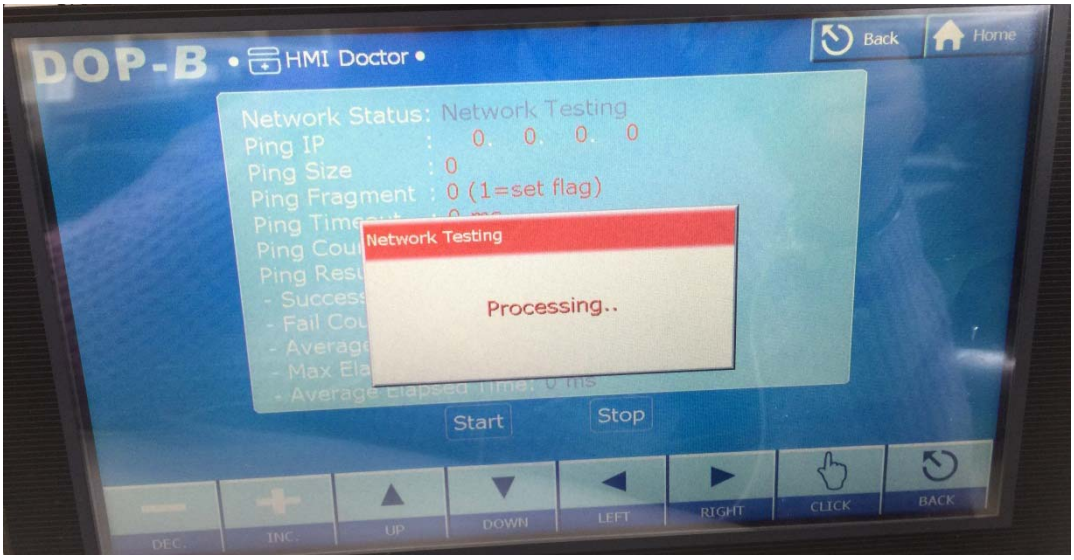
Before	It supports 4096 M devices.
After	It supports 8192 M devices.

3.11 DVP 12SE and DVP EH3 / DVP EH3-L models support PLC upload/download function.

3.12 Network type HMI, including DOP-B, DOP-H and HMC supports HMI Doctor function for self-verification on the Net.

Go to HMI system directory and select [HMI Doctor] > [Network] to ping the connectable IP address on the Net. Then, users can acquire Average TTL, Max Elapsed Time, Average Elapsed Time according to the input Ping IP address, Ping Size, Ping Fragment, Ping Timeout and Ping Count

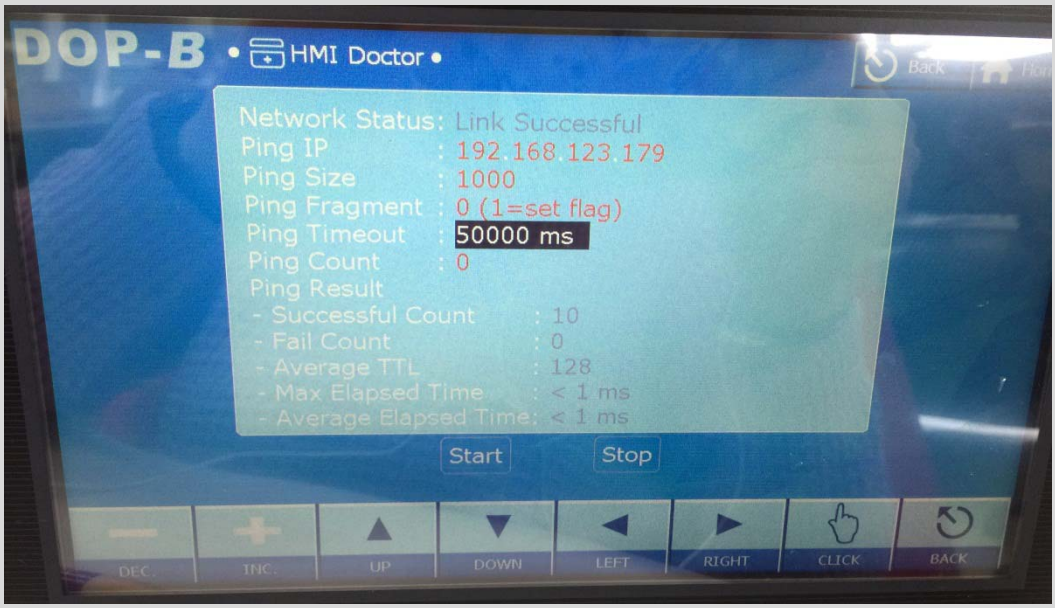
Note: You cannot enter the HMI's IP address here.

Item	Descriptions
 	
Network Status	It has two Network statuses, Link Fail and Link Successful. Once you are in Network page, HMI will automatically execute Network Testing. If the Network can be used normally, the screen will show Link Successful; if the Network is abnormal or disconnected, then the screen will show Link Fail.

Ping parameters setting

Ping IP	Enter the IP address to be tested. Note: Do not enter the HMI's IP address.
Ping Size	Enter the package size, which range is from 0 to 1500.
Ping Fragment	Users can determine if the packet can be segmented or not. Enter 0 means you are going to segment the packet by Router. Enter 1 means it is not allowed to use Router to segment the packet.
Ping Timeout	Enter the time of Timeout, which range is from 0 to 600000 ms. For example, if you enter 300 ms, when you have not received the package after 300 ms, it will be regarded as Timeout.
Ping Count	Enter the ping count, which range is from 0 to 100000.

Ping Result



Successful Count	When the setting of Ping parameter is complete, please press the Start button. The Successful Count will show the succeeded times of ping count.
Fail Count	When the setting of Ping parameter is complete, please press the Start button. The Fail Count will show the failure times of ping count.
Average TTL	TTL is the abbreviation of Time to Live. Its maximum value is 255. If the value of TTL is 242, it means the packet has gone through 13 Routers. When the setting of Ping parameters is complete, press the Start button to see the value of Average TTL.
Max Elapsed Time	Elapsed Time represents the time from packet sending to packet receiving. When the setting of Ping parameters is complete, press the Start button to see the value of Max Elapsed Time and Average Elapsed Time.
Average Elapsed Time	

3.13 Add PLC Controllers.

Add as below PLC controllers could connect with HMI.

Manufacture	Connection	Series
BECKHOFF	Ethernet	TwinCAT ADS/AMS TCP
Keyence	Ethernet	KV Series TCP
Panasonic	Ethernet	FP Series TCP
	COM	FP7 Series
	Ethernet	FP7 Series TCP
Mitsubishi	Ethernet	FX3U Ethernet
Megmeet	COM	MC 280
SIEMENS	Ethernet	S7 LOGO (ISO TCP)
YASKAWA	Ethernet	SIO UDP