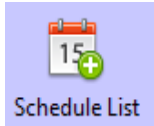


New functions of V2.1

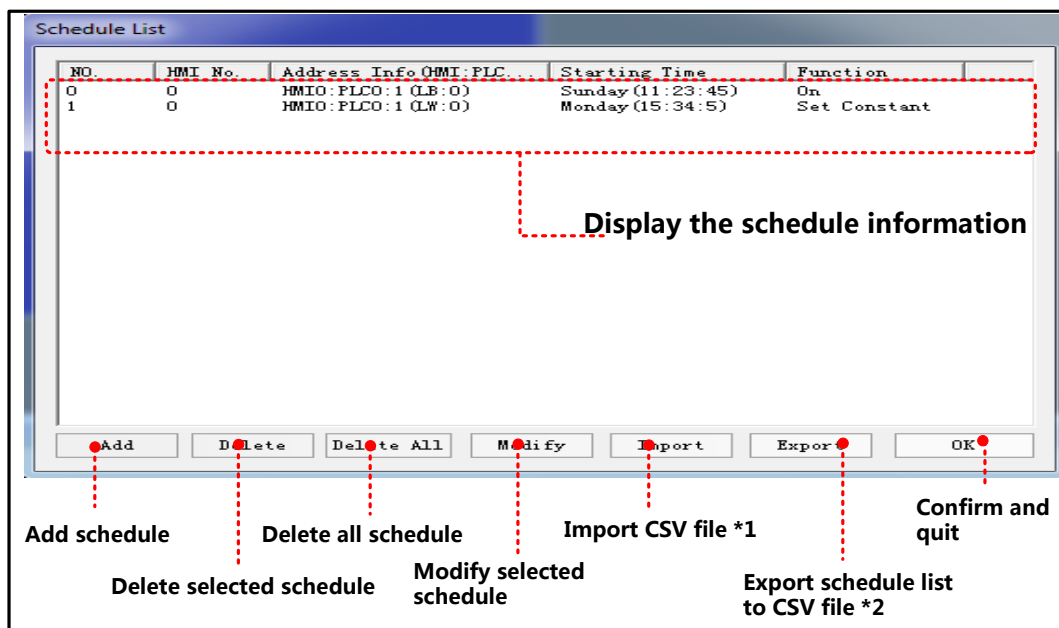
1 New Components

1.1 Schedule List



Schedule List is used to configure the operation which will be executed in specific time.

- 【Schedule List】 Interface



※1.Import the CSV file which include schedule list format into 【Schedule List】 in the current project.

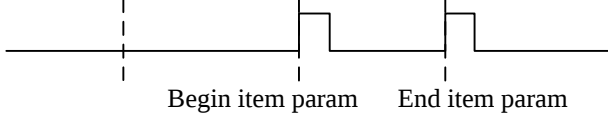
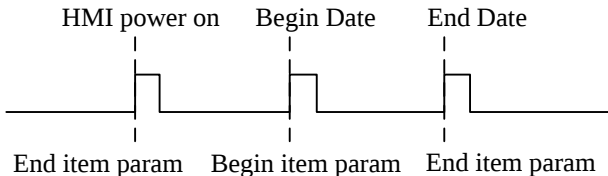
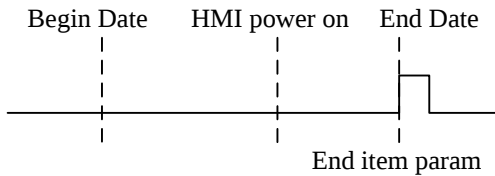
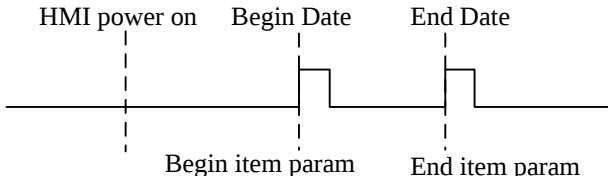
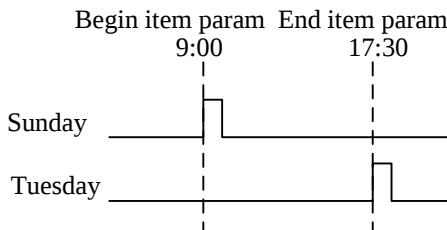
2.Export all the schedule information in current project to specific directory and saved as CSV file.This file can be open by Microsoft EXCEL.

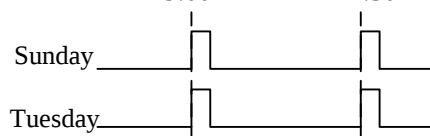
- 【Schedule List】 Setting

Click 【Add】 in 【Schedule List】 to open the setting window of 【Schedule List】,its attributes are shown as follows.

Basic Info.

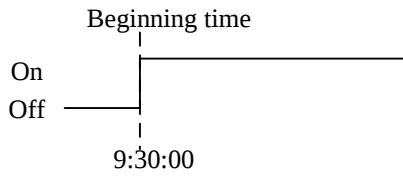
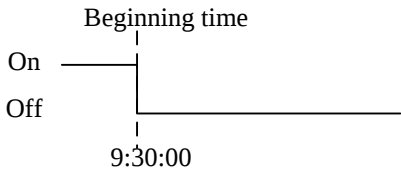
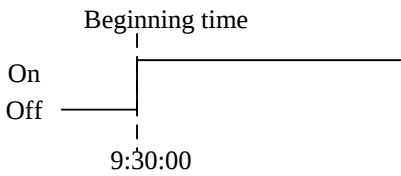
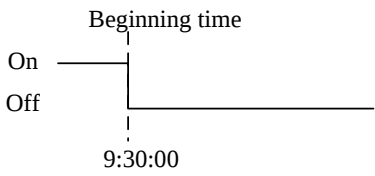
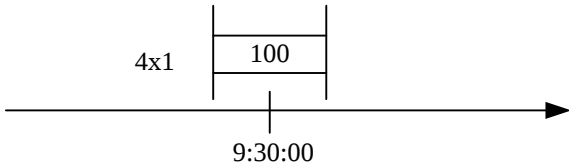
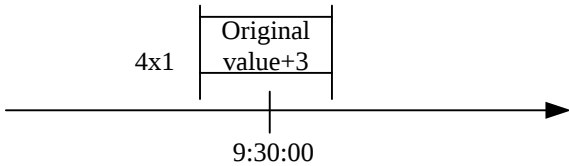
Descriptions		
Execute List	HMI	Select the HMI which will execute the schedule.
Basic Pro.	Execute when power on	
	Select	If HMI power on after the setting time of schedule,then it will execute the “Begin item param” automatically.

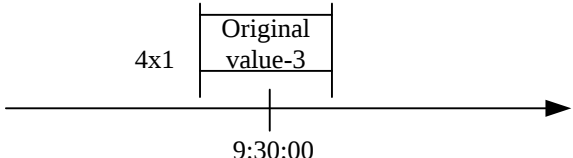
		Begin Date HMI power on End Date 
		If HMI power on before setting time of schedule and select “End item param”,then it will execute the “End item param” automatically. HMI power on Begin Date End Date 
	Unselect	If HMI power on after setting time of schedule and select “End item param”,then it won’t execute “Begin item param” automatically,but it will execute the end item param automatically.If “End item param” is not selected,then no item will be executed. Begin Date HMI power on End Date 
		If HMI power on before setting time of schedule and not select “End item param”,then it will execute HMI power on Begin Date End Date 
Trig Beep.It is used to set the buzzer when start executing preset operation.The range of buzzer is 1~65535s.		
Date and Time	UseSingleDate	When selecting this option,then the begin date and end date can be different,but there can only select one begin date and one end date. For example,begin date is 9:00:00 Sunday,end date is 17:30:00 Tuesday. Begin item param End item param 9:00 17:30 
		When unselecting this option,then the schedule is executed within one day(means from the begin date to end date is within 24 hours) ,but it can set multiple begin date and end date.

	Begin item param End item param 9:00 17:30  Note:If the time of end date is earlier than the time of begin date,then the end item param will be executed in next day.								
Begin Date	Set time and day for begin item param.Format is HH:MM:SS (Hour:Minute:Second).Range:hour (0~23) , minute (0~59) , second (0~59)								
End Date	When selecting [Use end date],the time of end date can be set. When selecting[UseSingleDate],the day of end date can be set.								
Variable Date Addr.	It is used to set schedule time and date by local or PLC address. If unselecting [Use end date] , it will occupy 4 words,these addresses are only used for begin date. The variable date addr.=Week. Bit0:Sunday(0:Invalid, 1:Valid).....Bit6:Saturday (0:Invalid, 1:Valid).The format is as following figure. 15 7 6 5 4 3 2 1 0 <table><tr><td>Reserved (0)</td><td>Saturday</td><td>Friday</td><td>Thursday</td><td>Wednesday</td><td>Tuesday</td><td>Monday</td><td>Sunday</td></tr></table> The variable date addr.+1=Hour The variable date addr.+2=Minute The variable date addr.+3=Second Exammple 1:The variable date addr. is LW0,then Week=LW0,Hour=LW1, Mintue=LW2,Second=LW3. If selecting [Use end date],it will occupy 8 words,then these addresses are used for begin date and end date. Example 2:if the variable date addr. is LW0,then the begin date is:Week=LW0, Hour=LW1,Minute=LW2,Second=LW3.End date is:Week=LW4,Hour=LW5, Minute=LW6,Second=LW7.	Reserved (0)	Saturday	Friday	Thursday	Wednesday	Tuesday	Monday	Sunday
Reserved (0)	Saturday	Friday	Thursday	Wednesday	Tuesday	Monday	Sunday		

Control Info.

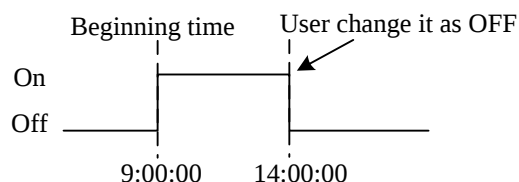
Descriptions		
Control Info.	Execute Type	Descriptions as follows.
	Bit Set	On: it will set the specific bit address as on at the beginning time. For example,beginning time is 9:30:00.

		
		Off:it will set the specific bit address as off at the beginning time. For example:beginning time is 9:30:00
		
		Toggle:it will switch the status of the specific bit address at beginning time.If the original status of the bit address is off,then it will switch to on.Or it will switch to off. For example,beginning time is 9:30:00
		
		
Word Set	Set Constant:it will write a constant to specific register at the beginning time. For example:beginning time is 9:30:00,constant value is 100 and specific register is 4x1.	
		
	Add Value:it will use the original value of specific register to add an addend at the beginning time,and its final value will not exceed the upper limit. For example:beginning time is 9:30:00,addend is 3,upper limit is 80 and specific register is 4x1.	
		
	Sub Value: it will use the original value of specific register to subtract a subtrahend at the beginning time,and its final value will not exceed the lower limit. For example:beginning time is 9:30:00,subtrahend is 3,lower limit is 9 and specific register is 4x1.	

		
	Data type	It is used to select the data type of setting value.It supports 16-bit signed\16-bit unsigned,32-bit signed\32-bit unsigned,float,double.
Write Address	Set the address which is used for execution.	
Variable Param Address	Use variables to change the set value(for set constant),Addend,upper(for add),subtrahend and lower(for sub)	



1. If the write addresses are the same in schedule list,it is forbidden to set the same time and date to them.
2. Every time in schedule list only executes once.When it reaches execution time,the specific address will be written a value once.



3. Because it needs to read the data of [Word Set] and [Control Setting],the execution maybe delay according to the data communication.
4. When selecting [Variable Date Address],system will read the address cyclically,the cycle time depends on the busyness of system.
5. When the value of the variable date address exceeds the range of standard time,then the setting schedule will be wrong.

2 Improvement in Components

2.1History Data Query in Trend Graph

History Data Query is a new function in Trend Graph.Tick“History Data Query”in 【History Data Query】 of 【Trend Graph Component Attribute】 ,then set Query Address and Query Trigger Address to make history data query function for trend graph.

☐ **History Data Query**

Query Address

HMI HMI0 PLC 0

Port COM0

☐ Change Station Num 1

AddrType LW Address 0

CodeType BIN Word Length 8

☐ Use Address Tag

Format(Range):DDDDD (0~10255)

Query Trigger Address

HMI HMI0 PLC 0

Port COM0

☐ Change Station Num 1

AddrType LB Address 0

CodeType BIN Word Length 1

☐ Use Address Tag

Format(Range):DDDD (0~9999)

【Example】 The real date of HMI is 2013-5-31, it needs to query the trend curve within the tim 15:55:10~15:57:40.

Create new project [Trend],then add a trend graph component and set its attribute as follows:

Basic Attributes	
Read Address	LW0 (Local address of HMI)
Trend Graphics	
Type	Multiple pages
Page Num	10
Channel	3
Time	Tick, address:LW 200 (Local address of HMI)
Channel	
No.0	Y Min/Max: 0/500 Color: ■ (Red)
No.1	Y Min/Max: 0/1000 Color: ■ (Yellow)
No.2	Y Min/Max: 0/1500 Color: ■ (Green)
Extended Attributes	
Use Grid	Tick.Lines/Columns:3/3,Background Color:■ (Blue-Grey) , Grid Line Color: □ (White) , Grid Line Style: - - -
History Data Query	
History Data Query	Tick.
Query Address	LW100 (Local address of HMI)
Query Trigger Address	LB0 (Local address of HMI)

Add four number input components,used to set the time for history data query.Set their attributes as follows:

Basic Attributes	
Read/Write Address	LW 100/LW102/LW104/LW106 (Local address of HMI)
Numeric Data	Unsigned int, DWORD

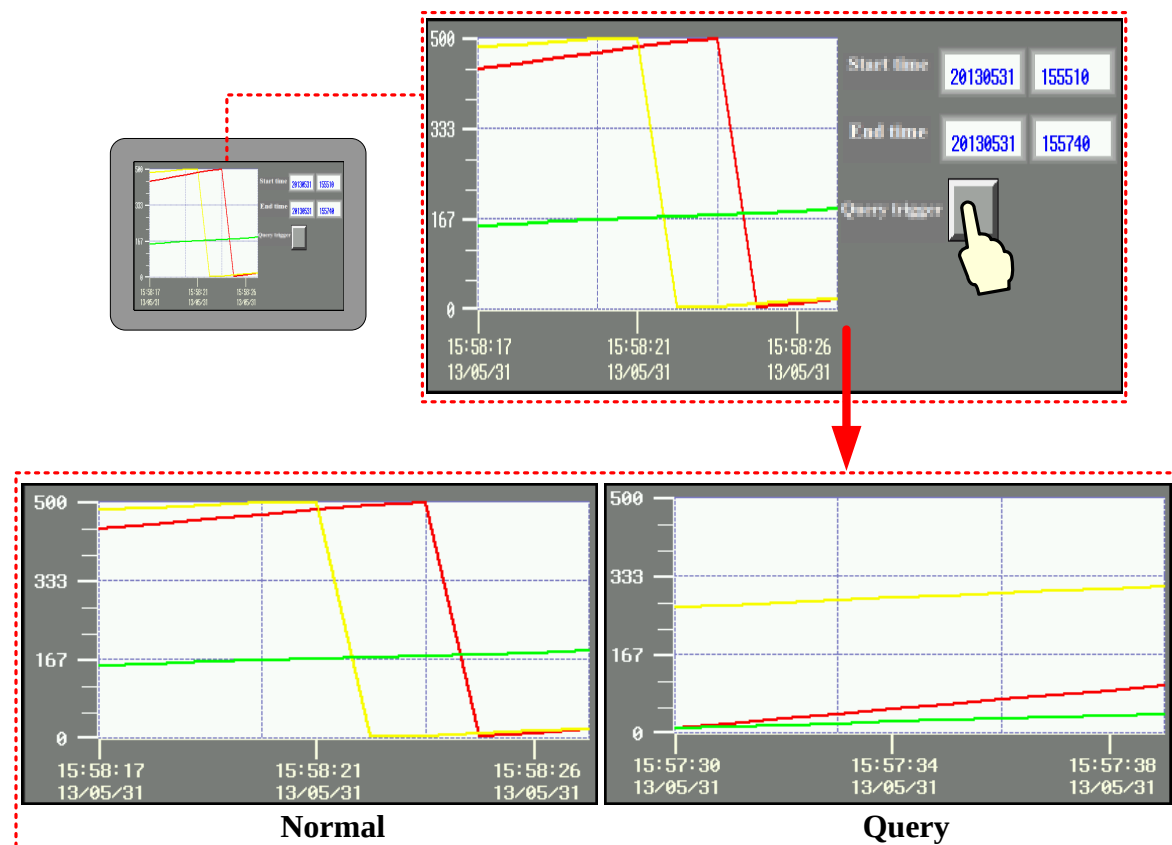
Add a bit state switch component,used to trigger query.Its attributse are as follows:

Read/Write Address	LB 0 (Local address of HMI)
Switch Type	Toggle

Add three number display components,used to obtain coordinate of current sampling data.Set their attributes as follows.

Read Address	LW 9210/LW 9211/LW 9212 (Local address of HMI)
--------------	--

It will run as follows:



2.2 Data Report

2.2.1 Use External Time for Datalogger

This can only use for Datalogger and Data Report.

Tick "Use External Time for Datalogger" option in **【HMI External Attributes】** of **【HMI Attribute】**, then the display time in Datalogger and Data Report will read from HMI system registers LW9010~LW9017 automatically. When using Data transmission function in timer component to transmit the data of real time in PLC to LW9010~LW9017, the display time in Datalogger and Data Report will be the same as the real time in PLC. More details please refer to "Use External Time for Event".

☐ Backlight 0 mins Video Mode PAL ▾
☐ Backlight automatically turns when the alarm / event occurs
☐ Screen Saver 0 mins The Window Of Screensavers 0:Frame0 ▾
☒ Return to Original Window when Screensavers Ends Number of Language 8 ▾
☒ Allow Upload Password 888888 Default Language 1 ▾
☒ Allow Decompilation Password 888888 Language Setting
☐ Use DownLoad Password 888888
☐ User defines datalogger's channel description
Chinese Font Box Height 24
System Scroll Bar Width 20
☐ Use INIT Macro macro_id.c ▾
☐ Use External Time for Datalogger
☐ Use External Time for Event
☒ Vector Fonts Edge Blur

Operational Records Storage Setting

Storage Devices HMI ▾

Subdirectory Record

Storage Type Daily File ▾

Bulk Storage Default ▾ ☐ Save MS

The descriptions of system registers LW9010~9017 are as following table.

Address Type	Code Type	Address	Descriptions	Address	Descriptions
WORD	BIN	LW9010	Second, range: 0~59	LW9014	Month, range: 1~12
		LW9011	Minute, range: 0~59	LW9015	Year, range: 0~2099
		LW9012	Hour, range: 0~23	LW9016	Week, range: 0[Sun.]-6[Sat.]
		LW9013	Day, range: 1~31	LW9017	Millisecond, range: 0~999

2.2.2 Support data type string in Data Report

With the data type string in sample channel,the Data Report can display characters,it supports unicode and GB code,and also support swapping high byte and low byte.

Sample channel

No.	Datatype	Length	Description
0	String	8	Channel0

16-bit signed
16-bit unsigned
32-bit signed
32-bit unsigned
float
double
String

The setting of Data Report is as following figure.

Data Report Display

Data report display attribute | DataReport Control | Display Setting

Data report attribute | Data report channel

Datalogger | DataReportChannelList

Data report channel

No.	In...	Title ...	Data Type	L...	Integer	Deci...	Unicode	Exchange H/L char
0	0	Cha...	String	16			No	No

OK Cancel Help

2.2.3 Add MaxSaveDays in Data Sample in Datalogger

SampleData Save

SaveDisk HMI

MaxSaveDays 30 Days (0:Unlimited)

Save Dir SampleDataStore

☐ Variable Dir

HMI HMI0 PLC 0

Port COM0

☐ Change Station Num 1

AddrType LW Addr 0

Codetype BIN word 16

☐ Use AddrTag

Format(Range):DDDDD (0-10255)

The range of days is 1~32767, 0 means no limit. When the save days reaches the MaxSaveDays, it will clear the data in the earliest day automatically and then continue sampling data in new day.

2.2.4 Add prompt dialog box in Data Report

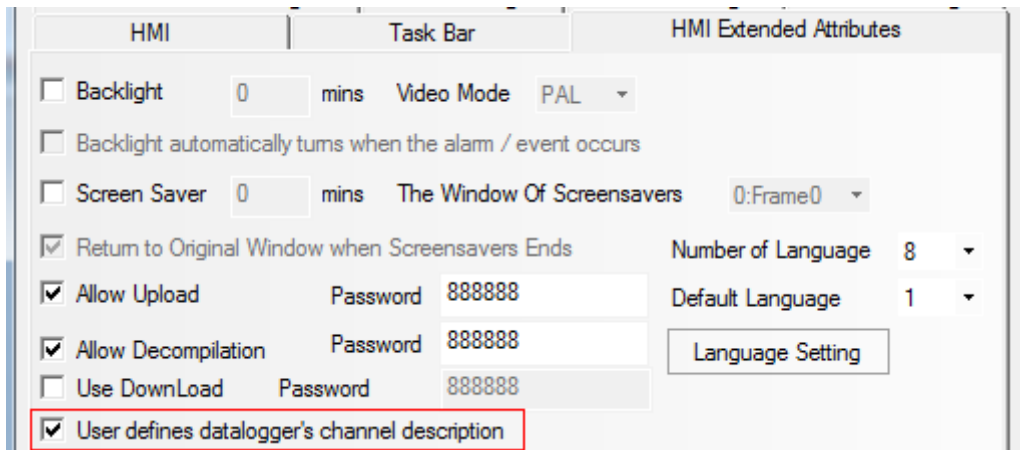
When the Data Report is querying history data, it will popup a prompt dialog box with information "Searching DB...". After finishing querying, it will close automatically.

2.2.5 Optimize the data format in CSV file exported by Data Report

The date format in CSV file is YYYY-MM-DD (Same as before), the time format is the same as user-define in the software. (Before the time format is fixed, can not change.)

2.2.6 User defines datalogger's channel description in DB file

Tick "User defines datalogger's channel description" in **【HMI Extended Attributes】** of **【HMI Attribute】**, then the channel name in .db file generated by datalogger will be the same as description in sample channel in Datalogger.

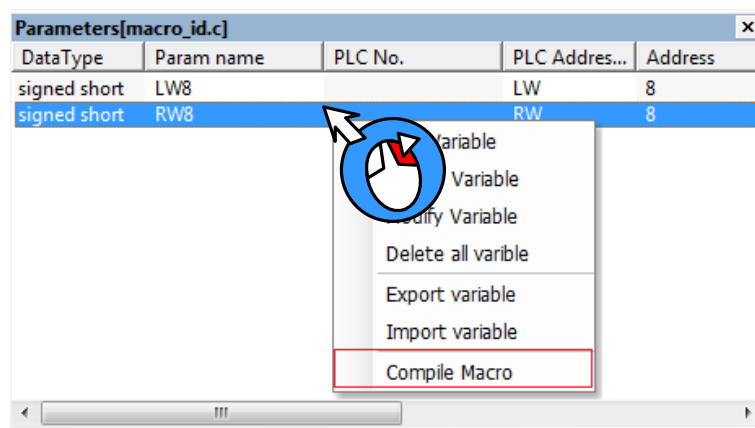


2.3 Add “Change Station Num” in background components

Add “Change Station Num” in background components such as Trend Graph,XY plot,Datalogger,Historical Data Display,Event Information Logon,Alarm Information Logon and PLC Control.Their station No. can be set by a constant or system register.

2.4 Compile macro separately

Add “Compile Macro” function in the Variable List in Macro,it is used to compile macro separately.



2.5 Add attribute list in Window Attribute

Add attribute list in Window Attribute in order to make it more convenient to check the timer and setting component in current Frame.If there is no any timer or setting components which is related to window attribute in current frame,then there will be no this attribute list in Window Attribute.

Window Attribute

Window Timer List Special setting element list

Timer List

Timer Name	Timer trigger t...	Timer trigger fr...	Timer function	Remark
TM0	All time	2X100MS	Execute Macro	

OK Cancel Help

Window Attribute

Window Timer List Special setting element list

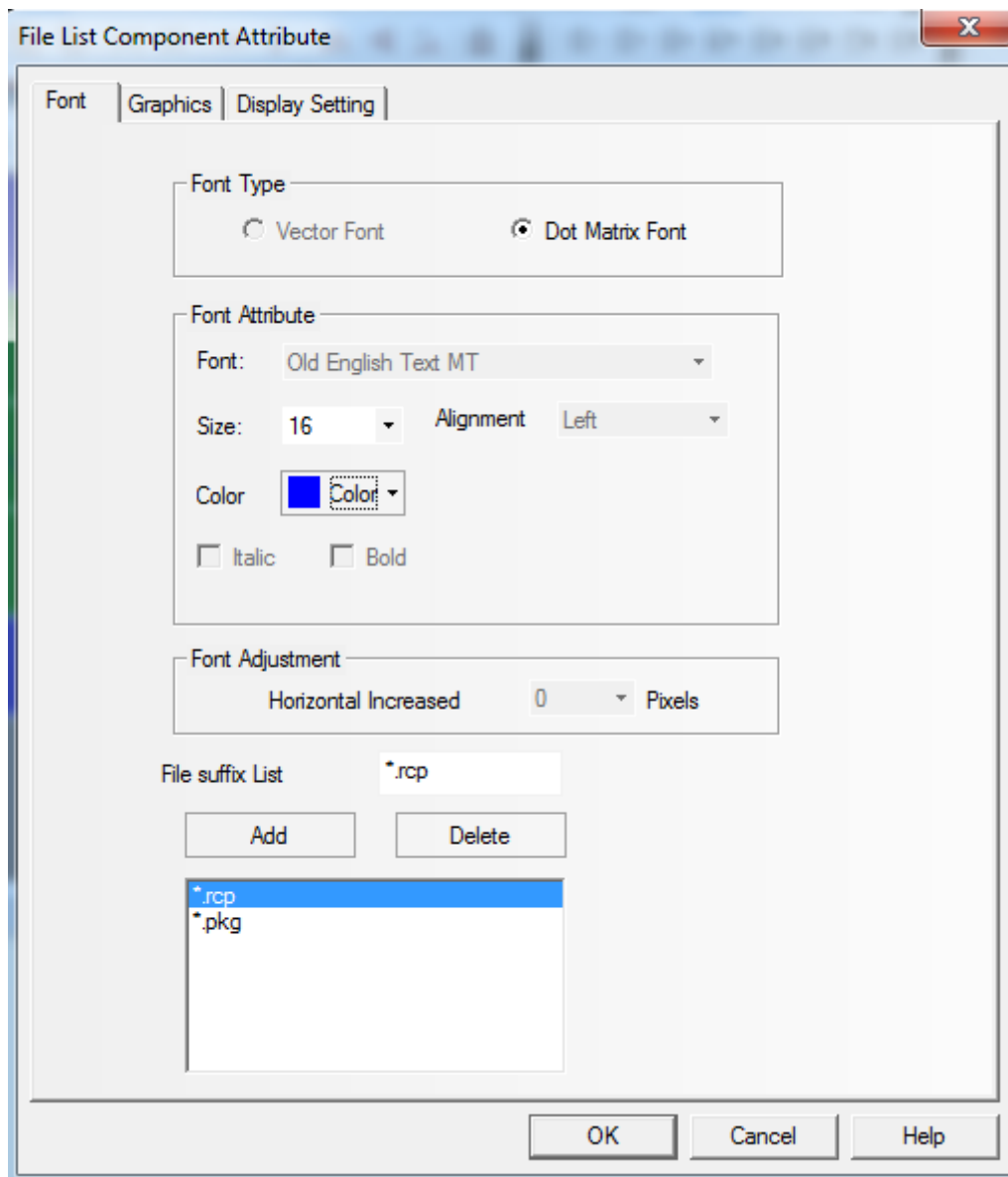
Special setting element list

Element Name	Type	Remark
SB0	Set On when Window Open	

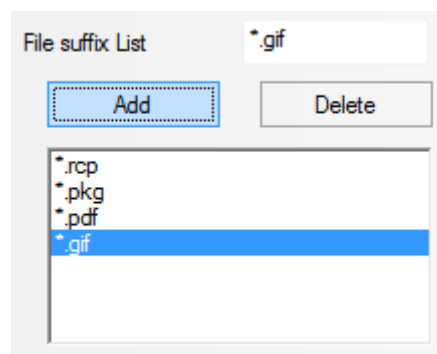
OK Cancel Help

Double click the component in the list,it will popup the attribute of this component.

2.6 Add file type in File List

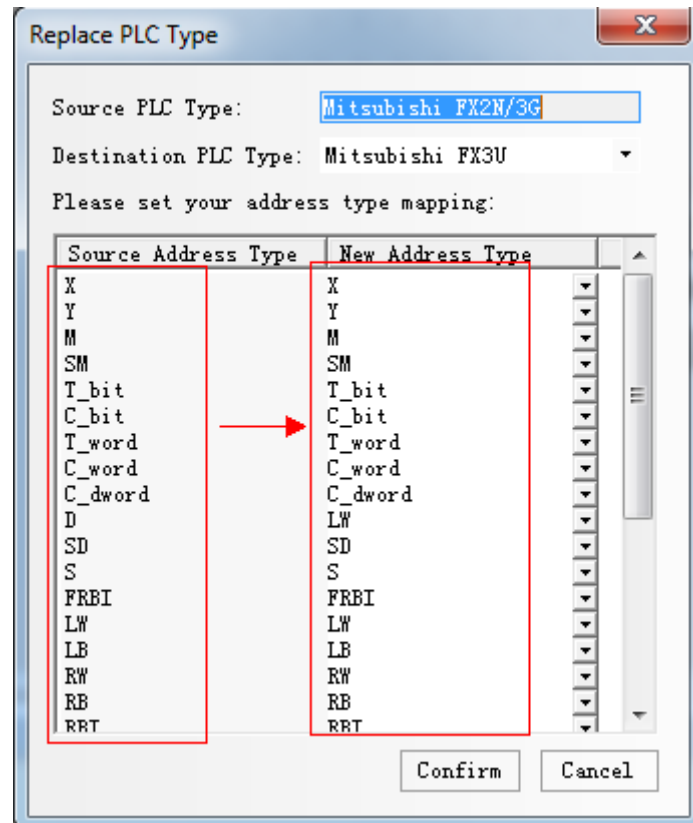


Enter file suffix name in File suffix List, default is *.pkg, *.rcp, means supporting compile file and recipe file. If user can enter suffix name in File suffix List to make it support *.gif, *.pdf files.



2.7 Add auto-matching the same registers when replacing PLC type

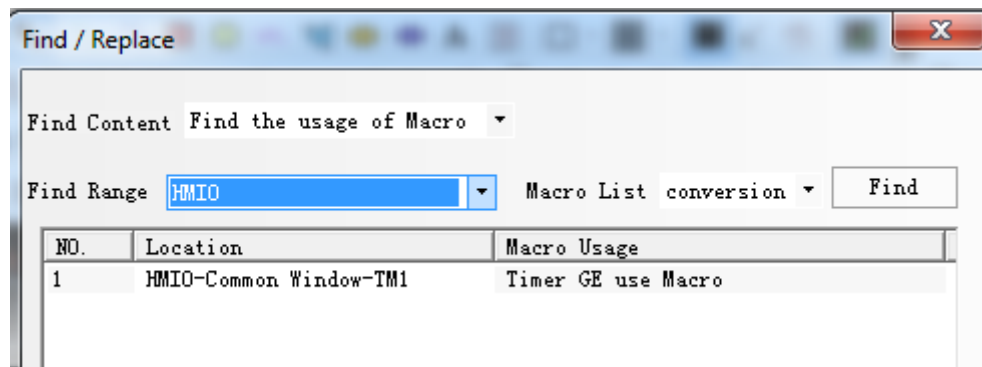
When replacing PLC type, if the destination PLC type has the same registers as source PLC type, then the software will choose the same registers automatically.



3 New Function

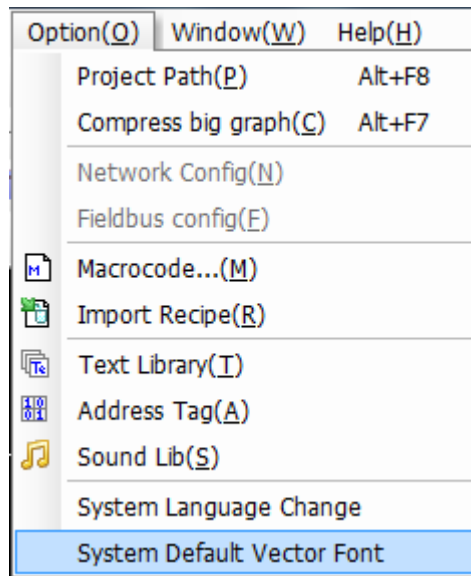
3.1 Find the usage of Macro

Open **Find/Replace** and select **Find the usage of Macro** in Find Content, then set HMI No. and Macro name, click Find, it will show where to execute the macro.



3.2 System Default Vector Font

User can define the default vector font in **System Default Vector Font** in **Option** .

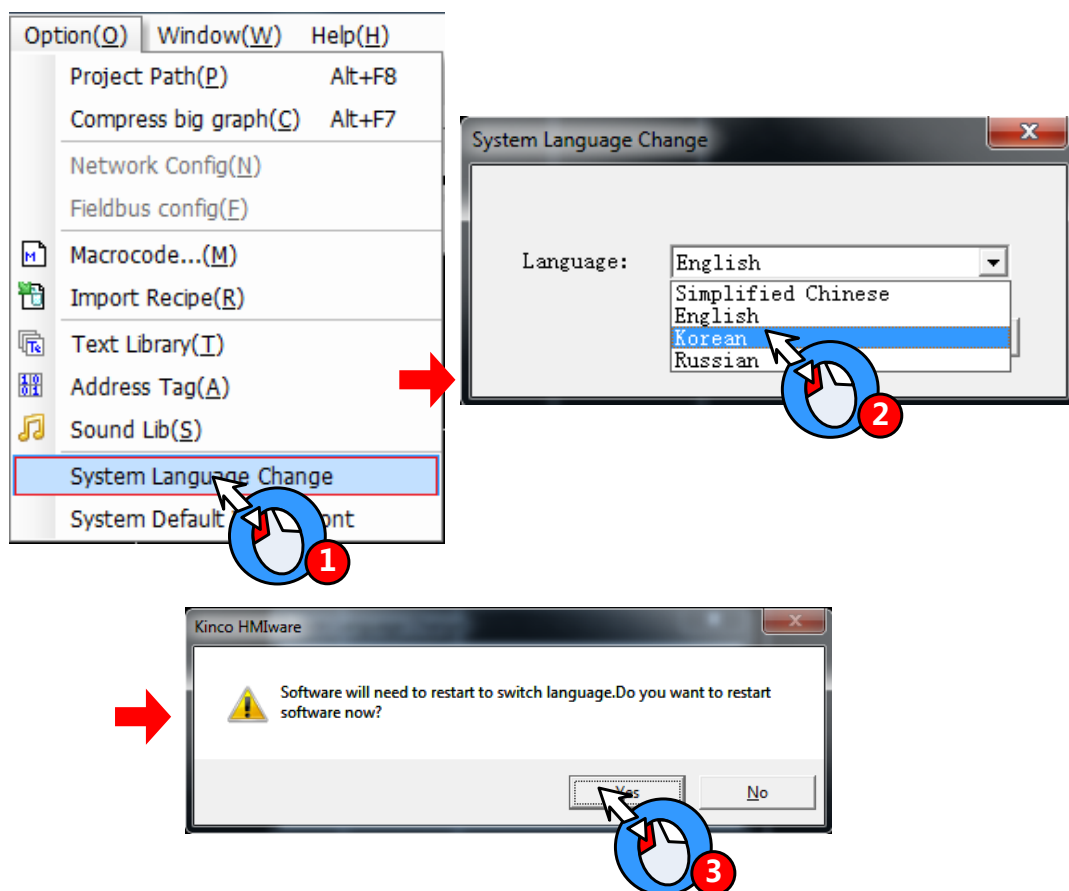


【Example】 Set System Default Font as “Arial”,when using tag or text and select “Vector Font”,it will select “Arial” by default automatically.

3.3 Multiple Language integrated

Kinco HMIware software can support multiple languages exchange function.In 软件支持多语言界面切换功能，用户可以通过软件菜单栏【选项】-【系统语言切换】将软件切换到对应的语言界面。之前只支持简体中文和英文两种语言界面切换，现支持中文、英文、韩文、俄文四种语言界面切换。

- 将简体中文软件界面切换成韩文软件界面



3.4 Import/Export LOGO file

Set “Import/Export project” function in Function Key,at the same time,it needs to set LB9265 as ON,then this function key can be used to import/export LOGO file.The format of LOGO file must be *.lg.

3.5 KHMonitor

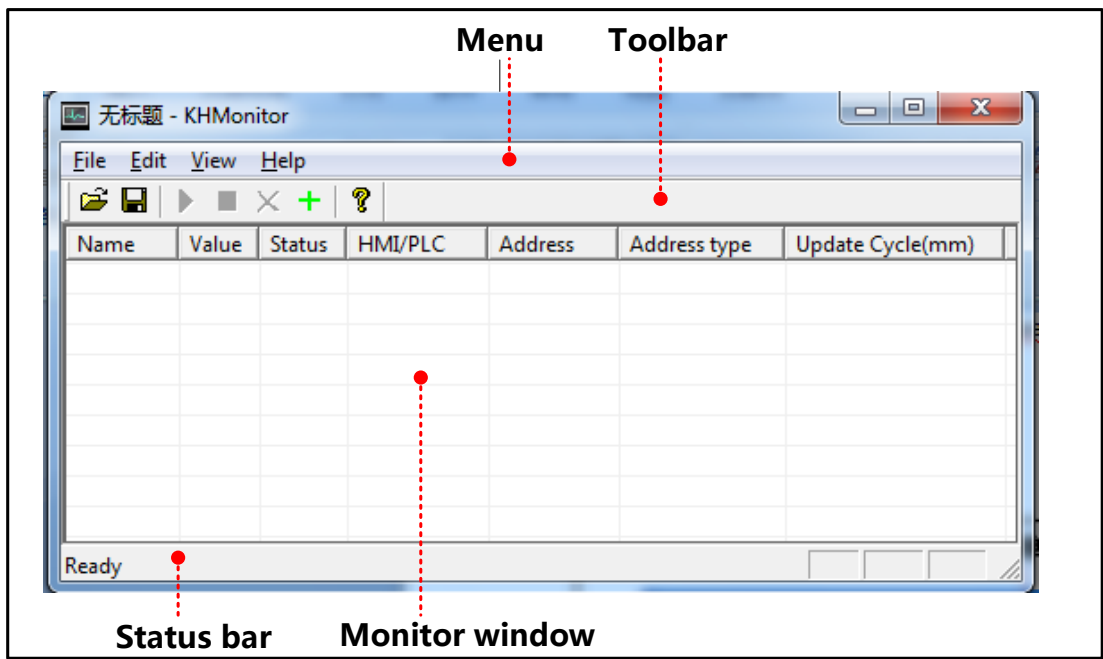
3.5.1 Descriptions of KHMonitor

KHMonitor is used to monitor the data in HMI and PLC registers through HMI.

3.5.2 Start KHMonitor

- Click 【Start】 - 【All Programs】 - 【Kinco】 - 【Kinco HMIware v2.1】 - 【Tools】 - 【KHMonitor】
- In the installation directory of Kinco HMIware,double click 【KHMonitor.exe】

3.5.3 KHMonitor Interface



- Menu/Toolbar

Menu Name	Toolbar Icon	Toolbar Name	Descriptions
File		Open	Open an exist monitor file
		Save	Save the monitor configuration file
		Save as	Save as another configuration file,its format is *.khm
		Exit	Close KHMonitor
Edit		Select All	Select all the monitor items in monitor window
		Add	Add a monitor item

		Del	Delete the selected monitor item
		Run	Execute selected monitor register
		Stop	Stop the status of selected monitor register.
View		Toolbar	Open/Close toolbar
		Status Bar	Open/Close status bar
Help		About KHMonitor	Version information

- Monitor Window

Monitor Window is used to display information such as Name, Value, Status, HMI/PLC, Address, Address type, Update Cycle(ms).

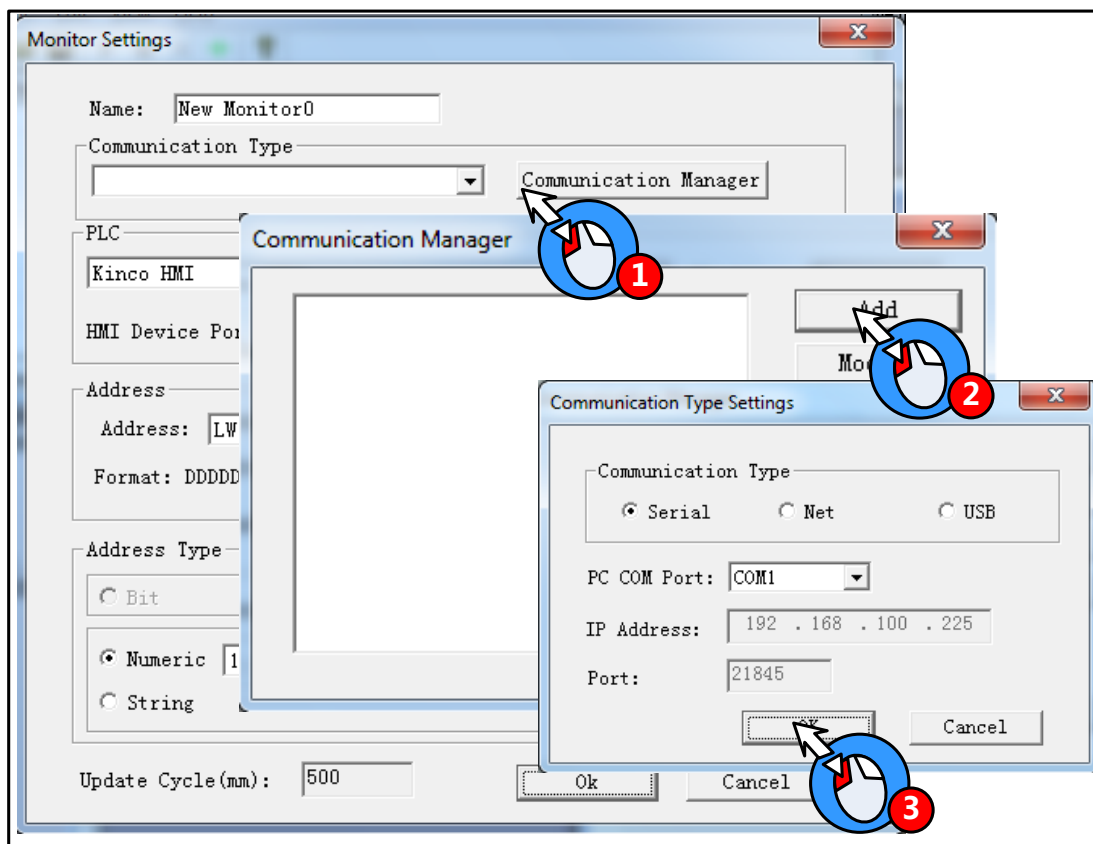


Double click the monitor item in Monitor Window to change its setting.

3.5.4 How to use KHMonitor

- (1) Create new monitor item. When it is first time to use KHMonitor, click  in toolbar to create data monitor.
- (2) Enter monitor name. Enter monitor name in the popup window when creating new monitor. Default name is New Monitor0, if create another item, the No. will increase automatically.
- (3) Set Communication Type. Set the current connection type between HMI and PC.

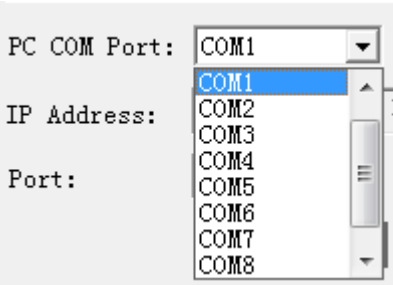
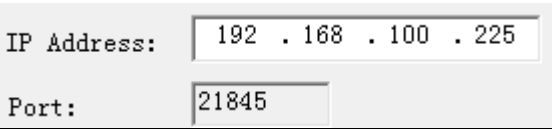
- Set Communication Type as following figure :



- Communication Manager include function such as **【Add】** , **【Modify】** , **【Remove】** , **【Remove all】** , **【OK】**
 - Add: to add a new communication type between HMI and PLC.

- Modify:to modify the current communication type.
- Remove:to remove the selected communication type.
- Remove all:to remove all the communication types.

● Descriptions of Communication Type Settings.

Communication Type		Parameters Setting
Serial	☒ Serial	Select current PC COM port. 
Ethernet	☐ Net	Set current HMI IP. 
USB	☐ USB	No need to set parameters.

(4) PLC:to select the communication protocol between HMI and PLC.

Descriptions of 【PLC】	
Drop down menu for PLC	Select the corresponding communication protocol between HMI and PLC.
Station	PLC's station No.
HMI Device Port	Select the HMI port which is used to communicate with PLC

(5) Address:to set the address which needs to be monitored

Descriptions of 【Address】		
Address	Set the address of HMI/PLC which needs to be monitored	
Batch	Batch Count	Set the number of address which will be copied,its range is 1~1000
	Address Auto Change Mode	Copy by address increment/decrement.
	Forward Address Auto Change	Increment/decrement for the address of the register
	After Address Auto Change	Increment/decrement for the address of the register in accordance with the decimal point
	Note:Batch is only valid in the first time to add monitor items.	

(6) Address Type:to select the data type of the address,including bit,number and string.It will display the data according to selected data type when monitoring.

(7) Run/Stop monitor

【Run】: Select monitor item and click icon  in toolbar to run it.Press ctrl/shift to select more items.The data will display in “Value” after run the item.

【Stop】: Select monitor item and click icon  in toolbar to stop it.Press ctrl/shift to select more items.

3.6 Multiple Ways to Concern Kinco

Support scanning the two-dimensional code to add Kinco WeChat official account,and obtain the latest news of Kinco products.

Open a mailbox Kinco_HMI_PLC@kinco.cn for users to communicate with our R&D team about HMI and PLC technical questions.



3.7New System Registers

New system registers in Kinco HMIware:

Address	Descriptions	R/W
LB9265	Open import/export logo function.ON:Open import/export logo function. OFF:Open import/export project function.	R/W
LB9270	Open the function of exporting event to csv file including date. ON:Open.After setting ON,the format of csv file in external device(USB,SD Card)will change,it can't be used together with the function "Save to external device" like USB and SD Card. OFF: Close.	R/W

● Register decoding in Modbus Slave driver

Address	Descriptions				R/W
LW9810	Adjust the decoding sequence of 16bits integer				R/W
	Value	Sequence	Descriptions	For example:0x0001	
	0	12	High byte and low byte are normal	Means 1 (0x0001)	
	1	21	High byte and low byte swap	Means 256 (0x0100)	
LW9811	Adjust the decoding sequence of 2bits integer				R/W

	Value	Sequence	Descriptions	For example:0x0000 0001	
	0	1234	High byte and low byte,high word and low word are Normal	Means 1 (0x0000 0001)	
	1	2143	High word and low word are normal,but high byte and low byte swap.	Means 256(0x0000 0100)	
	2	3412	High word and low word swap,but high byte and low byte are normal.	Means 65536 (0x0001 0000)	
	3	4321	High word and low word,high byte and low byte swap.	Means 16777216 (0x0100 0000)	
LW9812	Adjust the decoding sequence of 2bits float				读写
	Value	Sequence	Descriptions	For example:0x3F80 0000	
	0	1234	High byte and low byte,high word and low word are Normal	Means 1.0(0x3F80 0000)	
	1	2143	High word and low word are normal,but high byte and low byte swap.	Means -5.78564e-039 (0x803F 0000)	
	2	3412	High word and low word swap,but high byte and low byte are normal.	Means 2.27795e-041 (0x3F80 0000)	
	3	4321	High word and low word,high byte and low byte swap.	Means 4.60060e-041 (0x0000 803F)	