

TouchWin edit tool

User manual

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1 TOUCHWIN EDITING SOFTWARE	6
1-1. Installation and uninstallation of TouchWin editing software	6
1-1-1. Installation	6
1-1-2. Uninstall	9
1-2. INSTALLATION AND UNINSTALL THE USB DOWNLOAD CABLE	9
2 SIMPLIFIED PROJECT MANUFACTURE	.11
2-1. CREATE PROJECT	.11
2-2. Screen editing	.13
2-3. OFF-LINE SIMULATION	.14
2-4. On-line simulation	.14
2-5. Program download	.15
2-5-1. Common download	15
2-5-2. Complete download	16
2-5-3. U flash disk download	16
2-6. UPLOAD PROGRAM	17
3 SOFTWARE SCREEN AND WINDOW	.19
3-1. Software structure	.19
3-2. Project area	.20
3-2-1. Insert	20
3-2-2. Cut copy paste	20
3-2-3. Delete	21
3-3. Menu bar	21
3-3-1. File	21
3-3-2. Edit	30
3-3-3. View	31
3-3-4. Part	32
3-3-5. Tool	33
3-3-6. window	34
3-3-7. Help	34
3-4. Screen editing area	35
3-5. TOOL BAR	35
3-6. Status bar	36
4 PARTS	37
4-1. OVERALL OPERATION	37
4-1-1. Standard tool bar	37
4-1-2. Operation tool bar	37
4-1-3. Picture adjustment	38
4-1-4. Zoom tool bar	39
4-1-5. Status tool bar	39
4-2. Drawing tool bar	.40

4-2-1. Line	
4-2-2. Arc	
4-2-3. Rectangle	
4-2-4. Round rectangle	
4-2-5. Ellipse	
4-2-6. Fold - polygon	55
4-2-7. Block	59
4-2-8. Frame	61
4-2-9. Insert map	
4-2-10. Move animation	
4-2-11. Rotate animation	
4-2-12 Material library	
4-3. COMPONENT TOOL BAR	70
4-3-1. Text	
4-3-2. Dynamic text	
4-3-3. Variational text	
4-3-4. Lamp	83
4-3-5. Button	87
4-3-6. Lamp button	
4-3-7. Screen jump	
4-3-8. Digital display	
4-3-9. Alarm display	
4-3-10. Text display	
4-3-11. Digital input	
4-3-12. ASCII code input	
4-3-14. Set data	
4-3-15. Digital keyboard	
4-3-16. ASCII keyboard	
4-3-17. User input	
4-3-18. Bar	
4-3-19. Dynamic map	
4-3-20. Call window	
4-3-21. Window button	
4-3-22. Down recipe	
4-3-23. Up recipe	
4-3-24. Function button	
4-3-25. Function field	
4-3-26. Discrete column map	
4-3-27. Continue column map	
4-4. DISPLAY TOOL BAR	
4-4-1. Date	
4-4-2. Clock	
4-4-3. Buzzer	
4-4-4. Backlight	

	4-4-5. Scale	197
	4-4-6. Instrument	199
	4-4-7. Valve	203
	4-4-8. Pipe	207
	4-4-9. Pump	210
	4-4-10. Fan	213
	4-4-11. Motor	216
	4-4-12. Retort	218
	4-4-13. Inverter alarm information	222
	4-4-14. Scroll text	225
	4-4-15. Real trend map	226
	4-4-16. History trend map	231
	4-4-17. Event button	237
	4-4-18. XY trend map	243
	4-4-19. XY fold map	247
	4-4-20. Time trend map	251
	4-4-21. Alarm list	259
	4-4-22. Display real time event	263
	4-4-23. Display history event	267
	4-4-24. Common grid	270
	4-4-25. Data grid	275
	4-4-26. Sample save	280
	4-4-27. Sample export	282
	4-4-28. Process orbit	287
5	HMI INTERNAL REGISTER	291
	5-1. HMI INTERNAL REGISTERS	291
	5-2. Special internal registers	292
6	Q&A	296
	Q1 How to choose the software according to the hardware version of the HMI?	206
	Q2 How to install two or more versions of software in PC?	
	Q3 WHY THE SOFTWARE CAN NOT BE INSTALLED OR USED NORMALLY?	
	Q4 DOES THE SOFTWARE LAN NOT BE INSTALLED OR USED NORMALLY !	
	Q5 WHAT SHALL WE DO WHEN THE HMI PROGRAM OF TH SERIES AND TG SERIES CAN NOT BE DOWNLOADED?	
	Q6 WHAT SHALL WE DO WHEN THE FINIT PROGRAMS OF TP SERIES AND TO SERIES CAN NOT BE DOWINLOADED?	
	Q7 WHY DOES IT SHOW THE ERROR HMI CAPACITY IS NOT ENOUGH WHEN DOWNLOADING THE PROGRAM?	
	Q8 How to choose the download cable of HMI?	
	Q9 WHY THE PROGRAM CAN NOT BE UPLOADED? HOW TO SET TO UPLOAD THE PROGRAM?	
	Q10 HOW TO CHOOSE THE RIGHT COMMUNICATION CABLE?	
	Q11 WHY THE SCREEN CAN NOT COMMUNICATION CABLE?	
	Q12 WHY THE SCREEN CAN NOT COMMUNICATE NORMALLY AND IT DISPLAYED ERROR COMMUNICATION F	
	Q12 WHY THE COMMUNICATION SPEED BETWEEN TP, TH SERIES HIVES AND COMMUNICATION EQUIPMENTS IS S	
	Q13 How to change the download mode of HMI to communication mode?	
	Q13 HOW TO USE THE BROADCASTING FUNCTION OF HMI?	
	QT4 FIOW TO USE THE BRUADCASTING FUNCTION OF HIVIT	500

Q15 How to set when the screen is slave station?	307
Q16 WHAT SHALL WE DO IF HMI DOES NOT SUPPORT THE CURRENT EQUIPMENT MODEL?	307
Q17 Why the HMI only can read the data but cannot write when communicating with Omron PLC?	307
Q18 CANNOT PRINT THE WHOLE CONTENTS WHEN USING MICROPRINTER.	307
Q19 How to calibrate the screen of HMI?	307
Q20 How to calibrate the system time in the HMI?	308
Q21 How to modify the password in the HMI?	308
Q22 WHICH MODEL SUPPORT U-DISK DATA IMPORT AND EXPORT?	308
Q23 CAN THE MOUSE CONNECT TO THE USB-A PORT OF HMI?	308
Q24 CAN THE REGISTER IN THE KEEPING AREA WITHOUT ELECTRICITY IN THE HMI BE EXPANDED?	308
Q25 What is the function of the HMI dail switch?	309
Q26 How to open the advanced functions of HMI?	309
Q27 How to modify the Chinese input and the font size of historical events in the software?	310
Q28 How to display the time and the week in HMI?	311
Q29 IS THE HMI PASSWORD FUNCTIONAL AGAIN AFTER OPEN?	311
Q30 How to clear the data in trend map and data grid?	311
Q31 How to make the scroll texts in the screen?	313
Q32 How to set password for HMI components?	314
Q33 How to switch I/O terminals of PLC in the HMI?	315
Q34 How to make a keyboard in the software?	316
Q35 Why the software cannot operate the off-line simulation?	316
Q36 Why the on-line simulation shows communicating?	317
Q37 WHICH SOFTWARE DOES THE OP560 USE?	317
Q38 CAN THE PROGRAM OF MP SERIES BE CONVERTED TO THE PROGRAM OF TP, TH, TG SERIES?	318
Q39 CAN THE HMI PROGRAMS OF DIFFERENT TYPES BE CONVERTED TO EACH OTHER?	318
Q40 How many functions can be added in function button or function field?	318
Q41 How to calculate the PFW quantity used in the program?	318
Q42 WHAT'S THE MEANING OF PSW/PFW/PSB/PRW/PHW?	320
Q43 WHY DOES THE HMI SCREEN SHOW CHIP PICTURE?	321
Q44 Why does the HMI screen become white?	322
Q45 THE HMI TOUCH SCREEN HAS PROBLEM?	322
Q46 What is the operating temperature and the storage temperature of HMI?	322
7 TOUCHWIN V2.D NEW FUNCTIONS	373
7-1. MULTI-LANGUAGE	
7-2. ETHERNET FUNCTION	
7-2-1. Make Ethernet operation	325
7-2-2. Communicate with Siemens S7-1200 PLC	328
7-2-3. Communicate with TBOX	332
7-3. Show the button address	
7-4. Save encrypt	
7-5. Ватсн сору	337
7-6. Font batch setting	339
7-7. HIDE THE BUTTON	340
7-8. Hex Keyboard	340

7-9. PICTURE ROTATION	341
7-10. Set limit through register for data input button	342
7-11. BUTTON ALIGNMENT	343
7-12. UNDO	343
7-13. VARIABLE STRING	343
7-14. IMPORT/EXPORT DATA TYPE	
7-15. PRINT FUNCTION	
7-16. PROPORTION FUNCTION	
7-16-1. Proportion function of data input	
7-16-2. Proportion function of data display	
7-17. UPPER/LOWER LIMIT FOR CALCULATION RESULT	350
7-18.Scrolling text	351
7-19. DYNAMIC SPECIFIED FILE NAME FOR DATA IMPORT AND EXPORT FUNCTION	352
7.20 ROTATE ANIMATION	353
7-21. MODBUS FUNCTION CODE SWITCHING	355
7-22. PUBLIC SCREEN	355
7-23. SCREEN SAVER	355
7-24. TURN OFF THE BACKLIGHT	
7-25. Shielding user-defined device and station NO.	

1 TouchWin editing software

1-1. Installation and uninstallation of TouchWin editing software

1-1-1. Installation

If you want to install more than two versions of editing software, you need to choose different installaton paths. If you make overwrite installation, the software will operate unusually and even not operate.

1. Software source

CDROM or enter the xinje company website <u>www.xinje.com</u> to get the installation software and the installation instructions.

2. Hardware settings of computer

CPU: above INTEL Pentium II

RAM: above 64MB

HARD DISK: above 2.5GB the disk space can not be less than 1GB

DISPLAY: the resolution ratio of 32 bit true color display is above 800 x 600

3. Operating system

Windows 98/Windows 2000/Windows XP/Windows ME/WIN 7

4. Install steps (for example V2.C.6 simplified Chinese version)

(1) find the "setup.exe" in the installation file and double click it, then the following dialogue box will appear:

🔂 Setup - TouchWin 2012 Edit	
Setup - TouchWin 2012 Edit	Welcome to the TouchWin 2012 Edit Tool Setup Wizard This will install TouchWin 2012 Edit Tool V2.D1h on your computer. It is recommended that you close all other applications before continuing. Click Next to continue, or Cancel to exit Setup.
Setun	Next > Cancel

(2) click the "next". The following will appear on the screen, then choose the "I accept this

agreement" and click the "next";

Betup - TouchWin 2012 Edit	rtant information before continuing.
	Please read the following License Agreement. You must accept the terms of this agreement defore continuing with the installation.
Setup	< Back Next > Cancel

(3) Input the username, company name and serial number. Serial No. is "XinjeTouchWin". (you can copy from the "serial_no.txt" in the software setup package) Then click the "next".

Setup - TouchWin 2012 Edit	Tool	
User Information Please enter your information.		
	User Name: TXB Organization: Serial Number:	
Setup	<back next=""></back>	Cancel

(4) click the "browse" and set the software installation catalogue or use the default installation path, then click the "next".

1 Setup - TouchWin 2012 Edit T Select Destination Location Where should TouchWin 2012		
	Setup will install TouchWin 2012 Edit Tool into the following folde	er.
	To continue, click Next. If you would like to select a different fold	ler, click Browse.
	At least 496.0 MB of free disk space is required.	
	F:\TouchWin 2012 Edit Tool	Browse
Setup	< Back Next >	Cancel

(5) click the "browse" and choose the shortcut path of creating the program in the start menu.

🕞 Setup - TouchWin 2012 Edit Tool		_ _ X
Select Start Menu Folder Where should Setup place the prog	ram's shortcuts?	
	Setup will create the program's shortcuts in the following Start Menu fold	er.
	To continue, click Next. If you would like to select a different folder, clich Xinje\TouchWin 2012 Edit Tool	k Browse. Browse
Setup	< Back Next >	Cancel

(6) click the "install" button according to guide. At last click the "finish" button to install the software successfully.

(7) The following shortcut will appear on the desktop after finishing the installation. Please double click the icon to open the software.



1-1-2. Uninstall

1. Click the "start/program/ Thinget/TouchWin for TH/ B unload" or double click "

2. According to the step one, click the "yes(Y)" to confirm to uninstall the software.

3. click the "confirm" button. After uninstalling the software, please delete the catalogue folder.

1-2. Installation and uninstall the USB download cable

USB download cable is only suitable for TH, TG series HMI.

TH, TG series HMI support the USB2.0(USB-B) standard communication port. It is in the top right corner on the back of HMI. It can realize high-speed downloading and its transmission rate can be up to 480Mbps. This section will introduce how to install the USB download cable driver and download the program.

Now USB download driver has two kinds of installation modes in the system of Win98, WinXP, Win7-32 Bit. They are automatic installation and manual installation. It only can be installed manually in the system of Win7-64Bit.

1. Automatic installation

Concrete operations

(1) choose the relevant USB drive setup bag according to the relevant operation system. Then double click the "installvista32.exe".



(3) use the USB download cable to connect HMI USB download port and computer USB port.

then give the HMI power again and download program.

2. Manual installation

Concrete operation

- use the USB download cable to connect HMI USB download port and computer USB port. Then give the HMI power again. The catalogue box "find the guide of new hardware" will appear. Please choose "no" and click the "next".
- (2) Choose the "install from list or assigned address (advance)", then click the "next".
- (3) choose "include this place in the search" in the option of "search the best drive program in those places". Click the "browse" and find the relevant drive file. Click the "confirm", then click the "next".

Win98 system should choose Win98. WinXP and Win7-32Bit system should choose WinXP. Win7-64Bit system should choose Win7.

- (4) Click the "finish" to install the drive successfully.
- (5) Download program.

3. Uninstall the USB download cable drive

(1) Use the USB download cable to connect HMI USB download port and computer USB port. Then repower the HMI, and right click the "my computer" to choose "device manager". Click the "universal serial bus controllers", then you can see the information of installed USB drive such as "Thinget TH USB Device".

(2) According to above operation, choose the "Thinget TH USB Device". Right click to choose "uninstall".

(3) Click the "confirm" button, then the drive will be uninstalled.

2 Simplified project manufacture

The characteristic of TouchWin editing software is simple and fast. It provides an ideal editing platform for beginners or those who have some basis. This chapter introduces the use method of HMI editing software by a simple project manufacture.

Please confirm the HMI type and the communication equipment type before making the screen. This is the premise of making the screen program and equipment operate normally.

2-1. create project

- 1. open the software and click the standard tool bar "D" icon or "new" in the "file" menu.
- 2. Choose the correct HMI type.

Please select		
HIGO SERIES TOUCH PANEL		
I MH60 SERIES TOUCH-CONTROL PANE		
E- TG60 SERIES TOUCH PANEL		
TGA62		

3. Set PLC port and choose the correct PLC type and set the communication parameters.

Do not useF	LC Port	
Thinget XC		E
Thinget FC	Series	=
Mitsubishi F.	X Series	
Mitsubishi F.	X3U/G Series	
Mitsubishi Q	Series	
Mitsubishi F.	X BD(232/485)	
Siemens S7	-200 Series	
Siemens S7	-300/400	
Omron CPM	/CQM Series	
Ommon CP/(1/CS Series	
Parameters	19200, 8, Ever	n, 1

4. Set download port. When Download port communicates without external equipment, please choose "don't use Download port". When Download port communicates with external equipment, please choose the correct equipment type and set communication parameters.

DownLoad Port	
Do not useDownLoad Port	
Thinget XC Series	
Thinget FC Series	
Mitsubishi FX Series	
Mitsubishi FX3U/G Series	
Mitsubishi Q Series	
Mitsubishi FX BD(232/485)	=
Siemens S7-200 Series	
Siemens S7-300/400	

5. Set expanded port like Download port. Please choose the "unused equipment" when expanded port communicates without external equipment. Please choose the correct equipment type and set communication parameters when expanded port communicates with external equipment.

Do not useExpand Port	
Thinget XC Series	
Thinget FC Series	
Mitsubishi FX Series	
Mitsubishi FX3U/G Series	
Mitsubishi Q Series	
Mitsubishi FX BD(232/485)	
Siemens S7-200 Series	
Siemens S7-300/400	

Only TH765-NT3, TH765-NU3 needs to set expanded port. Please pay attention to the operation.

6. Input name, author and remarks according to requirement. Click the "finish" button at last, then the project will be created.

工程				×
	名称	工程		
	作者			
	备注			
		,		
< 上一步 (B) 下一步 (D) > 完成 取消				

2-2. Screen editing

We will make a simple button. The function is to set ON /OFF the PLC output terminal Y0.

1. Bit Button

Click the menu "part/operate/bit button" or icon "\$", click in the editing screen.

Object

Object type: set to "Y0"

B	utton					
	Object	Operate	Button	Color	Position	
	D	ation evice rStaNO	PLC Port	0 Sta	ation	▼ 1
		oject bjType	ŕ	•	0 indirect	

operate

Button operation: set to "reverse".

Button						
	Object	Operate	Button	Color	Position	1
	Button					
	🔘 Set ON 🔘 Set OFF 💿 Reverse 🔘 On Instant					

■ button

text: input "reverse"

Button	
Object Operate Button Color Position	
Text More Language	
Reverse	*
	~

2. Lamp

Click the menu "part/operate/lamp" or icon "" click in the editing screen, and set attributes in the attribute catalogue box.

object

object type: set to "Y0".

Ŀ	amp							
	Obje	ect	Lamp	Twinkle	Color	Position		
			ation — evice	PLC Port				•
		Vir	StaNO		0 St	ation		1
			iject ojType	Y	•	indirect	0	

2-3. Off-line simulation

To debug the program, you can simulate the program in the software without connecting the PLC.

- 1. Click the menu "file/off-line simulation" or icon "
- 2. Click the "reverse" button. You can set ON and set OFF the Y0.



2-4. On-line simulation

Simulate practical operation situation of the HMI and PLC in the computer. Realize the monitoring function for lower-computer. (PLC should be connected to computer, and the operation time of on-line simulation should be within half an hour)

1. click the menu bar "file/on-line simulation" or "on-line simulation" icon " ******", the following catalogue box will appear. Please click the "ok" button to enter the simulation screen.



on-line simulation only support equipment of Modbus RTU protocol. Such as XINJE

PLC, XINJE inverter and so on.

2. Click the right key of mouse in the blank of screen. Choose the "Com Port" in the catalogue box, and set the PLC Port to the serial port of connecting to the computer. The other keep default. Close the "COM Port" catalogue box at last.

Com Port	
PLC Port	COM3 ▼
Download P	ort ▼

- Log history record of logging in and quiting time
- About informations about AutoWin version
- Com Port the above catalogue box will appear. Set the computer serial port number which is connected with HMI PLC port /Download port.
- ➢ Exit exit

3. Please click the right key of mouse in the blank area again after those operations above. Choose the "Exit" to exit current on-line simulation operation, then open the on-line simulation again to perform the simulation function for lower-computer PLC.

If "communicating" window appears in the on-line simulation screen, you need to check if the setting is correct for "PLC Port". Then check if you open the simulation screen again after exiting simulation operation. Then check if the serial port is occupied by other softwares.

2-5. Program download

TouchWin software support two kinds of download style, and they are common download and complete download. Please choose the revelant download cable to download according to different kinds of HMI. This case uses USB download cable to download program. If you want to know the serial port download, please refer to the HMI hardware handbook.

2-5-1. Common download

Click the menu bar "file/download" or "download" icon " 🚔 ", then you can download the program. This download style doesn't have upload function.

2-5-2. Complete download

Click the "complete download" icon "¹, then you can download the program. This download style can upload the HMI program to computer.



the following versions can not support upload function

(1) V2.78 version doesn't have complete download function. So the program can not be uploaded.

(2) V2.99-V2.C.6 versions should set parameters in the software. Please choose the "complete download" in "tool/option", and choose "complete download".

If the program has been downloaded to HMI and you didn't set as above before downloading, program can not be uploaded into computer.

2-5-3. U flash disk download

Note: only suitable for V2.C.6d to V2.C.6i version software.

TH (-U), TG (-U), TG (-E) series HMI has USB-A(USB2.0) port. You can use U flash disk to download HMI program to many HMI. The process of downloading is simple and fast. Suitable occasion: the local with machine has no computer or it is far away from office, no download cable, equipment need to upgrade and update program.

Concrete operations:

- 1. Click "export project" in the "file" menu.
- 2. Following interface will appear in the editing screen. Please click "ok" button and export data.

export roject	
Export complete !	
Export project to file (Panel via U-Disk.	C:\Export.dat', it can be loaded into
	ОК

Export Project

3. According to the above operations, open the C:\ in the computer to find Export.dat and copy it into the U flash disk.



4. Set the third DIP switch of HMI to ON. Then repower the HMI, and the following picture will

appear in the screen.



5. Insert U flash disk ino the U flash disk port and click "import". Set the third DIP switch of HMI to OFF after dowloading, and repower it to display program.



- (1) The chosen type should be same as HMI when you are programming.
- (2) If the chosen type is wrong, click "import". The interface of import program will not appear and the alarm of inconsistent type will not appear also.
- (3) U flash disk download function only can be supported by V2.C.6d-V2.C.6i version software. But this function is forbidden in the V2.C.6i version. So customer need to install 2C.6d version software if he wants to use the U flash disk download function. After installing the software, you need to download a empty program to use U flash disk download function. It is aimed at updating the lower-computer system. If not, the above import interface will not appear even if the third dial switch is ON.
- (4) U flash disk download function, insert the U flash disk into the HMI. The U flash disk will import program to HMI automatically if there is no operation after 3s. You can not pull out the U flash disk in the process of importing. If not, the program can not be downloaded successfully.
- (5) You need to use U flash disk which its capacity is less than 32G.
- (6) It doesn't support mobile HDD.

2-6. Upload program

HMI support uploading project. It is useful for data resource management. Click the "upload" icon "a" to upload program. Please make the operations in chapter 2-5-2 at first. If not, the message "lack project" will appear.

Upload		
Lack Project!		
	ОК	

■ No encryption You don't need to input password. It is open to all customers

Upload		×
Uploading		
	Cancel	

Encryption You need to input password to upload the project

Upload	Password	
Linked panel	Please Input Password	
	OK Cancel	

3 Software screen and window

This chapter will have complete introductions of HMI editing software TouchWin.

Part of this handbook is based on primary function software. If you want to know advanced functions, please contact us to get advanced function manual.

3-1. Software structure

	▲ ▲ ▲ ▲ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
可却度回胡 日	100% ▼⊕ ∰ ∲ 0 ▼ ♡ ⊗ 物 🛱 × % % 🛆 👌 🖆
	? ?? [☆ C N ʷལ [⊼ ≷ J] □ 音 D ※ ※ [₩ = = = = = = =
⊬ { ® ~ 🔳 🕺 ≥	R 🕿 🎇 🕸 án 📾 🗟 X' 🗸 🕩 🗡 🖉 🔿 🛠 🚱 🖳 🖳 🖳 🖳 🖳 Parts and buttons
	Screen1
1: Screen1 🖍	Screen
65535: Common	
60001: Password	
60002: SetRTC	Project
60003: Password	
60004: XC Input F	
65532: PickSave	
65533: Print 👘	
65534: Alarm	/ · · · · · · · · · · · · · · · · · · ·
Window	screen edit area
60001: Commu N	bereen eur area
60003: password	
60004: password	
60005: password	
60005: password	
60011: XC Input F	
60012: XC Output	
60021: KeyBoard	
60022: KeyBoard	
60023: KeyBoard_	
60023: KeyBoard	
60025: KeyBoard_	status
ooozo, Keybuaru	
60026: KeyBoard	

- Project area about the basic operations, such as the creation, delete, copy, cut of screen and window.
- Screen editing area project screen editing platform
- Menu bar It has seven teams of menu. It contains file, edit, check, component, tool, window and help.
- Parts and buttons it contains tools such as standard, picture, operate, zoom, picture adjustment, display, status, parts, etc.
- Status bar display HMI type, PLC port connection equipment, display informations of download port connection equipment, etc.

3-2. Project area

Insert, cut, copy, paste and delete the screen, window.

3-2-1. Insert

Choose the project bar "screen" and click the right key of mouse. Please choose "insert" or click "^[a]" icon. The following attributes catalogue box will appear.

Screen		×
ID	2	
Name	Screen2	
Back Color		_
Message		
ОК		Cancel

- Screen number add the screen serial number and click ok, then the screen number can not be changed.
- Screen name project screen define name.
- Screen background the background color of project screen.
- Prompt message input relevant screen note informations.

Please click "¹" icon to change the screen attributes.

3-2-2. Cut copy paste

- 1. Choose screen2, click the right mouse and choose "cut" or "copy".
- 2. Choose project bar "screen", and click the right mouse to choose "paste" to finish the operation.



3-2-3. Delete

Choose the screen which you want to delete and click the right mouse, then choose the "delete" or click " \times " icon to delete the screen.

The insert, cut, copy, paste, delete of window are the same.

3-3. Menu bar

3-3-1. File

File contains different kinds of operation such as create, open, close, save, download project data, simulation, export project, etc.

File	Edit	View	Part	Tool	Wine		
	New		Ctrl+N				
	Open			Ctrl+O			
	Close			Ctrl+	Q		
	Save			Ctrl	+S		
	Save A	As		Ctrl+	A		
	Down	load		Ctrl+	-D		
	Export	t Projec	t				
	RunO	nLine(B)	Ctrl+	⊦B		
	RunO	ffLine(N	/1)	Ctrl+	М		
	PFW S	Set(P)		Ctrl+	۰P		
	Settin	g		Ctrl+	۰T		
	Build	SCADA					
	Last						
	Exit						

1. New



2. Open

Click "file/open" or "2" icon to open project.

3. Close

Click "file/close" to close current project. But it doesn't mean to exit TouchWin editing software.

4. Save

Click "file/save" or " 🖬 " icon to save the project.

You need to save at all times to prevent losing data at the process of editing screen.

5. Save as

This operaton is different from "save". "Save" uses new file to replace the old file based on the project. "Save as" save the current project at the form of new project. After the "save" catalogue box appears, please choose the saved path and input the file name and click "save" button.

6. Download

Download the project in the HMI, click " do or do not on the same function.



Please refer to chapter 2-5.

7. Export project



Please refer to chapter 2-5-3.

8. Run online

This function is similar to SCADA. Connect the PLC with the software; simulate the project functions in the software.



Please refer to chapter 2-4.

9. Run offline

Simulate the project functions in Autowin software without connecting the PLC.

Please refer to chapter 2-3.

10. PFW set

Initialize the PFW data after downloading program again. Click "file/PFW set", and following catalogue box will appear.

PFW Dat	a			23
Start]		End
	1.1			
A	.dd	Delete	Modify Range	Modify Data

set the address range of PFW

- Start PFW set the start address of PFW register.
- > End PFW set the end address of PFW register.
- Add click "add" after setting the start and end addresses. Then the set data range will be listed in the data set list.
- Modify range when the start and end address need to modified, please change the start or end address, then click modify range, the following message will appear, please click ok.

TWin	
<u> </u>	The pre-setting data beyond the range will be lost ,while the data in the same range will be held ,continue?
	Yes No

> Modify data modify the register data in the set range.

Set the data of PFW.

DEM

Choose the PFW register address range and click "modify data" or double click the PFW address range. Then the following window will appear.

XX-

FW[000000410] 0 0 0 0 0 0 0 0 0 FW[000000420] 0		+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	
FW[000000420] 0 0 0 0 0 0 0 0 0 0 FW[000000430] 0 0 0 0 0 0 0 0 0 0 FW[000000440] 0 0 0 0 0 0 0 0 0 0	PFW[000000400]	0	0	0	0	0	0	0	0	0	0	
FW[000000430] 0 0 0 0 0 0 0 0 0 FW[000000440] 0 0 0 0 0 0 0 0 0 0	PFW[000000410]	0	0	0	0	0	0	0	0	0	0	
FW[000000440] 0 0 0 0 0 0 0 0 0 0 0	PFW[000000420]	0	0	0	0	0	0	0	0	0	0	
	PFW[000000430]	0	0	0	0	0	0	0	0	0	0	
FW[00000450] 0 0 0 0 0 0 0 0	PFW[000000440]	0	0	0	0	0	0	0	0	0	0	
	PFW[000000450]	0	0	0	0	0	0	0				

Display data can be decimal or hex format.

Reset 0: set all the data to 0.

Set FF: set all the data to 65535(HFF).

The first address of data begins with PFW256, and PFW0~PFW255 is internal system data which is not allowed to modify. Specific content please refer to the chapter 5.

11. Setting

Parameter

Project Set	×						
Device Para	Expand Device Font Project Alternation Clock Panel						
Screen Start Screen	Screen Start Screen No.						
Passowrd							
Level Level1 Password 0							
Screen Save							
Latency Time	e After 3 Minute 💌						
Close LCI	D C Show Screen						

- Screen Define the start screen No. when the HMI start. When downloading and repowering, the first sreen is generally the main screen or the most used screen.
- Password password has the function of protecting data to improve security of program. Project password has nine levels. The range is from level 1 to 9. The first level is the lowest priority, and the 9th level is the highest priority). Level 9 password can open all the password from level 1 to 9. Level 1 only can open its own password. Level 2 can open level 1 and 2 password...
- Screen save When there is no operation for a long time, the HMI will close the backlight or jump into the assigned screen.

Latency time you can choose the waiting time according to your request or you can also choose no screen protection.

Close LCDwhen time is up to your waiting time, the backlight will be closed.Show screenwhen the time is over, it will jump to the certain screen.

Alternation

Device	Expand Device Font	Project
Para	Alternation Clock	Panel
Change	Screen Control	
Station —		
Device	PLC Port 👻	
VirStaNO	0 Station	1
Ohiost	1	
Object		
Object	D 🔻 0	
	🗖 Indirect	
	Current Screen ID	
Station —		
Device	PLC Port 💌	
VirStaNO	0 Station	1
	, ,	
Object —		
Object	D 🚽 0	
	Indirect	

 \triangleright Change screen control jump screen according to the data of register; for example, the register data is 10, it means to jump to screen ID10. System will clear the data of register to 0 after jumping screen.

Device current equipment port of communicating

Virstano communication equipment address No.

Object set the object style and address No. of register controlling screen transform.

Station No. Connected equipment No.

Indirect current register address changes by the data of indirect designated register.

Dx[Dy]=D[x+Dy data], (x, y=0, 1, 2, 3....)

display the number of current screen. for example, if the current \triangleright report current screen ID screen is 7, the register will display 7.

Device current equipment port of communicating

Virstano communication equipment address No.

Object set the object style and address No. of reporting current screen number register.

Station No. Connected equipment No.

Indirect current register address changes by the data of indirect designated register. Dx[Dy]=D[x+Dy data], (x, y=0, 1, 2, 3....)



virtual station: it is not open to use for all components. Follow-up no longer need.

clock

oject Set			
Device Para	Expand Device Atternation	Font Clock	Project Panel
Use R Station – Device VirStaN0	PLC Port 💌	n 📔	1
Object	D V Ind	0 irect	

Use RTC this function will export current time to related equipment for saving data.
 Device current equipment port of communicating

Virstano communication equipment address No.

object set the object style and first address No. of exporting clock register; if the address is set to D0, D0~D6 will display year, month, day, hour, minute, second and week. They occupy seven register addresses

station connected equipment No.

indirect current register address will change by the data of indirect designated register. Dx[Dy]=D[x+Dy data], (x, y=0, 1, 2, 3.....)



Time display is in hex format.

Panel

Project Set				×
Device Para	Expand D Alternat	· ·	Font Clock	 Project Panel
Model	B/TH765-	N/MT/UT	•	
Description	800*480, 6	5536 colors		
Zoom				
Same Size	e C	Same Ratio	,	
C Small Rat	tio O	Big Ratio		
The size of t unchanged.	he value of th	ne compone	ents is	
		Set parar	meter	

- Model display current HMI types. If you want to modify the display type and choose new display type, please click "ok" to make it effective.
- descriptiondisplay current screen size and pixel;

Set parameter set the internal spaces of HMI and you can modify the number of PFW register and PSW register.

Set	-
PFW Num	4096
PSB Num	1024
VisPSW Num	4096
PriPSW Num	4096
Cache Num	1
ОК	Cancel

PFW number set the total number of PFW in storage area

PSB number set the total number of PSB in storage area

Visible PSW number normal PSW number. Such as data area of data input and display, and so on.

Invisible PSW number internal storage number of data. Such as the automatic data storage area of historial trend diagram and real-time trend diagram.

Cache number number of PFW data cache register

Specific contents of PSW, PFW, PSB, please refer to the fifth chapter.

Zoom when you are changing display type. Proportional relationship of component's width and height size and display size in the screen.

Same size width and height value of components unchanged

Same ratio zoom the width and height value of components according to aspect ratio of display.

Small ratio zoom the width and height value of component according to the lowest aspect ratio of display.

Big ratio zoom the width and height value of component according to the highest aspect ratio of display.

Device

Project Set		×
Para Device	Alternation Clock Expand Device Font	Panel Project
Single	C Host Net C Slav	ve Net
PLC Port		
Model	Thinget XC Series	•
Param	19200, 8, Even, 1	
Download P	ort	
Model	None device linked	•

- Single control system is one screen one machine or one screen many machines. Adjust HMI to unit mode.
- Host net control system is many screens one machine or many screens many machines. This HMI is in the master mode.
- Slave net control system is many screens one machine or many screens many machines. This HMI is in the slave mode.
- PLC port
 Model
 PLC port connected equipment type

Parameter bit rate, data bit, verification mode, stop bit display. Click "…" to

modify parameters.

- Download port
 - Model Download port connected equipment type. "Don't use Download port" in default situation. It means that Download doesn't participate in communication of external equipment.

Parameters bit rate, data bit, verification mode, stop bit display. Click "……" to modify

parameter.

Expand device

This content is mainly related to system attribute of HMI and equipment which is connected with HMI by expanded port.



1	10	-
	MI.	0
E	3	1
	1	

TH765-NT3 and TH765-NU3 have expand port.

■ Font

This function is used to set input font of project screen. The font can be modified by "settings".

Project Set			×
Para Device	Alternation Expand Device	Clock Font	Panel Project
Demo	String	etting	

This setting is only effective for input real-time event display and historical event display of components.

project

This attribute records project informations, such as name, writer and remarks of this project.

Project Set			×
Para	Alternation	Clock	Panel
Device	Expand Device	Font	Project
Name Proje	ect		
Author			
Remark			

12. Build SCADA

Its function is the same to on-line simulation.

Steps:

Open "file/build SCADA". Please choose saving path. The AutoWin file will be generated.

Double click " AutoWin.exe ", then you can simulate the HMI project in the software.



please refer to chapter 2-4 for details.

13. Last

If you have opened or edited some projects recently, software will save names of these projects automatically. It will help you find them faster and you don't need to check their paths any more. Please you can click the editing project name to edit.

14. Exit

This function is used to exit TouchWin editing software, but it is different from the "close" operation. If you don't save the project, the saving window wil appear to prevent losing operation.

3-3-2. Edit

Editing menu is used for editing component. "cut, copy, paste and cancel" is corresponding to shortcuts of standard tool bar. As the following picture:

Edit	View	Part	Tool	Windo
	Cut		Ct	rl+X
	Сору		Ctr	·l+C
	Paste		Ct	rl+V
	Undo		Ct	rl+Z
	Replace		Ctr	l+H
	Public (Unit		
	Private	Unit		

👗 🗎 💼 🐖 from left to right: cut, copy, paste and cancel

😲 🕑 from left to right: public unit, private unit



Please refer to chapter 4-1-1 for details.

Replacement

Replace		×
Object Find what	Bit 🗨	Replace
Replace with	MO	Cancel
Object Num	1	
	Replace In © Current Screen © Whole Screen	

- > Object the replaced object type: bit, register, nregister
- > Find what the first address of primary object that you want to replace.
- Replace with replace first address of new object
- Object number replace the number of "bit" or "register"
- Replace in

Current screenreplace only in the scape of current screenWhole screenreplace all the screens of this project

For example: replace D5 with D0 of current screen. Please set as following picture. Click "replace" and then click "finish".

Replace		×
Object	Register	
Find what	D0	Replace
Replace with	D5	Cancel
Object Num	1	
	Replace In Current Screen Whole Screen	

3-3-3. View

It is used for displaying tools and columns. It contains standard bar, status bar, project area, drawing, zoom, status change, operate, part, align, advance, advance2, panel and CAD. Advance and advance2 display grayish white. It indicates that it is not activated. Only when the TouchWin editing software is in the status of advance function, it can be activated. CAD instructions please refer to "intelligent flexible manufacture system manual based on CAD".



3-3-4. Part

Part menu is used to edit part. It is corresponding to icons in tool bar.

Part] Tool Window Help	
	Text	•
	Operate	•
	Display	•
	Input	•
	Keyboard	►
	Bar	•
	Dynamic Map	
	Window	►
	Scheme	►
	Function	►
	Tool	►
	Device	►
	Inverter Alram Information	
	Picture Display	•
	Sample Save	





Please refer to chapter 4-3 for details.

3-3-5. Tool

This content contains basic tool segment, rectangle, ellipse, fold, map and options. The front five options are corresponding to tools in drawing bar. You can make the frame, polygon block and so on by cutshorts in drawing bar.

Tool Window Help	
Line	
Rectangle	
Ellipse	
Fold	
Map	
Option	\ \ D O O O O 🖨 🖬 🛃 🔗 🔖 📷

Option

This content refers to special settings, such as displaying, downloading data and uploading data, etc.

Option		×
Grid Size Move Grid Auto Save 1 (M)	Zoom Ratio(%) Grid Radio	100
DownLoad Port COM1 💌	Station Com Period	300000
TW Display Mouse Cursor	Hit Key Errors	10
Print • Top to bottom	C Bottom to top	
Print	Build and Exit	User Mode
ОК		Cancel

grid size ۶

move grid

least grid number when moving object.

Grid ratio set density of grid in screen. The smaller values are, the denser they will be.

For	example: when the "display grid" is chan	ged from "20" to "5", difference is as follow:
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	Display grid: 20	display grid: 5
	-	saving time to prevent losing data when launching this project data manually without lauching this option.
۶	Download port	
	default communicatin port first choi	ce when you are downloading data.
\triangleright	TW	
	Display mouse cursor check if display	mouse in the screen according to TW series.
	Hit key errors touch sensitivity	
\triangleright	print	
	top to bottom/bottom to top set print	ting direction
\triangleright	other	
	Undo enable the undo operation	15
	optimize enable optimization operat	ion for download serial port
	build and exit enable compiling function	n block when exiting.
	User mode open or close advance fur	nction.

3-3-6. window

Window menu is mainly used to edit screen window. It contains create window, cascade, tile and arrange icon.



- ➢ New creat a new screen
- > cascade arrange all the opening screen in the mode of cascade
- ➤ tile arrange all the opening screen in the mode of tile
- ➤ arrange icons arrange the icons

3-3-7. Help

Version and copyright information of software or click "?" icon.
3-4. Screen editing area

You can right click the part in the screen editing area.



- Property part setting, such as "display", "font", "color" and "location", etc.
- Lock relative position lock. After operation, this component can not be moved. You can realize the moving function by "unlock".
- > Public unit the unit can be used in all the screen
- \triangleright cut cut the part
- \triangleright copy copy the part
- ➢ delete delete the part
- save save current part into material store, and you can directly use it from material store.

3-5. Tool bar

Tool bar refers to all the operations about parts and screen. Relative font will appear when you move the mouse to relative component in operation. The specific distribution is as follows:



Drawing tool bar: line, animation, webpage, etc. webpage can only operate simulation or configuration.

6	
_	

Material store: add and save materials which are manufactured at the time of editing project.

A 🗛 🙀 😰 🏀 🥥 🎀 🚥 🎟 🖾 🖾 🖾 🗳 📾 🎬 💶 📱 🥔 🕞 🗔 🕸 🏷 🗆 🕬 🌆

Parts tool bar: it contains font, operation key, display, input, keypad, bar, dynamic map,window, recipe, function, continue column map, etc.



specific content about parts tool bar please refer to the fourth chapter.

🕅 🕝 ④ 🔆 🔆 🎬 🖸 頁 🚃 👰 👰 🖳 🤍 🗷 🞰 🗠 🖄 🖾 🗁 🔯 🗉 📰 📰 📰 4. /	4
--	---

Display tool bar: it contains basic tool, equipment, inverter alarm information, picture display, saving collected data, etc.



Standard tool bar: it contains new, open, save, cut, copy, paste, cancel, about, etc.



Status tool bar: it contains button status, animation status, etc.



Picture adjustment tool bar: it contains align left, align centre, align right, align top, align middle, align bottom, etc.



Operation tool bar: it contains public unit, private unit, create screen, screen attribute, delete, off-line simulation, on-line simulation, download, upload, complete download, etc.



Zoom tool bar: it contains zoom out screen, display proportion selection, zoom in screen, grid display, etc.

3-6. Status bar

Display current HMI type, PLC port communication device; coordinate position of the mouse in the editing screen, etc.

	B/TH765-N/MT/UT	PLC Port: Thinget XC Series	Download Port:None device linked	X: 324, Y: 417	NUM	
--	-----------------	-----------------------------	----------------------------------	----------------	-----	--

4 Parts

4-1. Overall operation

Overall operation will main refer to the following tool bar.



4-1-1. Standard tool bar

1. cut " 👗 "

Choose target object and cut it to shear plate. Choose target element or many elements at operation, then click " $\overset{\,\,}{\overset{\,\,}{\overset{\,\,}{\overset{\,\,}{\overset{\,\,}{\overset{\,\,}}}}}$ ".

2. copy" 🗎"

Choose target element and copy it. Choose target element or many elements at operation, then click "

The difference with cut is: the cut operation makes the original component not exist, but the original component still exists after copy operation.

3. paste" 🛍 "

It is the operation of "cut" and "copy". When you do "paste" operation after cutting or coping object element, you have moved or copied successfully.

4. cancel"∽"

Recover historical operation by "cancel" button. This operation can not be used aquiescently. You need to choose "cancel" of "option" in the "tool" manually.

Specific content about " C 🖻 🛱" and "?", please refer to chapter 3-3-1 and 3-3-7.

4-1-2. Operation tool bar



1. Public unit " 🔽"

The part can be used to all project screens. It is the same to copying part to all screens.

2. Private unit "😵"

This part is only effective for current screen. It is the same to deleting the same part which is copied to other page.

3. Create screen"¹

Specific content please refer to chapter 3-2-1

4. Screen attribute " 🗳 "

Choose the screen name which is needed to be modified in project bar. Click "¹" icon in the overall tool bar to open catalogue box of screen attribute, then you can modify screen attribute in it.

	Screen	×
	ID	1
	Name	Screen1
⊡	Back Color	
Screen	Message	
1: Screen1		
60002: SetRTC		_
60003: Password	ОК	Cancel
Project bar		screen attribute

For the built screen, its number can not be modified.

5. delete screen" ×"

Specific content please refer to chapter 3-2-3.

4-1-3. Picture adjustment

It is mainly used to arrange globality of chosed elements.

Constant "Align tool bar" can only be used when two or more than two elements are chosed at the same time. If not, the tool bar will be grey. It means that it can not be used.

For example: as the following picture, elements don't arrange in a line in the screen. You can choose all of them and click align midde "^[].

Before align



4-1-4. Zoom tool bar



4-1-5. Status tool bar

" can reverse the status.
 For example: indicator light " in the screen. Choose this element to reverse the status of ON and OFF by ".



2, "**0** " can choose the status of dynamic picture. There are 32 kinds of status display.

For example: it is dynamic picture "" in the screen. You can display relative status in the screen by choosing status number. Below is the display of "0" status and "20" status.



4-2. Drawing tool bar



Drawing tool bar contains line, arc, rectangle, round rectangle, ellipse, fold, polygon block, frame, map, web, move animal, rotate animal. Web is used in configuration to log in a website or open a designated path. Here we don't describe detailly. Move animal and rotate animal is refered to the application of advance function. Specific instructions please refer to "HMI advance function manual".

4-2-1. Line

1. Click the "``` icon in the drawing tool bar, and drag the left mouse. Then move the cursor to the end to release the left mouse. If you need to cancel this operation, please press "ESC" or click the right mouse.





This line can move location, change the size, rotate angle, etc.

2. Double click "line" or choose "line", then click right mouse. Choose "attribute" or set the attribute by " " button.

line

Line	
Line Color	Position
Pattem	Real line
Thick	1
Light	0

- > Pattern "real line", it can not be modified.
- Thick change thick of line according to the value. The greater the value, the greater the width. (integer between 0 and 255)
- ➢ light without this function now
- color



- \succ kind choose the color type which is need to be modified.
- \succ color set the color of the kind.
- position

Line		×	
Line Color Position			
Position	Size		
X 355	Width	-155	
Y 180	Height	-40	
Animal			
Horizontal			
Vertical			
🗆 Lock 🗖 Zo	om Ratio		

- position use the upper-left point as origin of coordinates(0, 0), and set the X, Y coordinate values
- X position set the coordinate value of X axle
 Y position set the coordinate value of Y axle
 > size set the width and height of line
 width (W) set the width of line
 height (H) set the height of line
 > animal set if the line can be moved

horizontal set horizontal display position of line according to the value of register. Modify the coordinate value of X axle.

X axle coordinate value = X position+current value of register.

vertical set the vertical display position of line according to the value of register. Modify the coordinate value of Y axle.

Y axle coordinate value=Y position+current value of register

- lock set if the line can be moved when you are editing.
- Zoom ratio set if it can be zoomed according to its proportion when you are changing the size.

4-2-2. Arc

1. Click the "```` icon in the drawing tool bar. Drag the left mouse and move the cursor to the end. Release the left mouse to finish it.



- Start point, end point move this point to change length of arc \triangleright
- Boundary point move boundary point to change the width and length of arc \triangleright
- 2、 double click "arc" or click right mouse, and choose "attribute" or set the attribute by "

button.

line

Arc	
Line Port	Pie Color Position
Pattern	Real line 💌
Thick	1

- "real line", it can not be modified. \geq pattern
- \triangleright thick change the width of line according to the value. The greater the value, the greater the width(integer between 0 and 255).

Port

Arc	X
Line Port Pie Co	olor Position
Start 260 Y 135	
Angle Start 90 End 274	

- \triangleright start point
- End point \triangleright

 \triangleright

- set to display the horizontal and vertical coordinate position of arc. Angle set the angle of arc.
- Starting angle the central point of arc is the basic point. Make the direction of

set to display the horizontal and vertical coordinate position of arc.

horizontal line crossing the basic point as the horizontal 0°. The angle cross the horizontal line and connect line of starting point and basic point.

Ending angle the ending angle is the angle crossing the horizontal 0 and connection line of basic point and ending point.

As the following picture, you can measure angles of the starting point and ending point which are 90 $^{\circ}$ and 180 $^{\circ}$.



pie

Arc		
Line Port	Pie	Color Position
Pie		

pie connect starting point, ending point and central point of arc to be a closed graph which is named pie.



fill

After choose the "pie", choose this component again and right click it to choose "attribute". you can also double click this component, and you will find that the title of attribute catalogue box has changed from "arc" to "pie" and add the opion of "fill". As the following picture.



- > None the interior of pie is performed as transparent.
- Solid choose the target tone from the pull-down list and you can choose the tone you need or customer color from "more".
- Dot fill the internal of pie in the form of punctiform pattern. The greater the points, the greater the intensive degree;
- Meek choose target tone and the desalt proportion of starting tone should be 0%. When the desalt proportion is positive value, the tone will be desalted. When the proportion is negative value, the tone will be deepening.

➢ Hatch the internal of pie is filled in the form of pattern.

Origin point coordinate the origin point position of pattern contains X ordinate and Y ordinate.

Foreground colorchoose the own tone of patternBackground colorchoose the filled bottom color of pattern.

➤ Linear

First color the tone choosing of starting point of graph

Last color the tone choosing of ending point of graph

Direction of gradual change you can choose the gradual change type and direction of color. You can also set the angle value of "angle setting".

style color the tone of color is as same as starting color

- style type choose the filling mode of tone
- > Centerar

Central colorchoose the central tone of filling objectBorder colorchoose the border color of filling objectCentral point X-%the relative position of central point X axleCentral point Y-%the relative position of central point Y axleRatio X-%X direction proportion occupied by central pointRatioY-%Y direction proportion occupied by central point

color

Pie	
Line Port Pie	Fill Color Position
Kind	Color
Frame Color	
	More
	More

- ➢ kind choose the color type which need to be modified
- color set the type color which is chosed by you
- position

ie	
Line Port Pie Fill	Color Position
Position	Size
X 26(Width 170
Y 135	Height 59
Animal	
Horizontal	
Vertical	
	m Ratio

position make the upper left point to be the origin point coordinate (0, 0), and set the coordinate value of arc X and Y.

X position set the axle coordinate value of arc X

Y position set the axle coordinate value of arc Y

- ➢ size set the width and height of arc
 - width (W) set the width of arc
 - height (H) set the height of arc
- > animal set if the arc can be moved

Horizontal set the horizontal position of arc according to the register value. Modify the X axle coordinate value. X axle coordinate value=X position+current value of register

Vertical set the vertical position of arc according to register value. Modify the Y axle coordinate value. Y axle coordinate value=Y position+current value of register

- Lock set if the arc can be moved when editing.
- > Zoom ratio set if it can be zoomed when editing its size.

4-2-3. Rectangle

1. Click the " \square " icon in the drawing tool bar. Drag the left mouse at the starting point. Move the curser to the end and release the left mouse to finish it.



- Starting point and ending point move this point to change the length and width of rectangle by equal proportion.
- > Boundary point move this point to change the width or height of rectangle.

2. Double click"rectangle" or choose "rectangle" and click the right mouse. Choose "attribute"

- or set the attribute by " 💕" button.
- line

Rectangle				
Line Color	Fill Position			
Pattem	Real line	Ŧ		
Thick		1		

- > Pattern it is "real line". It can not be modified
- Thick change the line thick according to the value. The greater the value, the greater the width. (integer between 0~255)
- color

Rectangl	e		
Line	Color	Fill	Position
Kind			Color
F	rame Colo	or	
			More

- \succ kind choose the color type which need to be modified.
- ➢ color set the color of the chosed type

■ fill



- None the interior of pie is performed as transparent.
- Solid choose the target tone from the pull-down list and you can choose the tone you need or customer color from "more".
- Dot fill the internal of pie in the form of punctiform pattern. The greater the points, the greater the intensive degree;
- Meek choose target tone and the desalt proportion of starting tone should be 0%. When the desalt proportion is positive value, the tone will be desalted. When the proportion is negative value, the tone will be deepening.
- Hatch choose target tone and the desalt proportion of starting tone should be 0%. When the desalt proportion is positive value, the tone will be desalted. When the proportion is negative value, the tone will be deepen.
- ➤ Linear

Starting color the tone choosing of starting point of graph

Ending color the tone choosing of ending point of graph

Direction of gradual change you can choose the gradual change type and direction of color. You can also set the angle value of "angle setting".

style color the tone of color is as same as starting color

- style type choose the filling mode of tone
- > Centerar

Central color	choose the central tone of filling object
Border color	choose the border color of filling object
Central point X-%	the relative position of central point X axle
Central point Y-%	the relative position of central point Y axle
Ratio X-%	X direction proportion occupied by central point
RatioY-%	Y direction proportion occupied by central point

position

Rectangle	
Line Color Fill Pos	sition
Position	Size
X 165	Width 90
Y 80	Height 45
- Animal	
☐ Horizontal	
Vertical	
🗆 Lock 🗆 Za	oom Ratio

- position make the upper left point to be the origin point coordinate (0, 0), and set the coordinate value of arc X and Y.
 X position set the axle coordinate value of arc X
 - Y position set the axle coordinate value of arc Y
- > size set the width and height of arc
 - width (W) set the width of arc
 - height (H) set the height of arc
- > animation set if the arc can be moved

Horizontalset the horizontal position of arc according to the register value. Modify theX axle coordinate value. X axle coordinate value=X position+current value of registerVerticalset the vertical position of arc according to register value. Modify the Y axlecoordinate value. Y axle coordinate value=Y position+current value of register

- \blacktriangleright Lock set if the arc can be moved when editing.
- > Zoom ratio set if it can be zoomed when editing its size.

4-2-4. Round rectangle

1. Click the " C "icon in the drawing tool bar. Drag the left mouse at the starting point. Move the cursor to the ending point and release the left mouse to finish it.



- Starting point and ending point move this point to change the length and width of rectangle by equal proportion.
- Boundary point move this point to change the width or height of round rectangle.

2. Double click the "round rectangle" or choose "round rectangle" and click right mouse to choose "attribute" or set the attribute by " " button.

■ line

Round Re	ct	
Line	Round rectangle Color Fill	Position
Patte	m Real line 💌]
Thick	1	ī

- ▶ pattern It is "real line" and can not be modified
- thick change the width of line according to value. The greater the value, the greater the width. (integer between 0~255)
- round rectangle

Round R	ect				
Line	Round rect	angle	Color	Fill	Position
Rour	nd Diameter			11	

- Round diameter modify by inputing value. Greater the value, greater the round diameter.
- color



- \blacktriangleright kind choose the type of color which need to modify
- \succ color set the color of kind

■ fill



- none graph's inside will lucidly display
- solid choose the target color by pull-down list. You can choose the color which you chose by "more".
- > dot fill the graph's inside with dots. Dot's value decides the dot density.
- meek choose the target color. Desalt proportion of original color is 0%. When the proportion is positive value, the color will be desalted. When it is negative value, the color will be deepening.

▶ hatch fill round rectangle's inside with hatch.

Origin coordinate graph's origin coordinate. It contains positions of horizontal and vertical coordinate.

Fore color	choose the graph's color
Back color	choose the graph's back color

➢ linear

first color choose the graph's first color

last color choose the graph's last color

linear direction you can choose the linear type and direction of color and also can set agle value by "set angle".

Style color color tone is as same as first color.

- Style kind choose the filling mode.
- ➤ centerar

center color	choose the center color of filling object
brink color	choose the brink color of filling object
center pointX-percentage	e relative position of center point X
center pointY- percentag	e relative position of center point Y
ratioX- percentage X	K direction ratio occupied by center point
ratioY- percentage Y	direction ratio occupied by center point

position

Round Rect		
Line Round rectangle C	olor Fill	Position
Position	Size	
X 25.	Width	130
Y 100	Height	65
Animal		
T Horizontal		
Vertical		
🗆 Lock 🗆 Zo	oom Ratio	

- position make the upper left point in screen as the origin point (0, 0) and set X, Y coordinate value of round rectangle.
 - X position set X coordinate value of round rectangle.
 - Y position set Y coordinate value of round rectangle.
- \blacktriangleright size set the width and height of round rectangle.
 - width (W) set the width of round rectangle
 - height (H) set the height of round rectangle
- ➤ animal set if the round rectangle can be moved

Horizontal set the horizontal position of round rectangle according to register value, modifing the X coordinate value.

X coordinate value=X position+current value of register

vertical set the vertical position of round rectangle according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current register value

- ➢ lock set if round rectangle can be moved when editing it.
- Zoom proportion set if it can be zoomed when changing its size. Now this function can not work.

4-2-5. Ellipse

1. Click "O" icon in drawing tool bar. Drag the left mouse at the first point. Move the cursor to the end and release left mouse to finish it.



First point, boundary point, last point edit width or height of ellipse by these points ۶

2. Double click "ellipse", or choose "ellipse" and right click the mouse. Then choose "attribute" or set attribute by " 🗳" button.

line

color

 \triangleright

Ellipse		
Line Color	Fill Position	
Pattern	Real line	Ŧ
Thick		i

- it is "real line" which can not be modified. Pattern \triangleright
- ⊳ Thick change width of line according to value. Greater the value, greater the width. (integer between 0~255)
 - Ellipse Color Fill Position Line Color Kind Fill Color Frame Color More ... 🗹 Fill choose the color kind which need to be modified.
- kind color set the color of the kind \triangleright
- ≻ fill set if ellipse need to be filled with fill color.

fill



- none graph's inside will lucidly display
- solid choose the target color by pull-down list. You can choose the color which you chose by "more".
- > dot fill the graph's inside with dots. Dot's value decide the dot density.
- meek choose the target color. Desalt proportion of original color is 0%. When the proportion is positive value, the color will be desalted. When it is negative value, the color will be deepen.
- ➢ hatch fill round rectangle's inside with hatch.

Origin coordinate graph's origin coordinate. It contains positions of horizontal and vertical coordinate.

Fore color	choose the graph's color
Back color	choose the graph's back color

➤ linear

first color choose the graph's first color
--

last color choose the graph's last color

linear direction you can choose the linear type and direction of color and also can set agle value by "set angle".

Style color	color tone	is as same	as first color.
-------------	------------	------------	-----------------

- Style kind choose the filling mode.
- ➤ centerar

center color	choose the center color of filling object
brink color	choose the brink color of filling object
center pointX-percentage	e relative position of center point X
center pointY- percentag	e relative position of center point Y
ratioX- percentage X	K direction ratio occupied by center point
ratioY- percentage Y	direction ratio occupied by center point

position

Ellipse			
Line Color Fill Position			
Position	Size		
X 23(Width	135	
Y 210	Height	65	
Animal			
Horizontal			
Vertical			
🗆 Lock 🗖 Ze	oom Ratio		

- position make the upper left point in screen as the origin point (0, 0) and set X, Y coordinate value of round rectangle.
 - X position set X coordinate value of round rectangle.
 - Y position set Y coordinate value of round rectangle.
- \blacktriangleright size set the width and height of round rectangle.
 - width (W) set the width of round rectangle
 - height (H) set the height of round rectangle
- ➤ animal set if the round rectangle can be moved

Horizontal set the horizontal position of round rectangle according to register value, modifing the X coordinate value.

X coordinate value=X position+current value of register

vertical set the vertical position of round rectangle according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current register value

- ➢ Lock set if round rectangle can be moved when editing it.
- Zoom proportion set if it can be zoomed when changing its size. Now this function can not work.

4-2-6. Fold - polygon

The difference between fold and polygon is whether it is closed.

1. Click " \bigcirc " icon in the drawing tool bar and press left mouse at the first point. Move the cursor and confirm positions of endpoints. When it is the last endpoint, please click left mouse to finish it.



2. Double click "fold" or choose "fold", then click right mouse to choose "attribute or set the attribute by " " button.

■ line

Fold	
Line Color	Polygon Position
Pattern	Real line 💌
Thick	i

- > Pattern it is "real line" which can not be modified.
- Thick change the width of line according to its value. Greater the width, greater the value. (integer between 0~255)
- color

olor Polygon Position
Color
More

- kind choose the kind of color you want to modify
- \triangleright color set the kind of color
- polygon

Fold	
Line Color	Polygon Position
Polyline Revolve	P1=[0,0] P2=[230,109] P3=[89,139] P4=[19,185]
	X Y

polyline its mode is polyline. When you don't choose it, the polyline will connect first point and last point to be a polygon. Then it will fill the polygon area in default filling pattern.



- modify coordinate set the first point as the starting point. List the coordinates in the form in the order according to paths. Choose the coordinate of object point. Input relative X, Y coordinates and press "enter" key to be effective.
- revolve click this button to set the revolve angle of polyline click the "revolve" button in "polyline". Following catalogue box will appear

Line Col	or Polygon Position
✓ Polylin	e P1=[0,0] P2=[230 109]
Revolve	
	Angle
	OK Cancel

Input the value of target angle. (positive value is anticlockwise revolve and negative value is clockwise revolve) then you can click "confirm".

■ fill

Don't choose "fold" and confirm it. Then choose this component to click right mouse to choose "attribute" or double click this component directly. Then you will find that the title of catalogue box has been changed from fold to polygon. Add the "fill" option.

Polygon	
Line Color	Polygon Fill Position
None	Graph's filled color is what user chose!
Dot	•

- none polygon's inside will lucidly display
- solid choose the target color by pull-down list. You can choose the color which you chose by "more".
- > dot fill the graph's inside with dots. Dot's value decide the dot density.
- meek choose the target color. Desalt proportion of original color is 0%. When the proportion is positive value, the color will be desalted. When it is negative value, the color will be deepen.
- ▶ hatch fill round rectangle's inside with hatch.

Origin coordinate graph's origin coordinate. It contains positions of horizontal and vertical coordinate.

Fore color	choose the graph's color
Back color	choose the graph's back color

➤ linear

last color choose the graph's last color

linear direction you can choose the linear type and direction of color and also can set agle value by "set angle".

Style color color tone is as same as first color.

- Style kind choose the filling mode.
- ➤ centerar

center color	choose the center color of filling object
brink color	choose the brink color of filling object
center pointX-percentage	e relative position of center point X
center pointY- percentage	e relative position of center point Y
ratioX- percentage X	direction ratio occupied by center point
ratioY- percentage Y	direction ratio occupied by center point

position

Polygon	
Line Color Polygon Fill	Position
Position	Size
X 22(Width 140
Y 55	Height 105
Animal	
Horizontal	
C Vertical	
🗆 Lock 🗖 Zoon	n Ratio

position set the upper left point in the screen to coordinate point (0, 0), and set the X and Y coordinate value of fold and polygon.

X position set the X coordinate value of fold and polygon.

Y position set the Y coordinate value of fold and polygon.

- ➢ size set the width and height of fold and polygon.
 - width (W) set the width of fold and polygon
 - height (H) set the height of fold and polygon

animal0 set if the fold and polygon can be moved.

Horizontal set the horizontal position of fold and polygon according to register value, modifying X coordinate value.

X coordinate value X position+current value of register

Vertical set the vertical position of fold and polygon according to the register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the fold and polygon can be moved when editing.
- Zoom proportion set if it can be zoomed when editing its size. This function can not work.

4-2-7. Block

 \triangleright

Change the area size occupied by color block in the polygon by setting the block value.

1. Click " \bigcirc " icon in the drawing tool bar. Press left mouse at the first point and confirm the position of top point. Then loosen the left mouse and confirm the position of second point. According to top point number, do this operation repeatedly. Please double click left mouse at the end. At this time the end and the first point will connect automatically to finish the drawing of "block".



2. Double click "block" or choose "block" and click the right mouse to choose "attribute" or set the attribute by "¹" button.

Polygon block

Block			
Polygo	on Block Color	Position	
Di	rection		7
	Up->Down	C Down->Up	
	C Left->Right	C Right->Left	
Blo			_
DIC	ick	0	

- > Direction choose the filling direction of block.
- \succ Block the value of block

For example: choose the direction "from up to down" and set the block value to "50".



color

Block	
Polygon Block Color	Position
Kind	Color
Frame Color Back Color Block Color	
	More

- \blacktriangleright kind choose the kind of color
- \succ color set the color of the kind

position

Block		
Polygon Block Color Pos	ition	
Position	Size	
X 295	Width	180
Y 240	Height	110
Animal		
Horizontal		
Vertical		
🗆 Lock 🔲 Za	oom Ratio	

- position set the upper left point in the screen as the coordinate point (0, 0), and set the X and Y coordinate value of block.
 - X position set the block X coordinate value.

Y position set the block Y coordinate value.

- ➢ size set the width and height of block
 - width (W) set the width of block
 - height (H) set the height of block
- > animal set if the block can be moved

Horizontal movement set the horizontal position of block according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

Vertical movement set the vertical position of block according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright set if the block can be moved when editing .
- Zoom proportion set if the size can be zoomed when editing its size. This function can not work.

4-2-8. Frame

1. Click the "□" icon in the drawing tool bar. Keep pressing the left mouse at the first point andmove the mouse to make a path of rectangle. Then loosen the left mouseassess at the end point. No the frame has been finished.



Edit the length, width and other attributes according to the modification of first point, boundary point and end point.

- 2. doubel click "frame" or choose "frame" and click right mouse to choose "attribute" or set theattribute by " " button.
- color



- \succ kind choose the type of color which need to be modified.
- \triangleright color set the color of the kind.
- Fill set if the frame needs to be filled with color.
- position

Frame		×
Color Position		
Position	Size	
X 215	Width	140
Y 100	Height	80
Animal		
Horizontal		
C Vertical		
🗆 Lock 🗖 Zo	oom Ratio	

≻	position	set the upper left point as the coordinate point (0, 0). Set the X and Y
	coordinate val	ues of frame.
	X position	set the X coordinate value of frame
	Y position	set the Y coordinate value of frame
≻	size	set the width and height of frame
	width (W)	set the width of frame
	height (H)	set the height of frame
≻	animal	set if the frame can be moved.
	Horizontal	set the horizontal position of frame according to register value, modifying
	the X coordina	ite value.
		X coordinate value=X position+current value of register.
	Vertical	set the vertical position of frame according to register value, modifying the Y
	coordina	ate value.
		Y coordinate value=Y position+current value of rigster
\triangleright	lock	set if the frame can be moved
\triangleright	zoom proporti	on se if it can be zoomed when editing its size. This function can not

4-2-9. Insert map

work now.

Realize the insert function of screen in HMI by this function.

1. Click "🛄" icon in the drawing tool bar. When the cursor is cross-shaped, please press the left

mouse to open the window of inserting paths.

2. Choose the goal display picture. (Now it support pictures of BMP and JPG form) Click "open" or double click the goal picture. Then it will be added to current screen automatically and its size and position can be moved freely as the following picture.



3. Double click the 'picture" or choose "picture" and click right mouse. Then set the attribute by "attribute" or "

■ picture



It is "display picture". If you choose "transparency", you need to add "mask".

Add mask: after clicking "mask", please click "changing" to appear a window. Then you can choose the picture. (Mask picture should be black and white picture which is the same size) Please see the following example to understand easily.



In the above picture, first picture is the original picture. It is the display picture. Now you need to do transparent processing for this picture.

Second picture is the same size as first picture and it is black and white mask picture.

Third picture is the final picture which is done transparency.

You can find something from picture 1, picture 2 and picture 3. transparency add picture 1 and picture 2. The white area in picture 2 will be transparent and the black area will be display.

position

Map		
Map Position		
- Position	Size	
X 12	Width	160
Y 90	Height	140
Animal		
Horizontal		
C Vertical		
🗆 Lock 🗖 Z	oom Ratio	

- position set the upper left point in the screen as coordinate point (0, 0). Set the X and Y coordinate value of picture.
 - X position set the X coordinate value of picture.
 - Y position set the Y coordinate value of picture.
- ➢ size set the width and height of picture.
- width (W) set the width of picture
- height (H) set the height of picture
- animal set if the picture can be moved
- horizontal set the horizontal position of picture according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

- vertical set the vertical position of picture according to register value.
 - Y coordinate value=Y position+current value of register.
- \blacktriangleright lock set if the picture can be moved when editing it.
- > Zoom ratio set if it can be zoomed when editing its size. This function can not work now.

4-2-10. Move animation

This function can make animation with other parts.

1. Click \checkmark icon in the menu, draw the animation track. Left click mouse to draw the track, left click mouse again to draw the second track, double click mouse to finish the drawing.

2. Double click move animation to open the attribute window. Coordinate

Move A	nimal			23
Coord	Control			
×	130	Key Point: X=130;Y=100 Escape Time:20.5Second		
Y	100	Key Point: X=323;Y=169 Escape Time:18.8Second Key Point: X=142;Y=220		
		OK Cancel	Apply	/

- \blacktriangleright coordinate the coordinate of animation
 - X the position of X-axis
 - Y the position of Y-axis
- Escape time the time from one position to another, the unit is second.
- Control

Move Animal			×
Coord Con	trol		
Enable	Ctrl	MO	
Reset	Ctrl	MO	
🔽 Repeat	:		
	0)K Cancel	Apply

- Enable the animation is activated by the coil. When the coil is on, the animation starts to move.
- \blacktriangleright Reset when the coil is on, the animation will move from the starting position.
- > Repeat repeat moving the animation

4-2-11. Rotate animation

1. Click $\widehat{\mathbf{A}}$ and put it in the screen. Right click it or press ESC to cancel.



- 2. Double click the rotate animation to open the attribute window.
- Animation clip



- > Material the pictures of animation, it can contain many pictures
- > Add open material library to add new picture and set the picture position
- Delete delete the pictures
- Modify open the material library, change the picture and the position
- Move up move up the picture
- Move down move down the picture
- Preview display the picture

Animation

nimation clip	Animation	Position
Period		
	8	00 ms
	DO	Register controls
Enable [MO	Register controls
Reset	MO	Register controls
Mode		
O Random		
📀 Continue		
	💽 Sing	gle
🔽 Repeat	○ Trip	2
Coil Contr	ol	
16	MO	

- > Period the time to finish the animation, the time can be set through register or constant
- Enable please always choose this item to ensure the animation can work. Register control means the animation can work when the coil is ON.
- Reset when the rising edge of signal is coming, the animation will start again.
- Random switch the pictures as the order defined by user
- > Continue switch the pictures as the default order
- Single switch the pictures from first to final one, then from first to final one again.
- Trip switch the pictures from first to final one, then from the final to first one, then from the first to final one...
- Repeat repeat the switching picture operation
- Coil control when the coil is ON, the animation is visible. When the coil is OFF, the animation is invisible.

Position

Animation cl	ip Animation	Position	
Position-		Size	
<u>x</u>	110	<u>W</u> idth	129
Y	100	<u>H</u> eight	136
Horizo			

- Position set the coordinate of animation according to the origin on the upper left corner
 X the X-axis coordinate
 - Y the Y-axis coordinate
- Size set the width and height of animation
 - Width the width of animation
 - Height the height of animation
- Animal the move direction of animation
 Horizontal horizontal moving the animation. Set the X-axis position through register.
 X coordinate = X position + current register value
 Vertical vertical moving the animation. Set the Y-axis position through register.
 Y coordinate = Y position + current register value
- Lock lock the animation, it cannot move

4-2-12 Material library

Click "**T**" icon in the drawing tool bar. Then the dialogue box of choosing picture will appear. It is as follow.

ė- (Adobe	^		M		X	Â	Transparer
	App Aqua AQua		Butterfly01.jpg	Butterfly02.jpg	Butterfly03.jpg	Butterfly04.jpg		
	Bomb Butterfly Cartoon		W	Y		M		
			Butterfly05.jpg	Butterfly06.jpg	Butterfly07.jpg	Butterfly08.jpg	E	Add Mater
	Funny gHard GLASS		M	86				Del Materi
	Glasz Hardware Hein		Butterfly09.jpg	Butterfly10.jpg	Butterfly11.jpg	Butterfly12.jpg	2	Open
	Macromedia	-	2	C.	SS		Ļ	Cancel

- > You can click "add file" or "delete file" to add or delete folder.
- Choose the picture in the right side, click open to insert it in the screen. Click "add material" or "delete material" to add or delete the picture.

4-3. Component tool bar

Component tool bar contains all basic buttons of data processing.

From left to right: text, dynamic text, variational text, lamp, button, lamp button, screen jump, digital display, alarm display, tet display, digital input, text input, set data, digital keyboard, ASCII keyboard, user input, bar, dynamic map, call window, window button, down recipe, up recipe, function button, function field, discrete column map and continue column map.

4-3-1. Text

1. Click "A" icon in the component tool bar. Move the cursor to the screen and click left mouse to place it. Then click right mouse or ESC button to cancel it. Modify the height and width of text by boundary point.



2. Double click "text" or choose "text" and click right mouse. Then set the attribute by choosing "attribute" or " "" button.

display
Text			x
Display Font Color	Position		
Content]
Text		*	
		~	
Aspect	Align Hor	Align Ver	1
Text	C Left	С Тор	
	Center	Middle	
Changing	C Right	C Bottom	

- ➢ content input content of text
- aspect choose if you need text frame. When you want to use it, you can modify the aspect by "changing" button.
- > Align hor it contains three kinds of align which are left, centre and right.
- > Align ver it contains three kinds of align which are top, middle and bottom.
- font

Set the content form of text

Text	
Display Font Color	Position
Font	
	Setting
C . 1	
String	Art
	-

> settings set informations of font, type and size in instrument.

Font						×
Font: Times New Roman Times New Roman Trebuchet MS Verdana Viner Hand ITC OFinaldi	*	Font style: Regular Regular Italic Bold Bold Italic	*	Size: 12 14 16 18 20 22 24	•	OK Cancel
Effects Strikeout Underline Color: Black]	Sample AaBt	oYy2	Zz	•	

 \succ art set the art type of displaying font in instrument.

Style			×
Projection			
💿 Shadov	Angle		0 0
C Solid	Dis	J [0 PX
C Relief			
C Carve	Color		
🗌 Brink V	/idth	1 Color	-
Fill			
Normal			
C Hatch		Fill in with text's color!	j
C Linear			

■ color



- \blacktriangleright kind choose the type of color in text.
- \triangleright color modify the color according to the kind.
- position

Text		
Display Font Color Po	osition	
Position	Size	
X 13(Width	40
Y 70	Height	20
Animal		
Horizontal		
Vertical		
🗆 Lock 🔽 Za	oom Ratio	

position set the upper left point in screen as coordinate point (0, 0). Set the X and Y coordinate value of text.

X position set the X coordinate value of text.

Y position set the Y coordinate value of text.

- Size set the width and height of text.
 - width (W) set the width of text
 - height (H) set the height of text
 - animal set if text can be moved
- horizontal set the horizontal position of text in screen according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the vertical position of text in screen according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register.

- \blacktriangleright lock set if the text can be moved in screen.
- zoom ratio set if it can be zoomed when editing its size. This function can not work now.

4-3-2. Dynamic text

 \triangleright

Dynamic text can transfer the displaying content by values of relative link register.

1. Click "A "icon in component tool bar. Move the cursor to the screen and click the left mouse to place it. Please click right mouse or ESC button to cancel it. You can modify the height and width of text area by boundary points.



2. Double click "dynamic text" or choose "dynamic text" and click right mouse. Then set the attribute by choosing "attribute" or "'B'" button.

object

Dynamic Text
Object Display Font Color Position
Station Device PLC Port VirStaNO Station
Object Object Object
Data
Data Type Word

\succ station

device current device port which is communicating.

- station address number of communication equipment.
- > object set the object type and address number of dynamic text.
- > indirect set the offset of current address as following picture.

-Object -			
Object	D	-	0
			PSW256

Current address of dynamic text changed with register PSW256. D0[PSW256]= D[0+PSW256 value].

> value set the data type as separate or double words.

We suggest using internal address of HMI for indirect specified address. (PSW, PFW) if not, the communication will be slow.

■ display

The display content of register is determined by object register value. It contains 16 kinds of display content of dynamic text.

Dynamic Text			
Object Display Font	Color Position		
Content Text 0 Text 1 Text 2 Text 3 Text 4 Text 5 Text 6 Text 7 Text 9	Text0		*
Aspect	Align Hor	Align Ver	
Text	C Left	C Top	
,	• Center	Middle	
Changing	C Right	O Bottom	

- ➢ content input the content of text
- aspect choose if you need text frame. When you are choosing, you can modify the appearance by "change" button.
- > Align hor it contains three kinds of align type which are left, centre and right.
- > Align ver it contains three kinds of align type which are top, middle and bottom.

For example: when the register value is 0, it will display the content of text 0. When the value is 1, it will display content of text 1 and so on.

When the object register value is above 15, the text content will not appear.

■ font

Set the content form of dynamic text.

ynamic Text	
Object Display Font	Color Position
Font	
	Setting
String	
	Art

set it contains font, type, size, effect, example, color and character set. You can set for your requirement.

Font		X
Trebuchet MS Verdana Viner #And ITC	Font style: Regular Italic Bold Bold Italic	Size: 12 OK 12 Cancel 14 16 18 20 22 24
Effects Strikeout Underline	Sample	yZz
Color: Black	Script: Western	•

art it contains projection, brink, fill and angle and so on. You can set for your requirement.

Style				x
Projection				
💿 Shadov	Angle		0 0	
C Solid	Dis	J	0 PX	
C Relief C Carve	Color			
Brink W	'idth	1 Color		-
 Normal Hatch 		Fill in with text's co	olor!	
C Linear				

color



- \blacktriangleright kind choose dynamic text to modify the kind of color.
- \blacktriangleright color modify the color according to the kind.
- position

 \triangleright

Dynamic Text		
Object Display Font Co	olor Position	n
Position	Size	
X 15(Width	40
Y 100	Height	20
Animal		
Horizontal		
Vertical		
🗆 Lock 🔽 Za	om Ratio	

position set the upper left point in screen as coordinate point (0, 0). Set the X and Y coordinate value of dynamic text.

X position set the X coordinate value of dynamic text.

Y position set the Y coordinate value of dynamic text.

size set the width and height of dynamic text

- wdth (W) set the width of dynamic text
- height (H) set the height of dynamic text

animal set if the dynamic text need to be moved.

horizontal set the dynamic text in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of regster

vertical set the dynamic text in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate=Y position+current value of register

- \blacktriangleright lock set if the dynamic text can be move in screen.
- zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

We will explain the using process. Object register is PSW300. Change the value of PSW register by input data. When PSW300 is 1, it will display "temperature over warning value. When PSW300 is 5, it will display "temperature over alarming value". The interface is as follow:

Dynamic Text	
Object Display Font Color Position	
Station Device PLC Port VirStaNO 0	
Object Object 300	
Data Data Type Word	
Dynamic Text	
Object Display Font Color Position	*
Dynamic Text	
Object Display Font Color Position	
Content Text 0 Text 1 Text 2 Text 3 Text 4 Text 5 Text 6 Text 7 Text 9	*

4-3-3. Variational text

1. Click "^{*} icon in component tool bar. Move the cursor to screen and click left mouse to set it. Then cancel it by clicking right mouse or ESC button. Modify the length and height of variational text by boundary point.

2. Double click "variational text" or click "variational text" and click right mouse. Then set attribute by choosing "attribute" or " ⁽¹⁾" button.

Object

 \triangleright

Variational Text
Object Display Font Color Position
└─ Station
Device PLC Port -
VirStaNO 0 Station 1
Object
Object D V 0
☐ Indirect
Data
Data Type Word 💌

- device current device port which is communicating.
 station address number of communication device.
 - object set the object type and address number of dynamic text.
- ➢ Indirect set offset off current address as follow.

Variational Text
Object Display Font Color Position
Station
Device PLC Port -
VirStaNO 0 Station 1
Object
Object D V 0
I▼ PSW256
Data
Data Type Word

Current address of variational text will change with the value of register PSW256. It is D0[PSW256] = D[0+PSW256 value].

> value set the data type to separate or double characters.

We suggest using internal address of HMI(internal address PSW and PFW) for indirect address. If not, it will make communication be slow.

■ display

Variational Text			
Object Displa	y Font Co	lor Position	
Data	String Descript	t	Add
-			Delete
Aspect		gn Hor	Align Ver
Text		C Left	О Тор
,	0	Center	• Middle
Changing	(U)	C Right	C Bottom

- content input display content of text
 data display the content number of text
 string descipt edit content of text
- > add add the project number of variational text by this button.
- > delete delete the project of variational text by this button.
- aspect choose if you need text frame. When you are choosing, please modify the aspect by "changing" button.
- Align hor it contains three kinds of align type which are left, centre, right.
- Align ver it contains three kinds of align type which are top, middle, bottom.
- font

set the content form of variational text.

Variational Text	
Object Display Font	Color Position
Font	
	Setting
String	Art

settings it contains font, type, size, effect, example, color, character set and son on. You can set it freely.

ont:		Font style:		Size:		
Times New Roman		Regular		12	_	ОК
Times New Roman	*	Regular	*	12 14	*	Cancel
Trebuchet MS		Italic		16		
Verdana		Bold		18	=	
Viner Hand ITC		Bold Italic		20 22		
Fixildi	Ŧ		Ŧ	24	Ŧ	
Effects		Sample				
Strikeout						
		AaBb	YyZ	z		
Color:						

> art it contains projection, brink, fill, angle and so on. You can set it freely.

Style				×
Projection				
💿 Shadov	Angle		0	o
C Solid	Dis	J	0	PX
C Relief C Carve	Color			
E Brink W	/idth	1 Color		_
 Normal Hatch Linear 		Fill in with text's co	blor!	

■ color

Variational Text		×
Object Display For	nt Color Position	
Kind Aspect Color Back Color Text Color		
	More	

- ➢ kind choose the kind of color
- > color modify the color according to the kind
- position

Variational Text			×
Object Display Font Co	lor Position	1	
Position	Size		
X 23.	Width		50
Y 75	Height		20
Animal			
I Horizontal			
C Vertical			
🗆 Lock 🔽 Zo	om <mark>Ra</mark> tio		

- position set the upper left point to be coordinate point (0, 0). Set the X and Y coordinate value of variational text.
 - X position set the X coordinate value of variational text
 - Y position set the Y coordinate value of variational text
 - size set the width and height of variational text
 - width (W) set the width of variational text
 - height (H) set the height of variational text
 - animal set if variational text can be moved
 - horizontal set the variational text in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the variational text in vertical position of HMI according to register, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the variational text can be moved in screen.
- zoom ratio set if it can be zoomed when editing its size. But now this function can not work.



the differences of functions between "variational text" and "dynamic text" is as

follow:

 \triangleright

 \triangleright

(1) variation of variational text can be added manually. It has not only 16 kinds of display content.

(2) variational text can not use newline. But dynamic text can use newline to edit.

4-3-4. Lamp

You can display object status by this button.

1. Click "'''''' icon in component tool bar. Move the cursor to screen and click left mouse to set. Cancel it by clicking right mouse or ESC button. You can realize to adjust the boundary size of object lamp button by boundary point.



2. Double click "lamp" or click "lamp" and click right mouse. Then set attribute by choosing "attribute" or " " button.

object

Lamp	
Object Lamp Twinkle Color Position	
Station Device PLC Port v VirStaNO 0 Station	
Object Object Indirect	

stationdevice

 \geq

station

current device port which is communicating

n the address of communication device

- object set address and trigger signal object type of lamp
- ➢ indirect

set the offset of current address as follow

Lamp		
Object Lamp	Twinkle Color Position	
Station Device VirStaNO	PLC Port	
Object Object]

Current trigger signal address of lamp will change with D0 value of register. It is M0[D0]=M[0+D0 value]

Click the pull-down box of object type. Change the relative object by choosing type in the pull-down menu. Because lamp is double state component, so relative object type can only be relay types or a bit of register. We suggest using internal address of HMI (PSW, PFW) for indirect address. If not, the communication will be slow.

lamp

Lamp		
Object Lamp Twin	nkle Color Po	sition
Aspect		
ON	H	Change Aspect
O OFF	HMI	User Defined
Visible	мі мі	Save Aspect
Use Text		
C Left	С Тор	Font
© Center	🖲 Middle	On 🔺
C Right	C Bottom	-

- > ON right frame display lamp when object cable is ON.
- > OFF right frame display lamp when object cable is OFF.
- Change aspect modify the aspect of lamp. Because it has own material library, so you can choose freely.
- > User defined modify the aspect of lamp. It has user defined material library.
- Save aspect save the aspect of lamp. It is convenient when you are programming.
- Use text modify the content, font, align type of lamp text.
 - content set the display content of text
 - font set the size, font, type of text.
 - align user can choose align type freely according to your requirement.
 - (1) change aspect: choose relative pictures in lamp library to display.

Click "change aspect". Following editing screen will appear.



choose the lamp icon in material library and press "confirm".

(2) User defined: you can define displaying picture freely from material library.

Click "use defined", then the following editing screen will appear.



Choose target icon in material library and click "open". Then the target icon will be added into lamp.

(3) save aspect: you can put user defined lamp into lamp library. If you want to use it next time, you can call it directly.

twinkle

choose the twinkle status of lamp.

Lamp			
Object Lamp	Twinkle Color	Position	
Status			
Stop	C ON	O OFF	
Speed			
Slow	C Fast		

➤ status

stop

it will stop twinkling whenever the lamp is ON or OFF.

ON lamp will twinkle when it is ON.

- OFF lamp will twinkle when it is OFF.
- > speed choose the twinkle speed when lamp is triwkling. Slow or fast
- color

Lamp	
Object Lamp Twin	nkle Color Position
Kind OFF Text Color OFF Text Color ON Color OFF Color Lamp Color Back Color	Color

- \succ kind choose the kind of color for lamp.
- \succ color modify the color according to the kind.
- position

Lamp				
Object Lamp Twinkle Co	olor Position]		
Position	Size			
X 14	Width		60	
Y 110	Height		60	
Animal				
T Horizontal				
C Vertical				
🗆 Lock 🗆 Zo	om Ratio			

- position set the upper left point to be coordinate point (0, 0). Set the X and Y coordinate value of lamp.
 - X position set the X coordinate value of lamp

Y position set the Y coordinate value of lamp

- Size set the width and height of lamp
 - width (W) set the width of lamp
 - height (H) set the height of lamp
- > animal set if the lamp can be moved

horizontal set the lamp in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

Vertical set the lamp in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the lap in the screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-5. Button

Realize the bit operation of relative switching value.

1. Click "��" icon in component tool bar. Move the cursor in screen and click left mouse to set. Then cancel it by clicking right mouse or ESC button. You can adjust the size of button by eight small boundary points.



2. Click "button" or choose "button" and click right mouse to choose "attribute". you can set attribute by " 🗳" button.

object

Buttor	1	
Obje	ect Operat	e Button Color Position
	Station Device VirStaNO	PLC Port 0 Station 1
	Object Object	M

- \succ station
 - device current device port which is communicating
- station address of communication device
- > object set the object type and address of button.
- ➤ indirect set the offset of current address as follow

Button	
Object Operate Button Color Position	
Station Device PLC Port VirStaNO 0 Station 1	
Object Object 0	

Trigger signal address of current button changes with D0 value of register. M0[D0]=M[0+D0 value]

We suggest using internal address of HMI (PSW, PFW) for indirect address. If not, communication will be slow.

 operate

Bu	tton	
(Object	Operate Button Color Position
	Butt	on
	œ	Set ON O Set OFF O Reverse O On Instant

➢ button

set ON	set the control cable to be ON
set OFF	set the control cable to be OFF
reverse	set the control cable to be reverse

ON instant when the button is pressed, the cable is ON at the moment. If the button is pressed again, the cable will be OFF.



Object Operate Button Color		
Кеу Туре		Password
Touch	lev	el Level1 👻
C Enter Code	V	
Hide Button		
Normal Change Aspect	✓ Use Text	
User Defined	Content ON	*
	Font	-
O Press _ Save Aspect		
	O Align Left	C Align Top
ON	Align Center	Align Middle
	O Align Right	C Align Bottom

Key type define the button code of touch or enter. Enter key is only for OP560, MP360, MP760, XMP, XMH.

Button	X
Object Operate Button Color Posit Key Type C Touch © Touch Enter Code Up Hide Button Up Hide Button Down Left Object Vp Save Aspec F3 F5	ion Password level Level1
UP C	Align Left C Align Top Align Center

hide button if you want the button visible or invisible when it is operating, please choose this option. The aspect and text of button can no be operated.

d —
vel1 👻
^
Ŧ
- T
ign Top
ign Middle
ign Bottom
li

- Normal the status picture when the button display normally or after the button was released.
- \blacktriangleright Press the status picture when the button is pressed.
- Change aspect modify the aspect of button. It has its own material library. You can choose it freely.
- > User defined modify the button aspect. It has its own material library.

- Save aspect save the button aspect. It is convenient when you are programming.
- Use text modify the content, font, align of button text.
 content set the content of button
 font set the size, font, type of button text.

align you can choose align type according to your requirement.



- Password set if the button needs to be protected by password. If you choose "password", please use password protection function and choose the password level.
- color

Button	
Object Operate Bu	utton Color Position
Kind Text Color Key Color Back Color	
	More

- \blacktriangleright kind choose the kind of color which neef to be modified.
- \succ color modify the color according to the kind.



Button				
Object Operate Button Color Position				
Position	Size			
X 20.	Width 75			
Y 70 Height 42				
Animal				
Horizontal				
Vertical				
🗆 Lock 🔲 Za	oom Ratio			

- position set the upper left point to be the coordinate point (0, 0). Set the X and Y of button.
 - X position set the X coordinate value
 - Y position set the Y coordinate value
- size set the wdth and height of button
- width (W) set the width of button
- height (H) set the height of button
- animal set if the button can be moved

horizontal set the button in the horizontal position according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the button in the vertical position according t register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the button in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-6. Lamp button

 \geq

Lamp button can control and display the object status.

1. Click "'O" icon in component tool bar. Move the cursort to screen and click left mouse to set. Click right mouse or ESC button to cancel it. You can modify the size of lamp button by pulling boundary points.



- 2. double "lamp button" or choose "lamp button" and click right mouse. Choose "attribute" or " " button to set the attribute.
- object

(1) Operate object object controlled by button

Object General Aspect Color Position
Station Device PLC Port
Device PLC Port
VirStaNO 0 Station
Object
Object M V
☐ Indirect
Watch Object
- Station
Device PLC Port -
VirStaNO 0 Station 1
Object
Object M J

> station

	device
	station
>	object

indirect

current device port which is communicating address of communication device set the object type and address of lamp button set the offset of current address as follow.

But	tton With Lamp
(Object General Aspect Color Position
	Operate Object Station Device PLC Port VirStaNO 0 Station 1
	Object Object Object Object Object

Current signal address of lamp button changed as register D0 value. M0[D0]=M[0+D0 value]

We suggest using the internal address of HMI (PSW, PFW) for indirect address. If not, the communication will be slow.

(2) Watch object

display object of lamp button

Vatch C)bject
Device	PLC Port 👻
VirStaNO	0 Station 1
Object Object	M v 0 Indirect

When you don't choose it, the display object is as same as operate object and they can not be modified. When you choose it, you can choose the device station number and object type of watch target.

 \succ station

device current device port which is communicating.

- station address of communication device
- > object set the watching object type and address of lamp button.
- ➢ Indirect set the offset of current address as follow.

Station	PLC Port 🚽
VirStaNO	0 Station 1
Object Object	

Current watch object address of lamp button changes with register D0 value. M0[D0]=M[0+D0 value].

We suggest using internal address of HMI (PSW, PFW) for indirect address. If not, the communication will be slow.

general

Button With l	amp				
Object General Aspect Color Position					
Button C			C Reverse	C ON Instant	
Twinkle	Statu	s			
Sto	p	C ON	C OFF		
Twinkle Speed					
💿 Slo	W	C Fast			
Password					
Level		Level1		V	

- Button operate it is used for "operate object" of "object" option. You can choose set ON, set OFF, reverse and ON instant
- set ON set the control cable to be ON
 - set OFF set the control cable to be OFF
 - reverse reverse the status of control cable

ON instant When you press it, the cable will be ON. When you release it, the cable wil be OFF.

- Twinkle status it is used for "watch object" of "object" option. You can choose stop, ON and OFF. When you choose twinkle, you can use "twinkle speed" to decide its speed.
 - Stop it will stop twinkling whenever the lamp is ON or OFF.
 - ON it will twinkle when the lamp is ON.
 - OFF it will twinkle when the lamp is OFF.
- password set if the "operate object" in "object" option need to protected by password. If you choose "password", please use password protection function and choose the relative password level.
- aspect

Object General As	pect Color	Positio	n	
Aspect				
⊙ ON	H	л	Change	Aspect
O OFF			User D	efined
Pressing Release	мі амі		Save A	spect
Use Text				
C Left	C Top		Font	
💿 Center	💿 Middle	On		~
	O Bottom			

- ON the lamp will display when the "watch object" is ON in the right box "object".
- OFF the lamp will display when the "watch object" is OFF in the right box "object".
- pressing it is used for "operate object" in "object" option, displaying aspect when pressing.
- release it is used for "operate object" in "object" option, displaying aspect when releasing.
- Change aspect modify the aspect of lamp button. It has its own material library. Customers can choose from it freely.
- ▶ User defined modify aspect of lamp button. It has user defined material library.
- Save aspect save aspect of lamp button. It is convenient when programming.
- > Use text modify the content, font align type of lamp button.
- color

Button With Lamp		23
Object General As	spect Color Position	
Kind OFF Text Color OFF Text Color ON Color OFF Color Key Color Back Color	Color	

- kind choose the type of color for lamp button
- \succ color modify the color according to the kind.

position

Button With Lamp				
Object General Aspect C	olor Position			
Position	Size			
X 23(Width 60	ī		
Y 20	Height 60	ō		
Animal				
Horizontal				
☐ Vertical				
🗆 Lock 🔲 Zoo	om Ratio			

- position set the upper left point to be coordinate point (0, 0). Set the X and Y coordinate value of lamp button
 - X position set the X coordinate value of lamp button.
 - Y position set the Y coordinate value of lamp button.
- \blacktriangleright size se the width and height of lamp button.
 - width (W) set the width of lamp button.
 - height (H) set the height of lamp button
- > aniaml set if the lamp button can be moved.

horizontal set the lamp button in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

- vertical set the lamp button in the vertical position of HMI according to register value.
 - Y coordinate value=Y position+current value of register
- \succ lock set if the lamp button in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-7. Screen jump

This component will realize the jump function between different screens. At the same time, you can set the limits of authority.

1. Click "P" icon in the component tool bar. Move the cursor to the screen and click left mouse to set. Click right mouse or ESC button to cancel it.



- 2. Double click "screen jump" or choose "screen jump" to click right mouse. Set the attribute by choosing "attribute" or "⁽¹⁾" button.
- operate

Screen Jump	×
Operate Button Color Position	
Screen ID	
- Mode	
Con Log On	
C Validate	
KeyBoard	
KeyBoard_1 💌	

- ➢ screen ID input screen ID
- ➢ mode log on

in this mode you need't set the limit of authority and it can jump screen directly.

validate in this mode, it operate password protection. You can jump the screen only when you input correct password. It is as same as "password function" in the "button" option.

button

reen Jump			_>
Operate Button Color Position			
Кеу Туре		Password	
 Touch 	lev	vel Level1 -	·
C Enter Code Up	~	,	
Hide Button			
Normal Change Aspect	✓ Use Text		
User Defined	Content Scr	r1 🔺	
C Press _ Save Aspect	Font		-
Scrl	C Align Left	C Align Top	
Stri	Align Center	Align Middle	
	C Align Right	C Align Bottom	

key type define the button code of touch key or enter key. Enter key is only for MP, XMP, XMH.

Screen Jump		X
Operate Button Color Position	n	
C Touch	le	Vel Level1
Enter Code F1 Hide Button		
Normal Change Aspect User Defined	Use Text Content F1	*
C PressSave Aspect	C Align Left	C Align Top
	 Align Center Align Right 	Align Middle Align Batters
		C Align Bottom

hide button set if the button is visible when operating it. If you choose this option, screen jump and text can not be operated.

Hide Button		
Normal Change Aspect	🗹 Use Text	
User Defined	Content F1	*
C Press Save Aspect	Font	Ŧ
F	C Align Left	C Align Top
	🖸 Align Center	🖸 Align Middle
	C Align Right	C Align Bottom

- normal screen jump button display normally or the status picture after releasing button.
- ➢ press the status picture when pressing screen jump button.
- Change aspect modify the aspect of screen jump button. It has its own material library. Customers can choose from it freely.
- User defined modify the aspect of screen jump button. It belongs to the user defined material library.
- Save aspect save the aspect of screen jump button. It is convenient for programming.
- Use text modify the text content, font and align type of screen jump button.
 set the displaying content of screen jump button.
 font set the size, font, type of screen jump button.
 align customers can choose align type according to requirement.

Pass	word	
level	Level1	-

password set if the screen jump button need to be protected by password. If you choose "password", please use password protection function and choose the relative password level.

color

Screen Jump	
Operate Button Co	olor Position
Kind	Color
Text Color Key Color Back Color	
	More

 \blacktriangleright kind choose the screen jump to the kind of color.

- \triangleright color modify the color according the kind.
- position

Screen Jump		
Operate Button Color P	osition	
Position	Size	
X 21(Width	75
Y 45	Height	42
Animal		
Horizontal		
C Vertical		
🗆 Lock 🗆 Zo	oom Ratio	

- position set the upper left point as coordinate point (0, 0). Set the X and Y coordinate value of screen jump.
 - X position set the X coordinate value of screen jump.
 - Y position set the Y coordinate value of screen jump.

size set the width and height of screen jump.

width (W) set the width of screen jump.

height (H) set the height of screen jump.

 \blacktriangleright animal set if the screen jump need to be moved.

horizontal set the screen jump in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the screen jump in the vertical position of HMI according to register value,根据 modifying Y coordinate value.

Y coordinate value=Y position+current value of register;

- \blacktriangleright lock set if the screen jump in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-8. Digital display

Display the register value.

1. Click the " \square " icon in the component tool bar. Move the cursor to the screen and click left mouse to set. Click right mouse or ESC button to cancel it. The size of difital box can be edited by boundary points.

00000

2. Double click "digital display" or choose "digital display" and click right mouse. Set the attribute by "attribute" or "⁽¹⁾" button.

object

Display Digital		23
Object Displ	ay Font Color Position	
- Station - Device VirStaN0	PLC Port	
Object Object		
Data — Data Ty	pe Word	

 \succ station

device	current device	port which	is communicating
uevice	current device	port winen	15 communicating

- station address of communication device
- > object set the object type and address of digital display.
- > indirect set the offset of current address as follow

Display Digital	x
Object Display Font Color Position	
Station Device PLC Port - VirStaNO 0 Station 1	
Object D V 0 PSW256	
Data Data Type Word	

Current address of digital display will change with register PSW256 value. D0[PSW256]=D[0+PSW256 value]

> data set the data type to separate word or double words.

We suggest using the internal address of HMI (PSW, PFW) for indirect address. If not, the communication will be slow.

display

Display Digital				23
Object Display Font	Color Po	sition		
Format		Bit Leng	th	
O Dec O Hes	c l	Total		5
C Float C Uns	signed	Float		0
Aspect	- Align Hor		Align Ver	
00000	C Left		С Тор	
	C Cente	er	Middle	
Changing	Right		C Bottom	
0 Lead				

- type choose the form of digital display. It can be decimal, hexadecimal, floating number and unsigned number.
- > length total bit of digital display and length setting of decimal place.
- aspect choose if it need digital display frame and modify the aspect by "changing" button.
- Align hor it contains left, centre and right.
- > Align ver it contains top, middle and bottom.
- \triangleright 0 lead add 0 when the data digits fails to meet figures.

For example: the register value is 23. The setting bits of digital display are 5 and decimal place is 0. When you choose 0 lead, the digital display will be 00023.

■ font

Display Digital		×
Object Display Font	Color Position	1
Font		
	Setting	
String	Art	

- setting it contains font, type, size, effect, example, color, character set and so on. You can set it freely.
- > art it contains projection, brink, fill and angle. You can set it freely.

color



- ▶ kind choose digital display to modify the kind of color.
- \triangleright color modify the color according to the kind.
- position

Display Digital	×
Object Display Font Co	olor Position
Position	Size
X 16(Width 75
Y 50	Height 30
Animal	
Horizontal	
Vertical	
🗆 Lock 🔽 Zo	oom Ratio

position set the upper left point as the coordinate point(0, 0). Se the X and Y coordinate value of digital display.

X position set the X coordinate value of digital display.

Y position set the Y coordinate value of digital display.

- \blacktriangleright size set the width and height of digital display.
 - width (W) set the width of digital display
 - height (H) set the height of digital display
- > animal set if the digital display need to be moved.

horizontal set the digital display in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value = X position+current value of register

vertical set the digital display in the vertical position of HMI according to register value, modifying Y coordinate value.

- Y coordinate value=Y position+current value of register
- > lock set if the digital display in screen can be moved.
- > Zoom ratio set if it can be zoomed when editing its size. But it can not work now.

4-3-9. Alarm display

Realize the limit function of data. It will twinkling when the data is over limit.

1. Click " IIII" icon in the component tool bar. Move the cursor to screen and click left mouse to set. Click the right mouse or ESC button to cancel it. The size of digital frame can be adjusted by boundary points.



2. Double click "alarm digital display" or choose "alarm digital display" and click right mouse. Set the attribute by choosing "attribute" or " "" button.

object

Display Alarm
Object Display Range Font Color Position
Station Device PLC Port v VirStaNO 0 Station
Object Object D V 0 Indirect
Data Data Type Word

 \succ station

 \geq

device

current device port	t which is c	communicating.
---------------------	--------------	----------------

- station address of communication device
- object set the object type and address of alarm display
- ➤ indirect set the offset of current address as follow.

Display Alarm
Object Display Range Font Color Position
Station Device PLC Port VirStaNO 0 Station 1
Object D 0 PSW256
Data Data Type Word

Current address of alarm display will change with register value PSW256.

- D0[PSW256]=D[0+PSW256 value]
 - set the data type to separate word or double word

We suggest using internal address of HMI (PSW, PFW) for indirect address. If not, the communication will be slow.

display

data

 \triangleright

Display Alarm				×			
Object Display Range Font Color Position							
Format	Bit Length						
C Dec C He	ex	Total		5			
C Float 🔍 Un	nsigned	Float		0			
Aspect	Align Hor		Align Ver				
00020	C Left		С Тор				
	C Center		Middle				
Changing	Right		C Bottom				
🗌 0 Lead							

- format choose the form of digital display. It can be decimal, hexadecimal, floating number and unsigned number.
- > Bit length total length of digital display and length setting of decimal place.
- aspect choose if it need alarm digital display frame. You can modify the aspect by "changing" button.
- > Align hor it contains left, centre and right.
- > Align ver it contains top, middle and bottom.
- \triangleright 0 lead add 0 when the data digital fails to meet figures
Range

Display Alarm	X
Object Display Range Font Color Position	
Max Check Value 100	
Min Check Value 0	

> Max

check set the alarm max of digital display. When the data is over the max, it will alarm by twinkling.

≻ Min

check set the alarm min of digital display. When the data is over Min, it will twinkling.

■ font

Display	Alarm		X
Objec	t Display Range	Font Color Position	
For	nt		
		Setting	
	String		
		Art	

- setting it contains font, type, size, effect, example, color and character set. You can set it freely.
- > art it contains projection, brink, fill and angle. You can set it freely.

color



- ➢ kind choose the alarm digital display to modify the kind of color.
- color modify the color according to the kind.
- position

 \triangleright

Display Alarm			X
Object Display Range Font	Color	Position	
Position	Size		
X <u>31(</u>	Width	75	
Y 20	Height	30	
Animal			
T Horizontal			
C Vertical			
🗆 Lock 🔽 Zoon	n Ratio		

position set the upper left point as the coordinate point(0, 0). Set the X and Y coordinate value of alarm digital display.

X position set the X coordinate value of alarm digital display.

Y position set the Y coordinate value of alarm digital display.

size set the width and height of alarm digital display.

width (W) set the width of alarm digital display.

height (H) set the height of alarm digital display.

➤ animal set if the alarm digital display need to be moved.

horizontal set the alarm digital display in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

Vertical set the alarm figital display in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the alarm digital display in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-10. Text display

Display the texts of register.

1. Click the "**ED**" icon in the component tool bar. Move the cursor in screen and click left mouse to set. Click right mouse or ESC button to cancel it. The size of data frame can be adjusted by boundary points.



2. Double click "text display" or choose "text display" and click right mouse. Set the attribute by choosing "attribute" or "¹ button.

One word (WORD) is consisted of two characters. One character occupies a bit. One register is a character. So you can change the displaying content of character by setting register number (displaying length). For example, register number is set to be one. It will display two characters. Character is showed by ASCII code and one character ASCII code is two bits hexadecimal.

object

Display Text	23
Object Display Font Color Position	
Station Device PLC Port VirStaNO 0 Station 1	
Object Object Indirect	
Data Register 1	

➤ station

device current device port which is communicating.

- station address of communication device
- > object set the object type and address of text display.
- \blacktriangleright indirect set the offset of current address as follow.

Display Text	x
Object Display Font Color Position	
Station Device PLC Port v VirStaNO 0 Station 1	
Object D 0 PSW256	
Data Register 1	

Current address of text display will change with register value PSW256. D0[PSW256]= D[0+PSW256 value]

data set the length of text display. One register will display two characters

We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

■ display

 \triangleright

 \triangleright

Display Text	×
Object Display Font	Color Position
Aspect	
Text	Change
Align Hor	Align Ver
C Left	С Тор
Center	• Middle
C Right	C Bottom

- aspect choose the aspect of text display frame and you can modify the aspect by "changing" button.
- > Align hor it contains left, centre and right.
- Align ver it contains top, middle and bottom.

■ font

Display Text	×
Object Display Font	Color Position
Font	
	Setting
String	
	Art
	Art

- setting it contains font, type, size, effect, example, color, character set and so on. You can set it freely.
- > art it contains projection, brink, fill, angle and so on. You can set it freely.
- color

Display Text		X
Object Display For	nt Color Position	
Kind Aspect Color Back Color Fore Color	Color	
	More	

- \succ kind choose the text display to mdify the kind of color.
- \succ color modify the color according to the kind.
- position

Display Text			×
Object Display Font Colo	or Position	n	
Position	Size		
X 15(Width		75
Y 105	Height		30
Animal			
Horizontal			
C Vertical			
🗆 Lock 🔽 Zoo	m Ratio		

- position set the upper left point to be coordinate point(0, 0). Set the X and Y coordinate value of text display.
 - X position set the X coordinate value of text display.
 - Y position set the Y coordinate value of text display.
- size set the width and height of text display
 - width (W) set the width of text display
 - height (H) set the height of text display
- \blacktriangleright animal set if the text display need to be moved.

horizontal set the text display in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the text display in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the text display in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-11. Digital input

Input digital value through digital keyboard.

1. Click "23" icon in the component tool bar. Move the cursor to screen and click left mouse to set. Click right mouse or ESC button to cancel it. You can also set many components of digital input. You can adjust the size of input frame by boundary points.

Temperature	00000	Ĉ
Pressure	00000	MPa

- 2. Double click "digital input" or choose "digital input" and click right mouse. Set the attribute by choosing "attribute" or " " button.
- object
- (1) operate object object register of digital input

Digital Input	X
Object Display Input Font Color Position	
Operate Object Station Device PLC Port VirStaNO Object Object Indirect	
Data Data Type Word	
Watch Object Station Device PLC Port VirStaNO 0 Station 1	
Object Object D Indirect	

- \succ station
 - device current device port which is ommunicating
 - station address of communication device
- ➢ object set the object type and address of digital input
- ➢ indirect set the offset of current address as follow

Digital In	ut	
Object	Display Input Font Color Position	
Ot	erate Object	
	tation	
	PLC Port -	
	irStaNO 0 Station 1	
	bject	
	bject D V	
	PSW256	

Current address of digital input will change with register value PSW256. D0[PSW256]= D[0+PSW256 value].

> data set the data type to be WORD or D WORD.

We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

(2) watch object when you are choosing, the digital input box will display the data of register.

Vatch C	Diject
Device	PLC Port 👻
VirStaNO	0 Station 1
-Object	
Object	D - 0
	└ Indirect

➤ station

device

current device port which is communicating

- station address of communication device
- object set the watch object type and address of digital input
- > indirect set the offset of current address as follow

Vatch C)bject
Device	PLC Port 👻
VirStaNO	0 Station 1
Object	
Object	D 🔽 0
	PSW256

Current watch object address of digital input will change with register value PSW256 D0[PSW256]=D[0+PSW256 value].



We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

display

Digital Input				×
Object Display Input Font Color Position				
Format		-Bit Lengtł	ı———	
C Dec C Hex	c	Total		5
C Float 🔍 Uns	signed	Float		0
Aspect	Align Hor		Align Ver	
888388	C Left		С Тор	
	C Center		Middle	
Changing	Right		C Bottom	
🗖 0 Lead	Password	ł		

- ۶ format choose the format of digital display. It can be Dec, Hex, float and unsigned.
- Bit length total bit of digital display and the length setting of float. \triangleright
- ≻ aspect choose if you need digital input frame and you can modify the aspect by "changing" button.
- \triangleright Align hori it contains left, centre and right.
- ≻ Align vert it contains top, middle and bottom.
- 0 lead ≻ add 0 when data digits fails to meet figures
- data is in the form of password. It will display "*" ⊳ password
- input

Digital Input	X
Object Display Input Password Level Level1	Font Color Position
Max Check	Min Check
▼ Popup KeyBoard - KeyBoard_1 ▼	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

 \succ password set if the digital input need to be protected by password. If you choose "password", please use the password protection function. At the same time, please choose the relative password level.

> Notify make the target relay to be on after inputting. You can reset it manually.

Setting of the range the limit data of digital input.

> Popup keyboard when you choose it, a small keyboard will appear. If not, the keyboard will not appear.

■ font

Digital Input				
Object Display Input	Font Color Position			
Font				
	Setting			
String				
	Art			

setting it contains font, type, size, effect, example, color, character set and so on. You can set it freely.

- > art it contains projection, brink, fill and angle, etc. you can set it freely.
- color

Digital Input	×
Object Display Input Font Color Kind Color Aspect Color Back Color Text Color More	

- ➢ kind choose digital input to modify the kind of color
- \triangleright color modify the color according to the kind.
- position

 \triangleright

Digital Input				
Object Display Input Fon	t Color	Position		
Position	Size			
X 245	Width	75		
Y 50	Height	30		
Animal				
☐ Horizontal				
☐ Vertical				
□ Lock				

- kind set the upper left point to be coordinate point (0, 0). Set the X and Y coordinate value of digital input.
 - X position set the X coordinate value of digital input.
 - Y position set the Y coordinate value of digital input
 - size set the width and height of digital input.
- width (W) set the width of digital input
 - height (H) set the height of digital input
- > animal set if the digital input need to be moved.
 - horizontal set the digital input in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the digital input in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

Lock set if the digital input in screen can be moved.

Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

3. Enter the off-line status by component "²⁰". When you don't set password level in the processing, please press he digital input component and small keyboard will appear. The simulation operating is as follow.



After inputting data, please press "ENT" to confirm. If you need to input data again, press"CLR" to clear inputting box. If you don't need to modify and you want to exit, please press "ESC".

4-3-12. ASCII code input

Input ASCII code for target register by small keyboard. It is corresponded with character.

1. Click " AB" icon in the component tool bar. Move the cursor to the screen and click left mouse to set. You can click right mouse or ESC button to cancel it. You can set many ASCII input component. You can also adjust the size of input frame by boundary points.



- 2. Double click "ASCII input" or choose the "ASCII input" and click right mouse. Set the attribute by choosing "attribute" or " "" button.
- object

ASCII Input	x
Object Display Font Color Position Station Device PLC Port	
VirStaNO 0 Station	
Object D V O	
Data Register 1	

station \triangleright

 \triangleright

device	current port which is communicating.
station	address of communication device.

- object set the object type and address of text input set the offset of current address as follow.
- indirect \triangleright

ASCII	Input	
Obje	ect Displa Station Device VirStaNO	y Font Color Position
	-Object	D PSW256
	Data Register	1

Current address of text input will change with register value PSW256 D0[PSW256]=D[0+PSW256 value]

 \triangleright

set the length of text input. One register can display two characters data

We suggest using the internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

display

ASCII Input				
Object Display Font Color Position				
Aspect	Align Hor	Align Ver		
Text	• Center	Middle		
Change	C Right	C Bottom		
Password Level Level1	<u> </u>	Notify		
Popup KeyBoard KeyBoard_1				

- Aspect choose if you need text input frame and you can modify the aspect by "changing" button.
- > Align hor it contains left, centre and right.
- > Align ver it contains top, middle and bottom.
- password set if the text input need to be protected by password. If you choose "password", you need to use password protection. At the same time choose the relative password level.
- > notify trigger the target relay to be on after inputting. You can reset it manually.
- Popup keyboard when you choose it, small keyboard will appear. If not, the keyboard will not appear.



ASCII Input				
Object Display Font Color Position				
Font				
	Setting			
String				
	Art			

- setting it contains font, type, size, effect, example, color and character set. You can set it freely.
- > art it contains projection, brink, fill, angle and so on. You can set it freely.
- color

ASCII Input		×
Object Display Fon	t Color Position	
Kind Aspect Color Back Color Text Color	Color	

- \blacktriangleright kind choose the text input to modify the kind of color
 - color modify the color according to the kind.
- position

 \triangleright

ASCII Input		x				
Object Display Font Col	Object Display Font Color Position					
Position	Size					
X 335	Width 75					
Y 85	Height 30					
Animal	Animal					
Horizontal						
☐ Vertical						
🗆 Lock 🔽 Zoo	om Ratio					

 \succ position set the upper left point to be coordinate point(0, 0). Set the X and Y

coordinate value of text input.

 \triangleright

 \geq

- X position set the X coordinate value of text input.
- Y position set the Y coordinate value of text input.
- Size set the width and height of text input.
- width (W) set the width of text input.
- height (H) set the height of text input.
- animal set if the text input need to be moved.

horizontal set the text input in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the text input in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the text input in screen can be moved.
- > Zoom ratio set if it can be zoomed when editing its size. But this function can not work.
- 3. Enter the off-line simulation by the component "³". If you don't set password level, please press the component of text input. Then the keyboard of text input will appear as follow.



Input character directly by keyboard button. Press "ESC" button to exit. Press "<-" to cancel it. Press "ENT" to confirm.

4-3-14. Set data

Do arithmetic calculation for register data.

1. Click "¹²³" icon in the component tool bar. Move the cursor to screen and click left mouse to set. You can click right mouse or ESC button to cancel it.



2. Double click "set data" or choose "set data" and click right mouse. You can set attribute by choosing "attribute" or "¹" button.

object

et Data
Object Operate Button Color Position
Station
Device PLC Port -
VirStaNO 0 Station
Object
Object D 🔽 0
☐ Indirect
Data
Data Type Word 💌

station
 device

current device port which is communicating. address of communiation device set the object type and address of setting data.

objectIndirect

station

set the offset of current address as follow.

Set Da	a	
Obje	t Operate Button Color Position	
	Station Device PLC Port VirStaNO 0 Station 1	
	Object D V D PSW256	
	Data Data Type Word 💌	

Current address of set data changed with register value PSW256. D0[PSW256]= D[0+PSW256 value]

data set the word or D word of data type

We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

operate

⊳

Set Data	
Object Operate Button Color Position	
Function	
0+ 0- 0* 0/	Constant
Operand 0	
Format	
• Dec O Hex O Float	C Unsigned

- \triangleright function data operation of object register add object register value + operand= object register value object register value - operand= object register value substract object register data X operand=register data multiply division object register data -operand=register data constant operand is the data of current object register \triangleright format it contains decimal, hexadecimal, float and unsigned.

button

- X Set Data Object Operate Button Color Position Кеу Туре Password Touch level Level1 ÷ $\overline{\mathbf{v}}$ C Enter Code Hide Button Normal Change Aspect Use Text Content Set æ. User Defined Font Save Aspect Press O Align Left Align Top Set Align Center Align Middle Align Right Align Bottom
- Key type define the button code of touch key or enter key. Enter key is only for OP560, MP360, MP760, XMP, XMH.
- Hide button set if the button can be visible when it is operating. Choose this option. The aspect and text cannot be operated.

- Iver Hide Button		
Normal Change Aspect	🗹 Use Text	
User Defined	Content Set	*
C Press Save Aspect	Font	Ŧ
Set	C Align Left	C Align Top
	Align Center	Align Middle
	C Align Right	C Align Bottom

- > normal set the normal display or the status picture after releasing the button.
- \blacktriangleright press set the status picture when pressing the button.
- Change aspect set the aspect. It belongs to software's material library. You can choose from it freely.
- > User defined modify the data to set aspect. It belongs to user defined material library.
- Save aspect save data to set aspect. It is convenient when you are programming.
- ➢ font modify data to set the content, font and align type of text.
 - content set the displaying content
 - font set the size, font and type of text.
 - align choose the align type according to your requirement.
- password set if it need to be protected by password. If you choose password, please use password pretection. At the same time choose the password level.
- color



- \blacktriangleright kind modify the kind of color.
- \succ color modify the color according to the kind.
- position

Set Data				
Object Operate Button Color Position				
Position	Size			
X 21(Width 75			
Y 100	Height 42			
Animal				
Horizontal				
Vertical				
🗆 Lock 🗖 Zo	om Ratio			

- position set the X and Y coordinate value.
 X position set the X coordinate value.
 Y position set the Y coordinate value.
- \succ size modify the data to set the width and height.
- width (W) modify data to set width
- height (H) modify data to set height
- ➤ animal set if it can be moved.

horizontal set in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+value of current register

vertical set in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+value of current register

- \succ lock set if the set data in the screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-15. Digital keyboard

It is related to digital input component. When you don't choose "pop-up keyboard", digital keyboard will not appear in the process of input number and you need to add digital keyboard manually.

Click " " con in the component tool bar. Move the cursor in the screen and click left mouse to set. Click right mouse or ESC button to cancel it.



The digital keyboard will connect to digital input button automatically. Press "ENT" key will finish the digital input. You only need to set one digital keyboard for all the digital input buttons.

Only one digital input component can be used when there are many digital input buttons. Digital keyboard will connect to them automatically.



Group		×
Position		
Position	Size	
X 15(Width	116
Y 125	Height	186
Animal		
Horizontal		
☐ Vertical		
🗆 Lock 🗖 Zo	om Ratio	

position set the upper left point in screen to be coordinate point(0, 0). Set the X and Y coordinate value.

X position set the X coordinate of digital keyboard.

Y position set the Y coordinate value of digital keyboard.

size set the width and height of digital keyboard

- width (W) set the width of digital keyboard
- height (H) set the height of digital keyboard
- ➤ animal set if the digital keyboard need to be moved

horizontal set the digital keyboard in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the digital keyboard in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the digital keyboard in screen can be moved. \triangleright
- Zoom ratio set if it can be zoomed when editing its size. but this function can not work now.

4-3-16. ASCII keyboard

position

ASCII keyboard is corresponded to ASCII input component. When you don't choose "pop-up keyboard", ASCII keyboard will not appear. You need to add ASCII keyboard manually. Click the "minimum icon in the component tool bar. Move the cursor in screen and click left mouse to set. Click right mouse or ESC button to cancel it.



Only one ASCII input component can be used when there are many text input boxes

Group		23
Position		
- Position	Size	
X 45	Width	311
Y 50	Height	161
Animal		
Horizontal		
C Vertical		
🗆 Lock 🗆 Z	oom Ratio	

set the upper left point to be coordinate point(0, 0). Set the X and Y coordinate value of \triangleright ASCII keyboard.

X position set the X coordinate value of ASCII keyboard.

in editing screen. ASCII keyboard will connect to it automatically.

	Y position	set the Y coordinate value of ASCII keyboard.
\triangleright	size	set the width and height of ASCII keyboard.
	width (W)	set the width of ASCII keyboard
	height (H)	set the height of ASCII keyboard
\triangleright	animal	set if the ASCII keyboard need to be moved.
	horizontal	set the ASCII keyboard in the horizontal position of HMI according to register
	value, modif	ying the X coordinate value.
		X coordinate value=X position+current value of register
vert	ical set	the ASCII keyboard in the vertical position of HMI according to register value,
mo	odifying the Y	coordinate value.
		Y coordinate value=Y position+current value of register
\triangleright	lock	set if the ASCII keyboard in screen can be moved.

Zoom ratio se if it can be zoomed when editing its size. But this function can not work now.

4-3-17. User input

The keyboard is formed by user input components. Every button value is corresponded to an ASCII code. Then the input data will be separated. Customer can use defined input keyboard of this component.

1. Click "**1**" icon in component tool bar. Move the cursor in the screen and click left mouse to set. Click right mouse or ESC button to cancel it.



2. Double click the "user input" or choose "user input" and click right mouse. Set the attribute by choosing "attribute" or "¹" button.

operate

> input input relative ASCII code of button

The following are common ASCII code value of buttons.

1 - 0X31	2 - 0X32	3 - 0X33	4 - 0X34	5 - 0X35
6 - 0X36	7 - 0X37	8 - 0X38	9 — 0X39	0 - 0X30
ESC – 0X1D	CLR – 0X7F	ENT - 0XD		

button

User Input		
Operate Button Color Position	1	
Key Type Image: Touch Image: Touch Image: Touch		Password evel Level1 _
Hide Button	_	
Normal Change Aspect User Defined Press _ Save Aspect	Content 1	*
1	C Align Left	C Align Top
	Align Center	Align Middle
	C Align Right	C Align Bottom

- Key type define the key code of touch or enter key. Enter key is only for OP560, MP360, MP760, XMP, XMH.
- hide button if it is visible when the button is operating. Choose this option. User input aspect and text cannot be operated.

✓ Hide Button Image Normal Change Aspect User Defined C Press Save Aspect	✓ Use Text Content 1 Font	•
1	C Align Left C Align Center C Align Right	C Align Top C Align Middle C Align Bottom

- > normal the status picture after normal display or releasing button of user input.
- > press displaying status picture when pressing the user button.
- Change aspect modify the aspect of user input.it belongs to its own material library. You can choose from it freely.
- ▶ User defined modify the aspect of user input. It belongs to user defined material library.
- Save aspect save the aspect of user input. It is convenient for programming.
- ➢ Use text modify the content, font and align type of user input.
 - content set the displaying content of user input.
 - font set the size, font and type of user input text.
 - align you can choose align type according to your requirement.

- password if the user input need to be protected by password. If you choose "password", please use password protection. At the same time choose the relative password level.
- color

User Input		
Operate Button	Color Position	
Kind	Color	
Text Color Key Color		
Back Color		
	More	
I		

- \blacktriangleright kind choose the user input to modify the kind of color
- \triangleright color modify the color according to the kind.
- position

User Input		×
Operate Button Color	Position	
- Position	Size	1
X 17(Width 35	
Y 80	Height 35	
Animal		
Horizontal		
Vertical		
🗆 Lock 🗖	Zoom Ratio	

- position set the upper left point in screen to be coordinate point (0, 0). Set the X and Y coordinate value of user input.
 - X position set the X coordinate value of user input
 - Y position set the Y coordinate value of user input
- ➢ size set the width and height of user input
 - width (W) set the width of user input
 - height (H) set the height of user input
- \succ animal set if the user input need to be moved.

horizontal set the user input in the horizontal position according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the user input in the vertical position according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the user input in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-18. Bar

This function will display the bar of object data. It is direct to show it. It is usually for analog quantity such as pressure change, level change and temperature change. As the following picture, it shows the relation between current value and full scale value.



1. Click the " \blacksquare " icon in component tool bar. Move the cursor to screen and click left mouse to set. Click right mouse or ESC button to cancel it. You can also edit the size by adjusting boundary points.



2. double click "bar" or choose "bar" and click right mouse. Set the attribute by choosing "attribute" or " " button.

object

Bar	×
Object Stick Color Position	
- Station	- II
Device PLC Port -	
VirStaNO 0 Station	
-Object	-
Object D 💌 0	
Indirect	
Data	-
Data Type Word	

- station
 device current device port which is communicating.
 station
 address of communiation device
 object set the object type and address of bar
- object set the object type and address of balance
 indirect set the offset of current address as for
 - indirect set the offset of current address as follow.

Bar Object Stick	Color Position
Station Device VirStaNO	PLC Port v 0 Station 1
Object Object	D PSW256
Data Data Type	Word

Current address of bar will change with register PSW256. D0[PSW256]=

D[0+PSW256 value]

 \succ data set the data type to be word or D word.

We suggest using internal address of HMI (PSW, PFW internal address type) for indirect address. If not, the communication will be slow.

bar

Bar	×
Object Stick Color Posit	ion ✓ Scale Upper Limit% 90 Lower Limit% 10 Main Scale 3 Slave Scale 1
Aspect	Data
Top/Right	Format Dec 💌
C Bottom/Left	Max 100
Mode	Min 0

- previewaspect
- display simple picture of current bar aspect setting of bar

For vertical bar, choose top or bottom type. For horizontal bar, choose the left or right type.

Transform the horizontal and vertical display direction by "mode" button. You can also choose aspect of bar.

- Scale set the centigrade of upper limit and lower limit. Set the main scale and slave scale.
- Data set the data format, max and min value.
- color



 \blacktriangleright kind choose the bar to modify the kind of color.

color modify the color according to the kind.

position

Bar			×
Object Stick Color Po	sition		
- Position	Size		_
X 2	Width	30	1
Y 215	Height	125	
Animal			
Horizontal			
C Vertical			
🗆 Lock 🗖 Za	oom Ratio		

position set the upper left point to be coordinate point (0, 0). Set the X and Y coordinate value of bar.

X position set the X coordinate value of bar

- Y position set the Y coordinate value of bar
- size set the width and height of bar
 - width (W) set the width of bar
 - height (H) set the height of bar
- \succ animal set if the bar need to be moved.

horizontal set the bar in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the bar in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the bar in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-19. Dynamic map

Switch the pictures according to register value. The range of register value and the status of picture are 0 to 15.



1. Click the "" icon in the component tool bar. Move the cursor to the screen and click left mouse to set. Click right mouse or ESC button to cancel it. You can edit its size by adjusting the boundary points.



2. Double click "dynamic map" or choose "dynamic map" and click right mouse. Set the attribute by choosing "attribute" or "'B'" button.

object

Dynamic Map
Object Map Position
Station Device PLC Port v VirStaNO 0 Station
Object Object D V 0 Indirect
Data Data Type Word

 \succ station

 \triangleright

device current device port which is communicating.

- station address of communication device.
 - object set the object type and address of dynamic map.
- ➢ indirect

rect set the offset of current address a	as follow.
--	------------

Dynamic Map	x
Object Map Position	
Station Device PLC Port - VirStaNO 0 Station 1	
Object D V O PSW256	
Data Type Word 💌	

Current address of dynamic map change with register PSW256.

D0[PSW256]= D[0+PSW256 value]

> data set the data format to be word or D word.

We suggest using internal address of HMI (PSW and PFW internal address type) for indirect address. If not, the communication will be slow.

picture

Dynamic Map		X
Object Map	Position	1
Picture0 Picture1 Picture2 Picture3 Picture4 Picture5 Picture6 Picture7 Picture8 Picture9 Picture10 Picture11 Picture12		Changing

From picture 0 to picture 15. It is corresponed to "object" register value. (0~15) choose the object picture number. You can choose the object picture by "changing" (bmp and jpg picture).

position

 \geq

Dynamic Map			×
Object Map Position			
Position	Size		
X 25(Width		32
Y 55	Height		32
Animal			
T Horizontal			
Vertical			
Lock Zoom Ratio			

position set the upper left point to be the coordinate point (0, 0). Set the X and Y coordinate value of dynamic map.

X position	set the X coordinate value of dynamic map.
Vnosition	set the V acordinate value of dynamic man

Y position set the Y coordinate value of dynamic map.

size set the width and height of dynamic map.

width (W) set the width of dynamic map

height (H) set the height of dynamic map

➢ animal set if the dynamic map need to be moved.

horizontal set the dynamic map in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the dynamic map in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the dynamic map in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-20. Call window

 \geq

Object window is called by controlling the ON/OFF of auxiliary relay.



M0=1, call window ID60001

1. Click " icon in the component tool bar. Move the cursor to the screen and click left mouse to set. Click right mouse or ESC button to cancel it. Pop-up window will be based on its position.



2. Double click "call window" or choose "call window" and click right mouse. Set the attribute by choosing "attribute" or "¹" button.

object

Call Window	x
Object Window Position	
Station Device PLC Port VirStaNO 0 Station	
Object Object M V 0 Indirect	

\succ station

device current device port which is communicating

station address of communication device

- > object set the trigger signal object type and address of call window.
- ➢ indirect set the offset of current address as follow.

Call Window	×
Object Windo	w Position
Station — Device VirStaNO	PLC Port v 0 Station 1
Object Object	

Current trigger signal address of call window will change with register D0. M0[D0]=M[0+D0 value]

When the auxiliary relay is ON, the called window will appear in screen. When it is OFF, this window will be closed. We suggest using internal address of HMI (PSW and PFW internal address type) for indirect address. If not, the communication will be slow.

window	
	Call Window
	Object Window Position
	Window D: 60001
window	set the call window ID

position

Call Window		×	
Object Window Position			
Position	Size		
X 18(Width	80	
Y 90	Height	16	
Animal			
Horizontal			
Vertical			
🗖 Lock 🔲 Zoom Ratio			

- Position set the upper left point to be the coordinate point (0, 0). Set the X and Y coordinate value of call window.
 - X position set the X coordinate value of call window

Y position set the Y coordinate value of call window

Call window component is invisible after downloading to the HMI. So its size can not be edited.

Animal set if the call window in screen can be moved.

horizontal set the call window in the horizontal position of HMI according to register value, modifying the X coordinate value

X coordinate value=X position+current value of register

vertical set the call window in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the call window in screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-21. Window button

Direct close or open the window without the controlling of auxiliary relay.

1. Click "□" icon in the component tool bar. Move the cursor to screen and click left mouse to set. Click right mouse or ESC button to cancel it. You can eidt its size by boundary points.



2. Double click the "window button" or choose "window button" and click right mouse. Set the attribute by choosing "attribute" or "''F'' button.

operate

Window Button	
Operate Button (Color Position
Current Windo	w60001
Function Type Op	en Window 💌
0	Hide 📀 Show
Position	
X: 150)
Y: 60	

- Current window when you are choosing, please aim at theoperation of current window.
 Window ID object window ID of inputting target.
- function choose the function for window operation
 type choose the current function to open window, close window or window

status. You can choose the window status as hide or show.

- > Position pop-up window is in the coordinate position of editing screen.
 - X set the X coordinate value of pop-up window
 - Y set the Y coordinate value of pop-up window

Button

ndow Button Operate Button Color Position			
Key Type Touch C Enter Code	[[_]	Password vel	-
Hide Button Normal Change Aspect User Defined Press _ Save Aspect	Use Text Content Op Font	pen	*
Open	C Align Left C Align Center C Align Right	 C Align Top ● Align Middle C Align Bottom 	

- Key type define the code of touch key or enter key. The enter key is only for OP560, MP360, MP760, XMP, XMH.
- Hide button set if it can be visible when button is operating. If you choose this option, the operation of window button aspect and text will be forbidden.

Hide Button		
Normal Change Aspect	🗹 Use Text	
User Defined	Content Ope	en 🔺
C Press Save Aspect	Font	Ŧ
Open	C Align Left © Align Center	🔿 Align Top 💿 Align Middle
	C Align Right	C Align Bottom

- normal displaying status picture after the window button display normal or releasing window button.
- > press the displaying status picture when the window button is pressed.
- Change aspect modify the aspect of window buton. It belongs to its own material library. You can choose from it freely.
- User defined modify the aspect of window button. It belongs to user defined material library.
- Save aspect save the aspect of window button. It is convenient for programming.
- ➢ Text modify the content, font and align type of window button text.
 - content set the display content of window button.
 - font set the size, font and type of window button font.
 - align you can choose the align type according to your requirement.
- Password set if the window button can be protected by password. If you choose "password", use password protection. At the same time choose the relative password level.
- color

Window Button	_
Operate Button Color Kind Color Text Color Image: Color Key Color Image: Color Back Color Image: Color More Image: Color	

- \blacktriangleright kind choose the window button to modify the kind of color.
- \succ color modify the color according to the kind.
- position

 \triangleright

Window Button			×
Operate Button Color Position X 15(Position Size Width	50	
Y 60	Height	30	
Animal			
Horizontal			
Vertical			
🗆 Lock 🗖 Z	Zoom Ratio		

- position set the upper left point to be the coordinate point (0, 0). Set the X and Y coordinate value of window button.
 - X position set the X coordinate value of window button.
 - Y position set the Y coordinate value of window button.
- size set the width and height of window button
 - width (W) set the width of window button
 - height (H) set the height of window button
 - animal set if the window button need to be moved.

horizontal set the window button in the horizontal position of HMI according to register

value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the window button in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- \blacktriangleright lock set if the window button in the screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

For example: open and close window ID60001.

Open window 60001



Open	Close

Close window 60001

4-3-22. Down recipe

Recipe is consisted of a group of similar type material. Because these materials are similar, you can edit them to be a group of recipe. It is convenient to deliver to object device. It will control it effectly. So when users find a group of similar materials, you can use this function to deliver the materials effectly and correctly.

In the pratical application, because the HMI has large data storage space and at the same time it has the conveniences of displaying, users can use the recipe of HMI to control PLC. You can control the read and save function of PLC materials by the recipe function. They are upload and download function as the following picture.

Recipe group	Download	Object device such as PLC
Group 1 XXX XXX XXX		Group 1 XXX XXX XXX
Group 2 XXX XXX XXX Group 3 XXX XXX XXX	Upload	Group 2 XXX XXX XXX Group 3 XXX XXX XXX

So the recipe function meets the requirement of industry control, transfer the data between device data and recipe data library. Down recipe function can transfer from recipe data library to device data section.

1. Click the "��" icon in the component tool bar. Move the cursor to the screen and click left mouse to set. Click right mo use or ESC button to cancel it. You can also edit its size by adjusting boundary points.



2. Double click "Down recipe" or choose the "Down recipe" and click right mouse. Set the attribute by choosing "attribute" or """ button.

object

Down Recipe	×
Object Recipe Button Color Position	
Device Data Station Device PLC Port VirStaNO O Station	
Object Object D Indirect	
Recipe Data Object Object PFW 2 56	
Data Recipe 1	

> device data the address information of data download object register.

- > station set the connecting device and station
 - device current device port which is communiating
- station address of communication device
- ➢ object address and serial number of download object register.
- \succ indirect set the offset of current address as follow.

Down Recipe		x
Object Recipe	Button Color Position	
Device Data Station Device	PLC Port	
VirStaNO Object Object	0 Station 1 D V 0 V PSW256	

Device data address of current recipe download will change with register PSW256. D0[PSW256]=D[0+PSW256data]

We suggest using internal address (PSW and PFW internal address type) for indirect

address. If not, the communication will be slow.

- > Recipe data address and serial number of HMI internal data register.
- data set the recipe of recipe data according to actual data capacity.
- recipe

Down Recip	
Object R	Recipe Button Color Position
Count	

count the total group of recipe data.

HMI has PSW and PFW registers. PSW is not power-loss retentive register and the PFW is power-loss retentive register. PFW is suitable for recipe data. Save the recipe data in a group of registers, then choose the recipe by reference number PSW40. It can be input only after PSW40 have been opened in advanced function.



button

Down Recipe		X
Object Recipe Button Color	Position	
Кеу Туре		Password
C Touch		level Level1 -
C Enter Code	T	
Hide Button		
Normal Change Aspect User Defined Save Aspect	Use Text Content Font	Down
Down	C Align Left Align Center C Align Right	

- key type define the key code of touch key or enter key. Enter key is only for OP560, MP360, MP760, XMP, XMH.
- hide button set if it can be visible when button is operating. Choose this option. Aspect of recipe download and character forbidden operation.

✓ Hide Butt	on			
🖲 Normal	Change Aspect	🔽 Use Text		_
	User Defined	Content	Down	*
O Press _	Save Aspect	Font		Ŧ
Do	own	C Align Left	C Align Top C Align Middle	
		C Align Right	C Align Bottom	

- normal displaying status picture when the recipe download button display normally or after releasing recipe download button.
- > press displaying status picture when the recipe download button is pressed.
- Change aspect modify the aspect of recipe download button. It belongs to its own material library. You can choose from it freely.
- User defined modify the aspect of recipe download button. It belongs to user defined material library.
- Save aspect save the asoect of recipe download button. It is convenient for programming.
- ➢ text modify the content, font and align type of recipe download button.
 - content set the displaying content of recipe download button.

font set the size, font and type of rrcipe download button.

align you can choose the relative align type according to your requirement.

- Password if the recipe download button need to be protected by password. If you choose "password" and use password protection. At the same time choose the relative password level.
- color

Down Recipe	X	
Object Recipe Butt	ton Color Position	
Kind Text Color Key Color Back Color	Color	
	More	

➤ kind

- choose the recipe download button to modify the kind of color.
- color modify the color according to the kind.

Down Recipe		×
Object Recipe Button	Color Position	
Position	Size	
X 293	Width 75	
Y 40	Height 42	
- Animal		
Horizontal		
Vertical		
🗆 Lock 🗖	Zoom Ratio	

- position set the upper left point to be the coordinate point(0, 0). Set the X and Y coordinate value.
 - X position set the X coordinate value of recipe download button.
 - Y position set the Y coordinate value of recipe download button.
 - size set the width and height of recipe download button.
- width (W) set the width of recipe download button.
- height (H) set the height of recipe download button.
- > animal set if the recipe download button can be moved.

horizontal set the recipe download button in the horizontal position according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the recipe download button in the vertical position according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- lock set if the recipe download button in the screen can be moved.
- Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-23. Up recipe

 \triangleright

 \triangleright

It is corresponded to download recipe function. This function transfers the device data to internal register of HMI.

1. Click the "Sa" icon in the component tool bar. Move the cursor to the screen and click left mouse to set. Click right mouse or ESC button to cancel it. You can modify its size by boundary points.



2. Double click "up recipe" or choose "up recipe" and click right mouse. Set the attribute by choosing "attribute" or "⁽¹⁾" button.

object

۶ ۱

Up Red	
Obje	ct Recipe Button Color Position
Г	Device Data
	Station
	Device PLC Port -
	VirStaNO 0 Station
	Object
	Object D V Indirect
	Recipe Data
	Object PFW 256
	Data
	Recipe 1
l L	
vice da ation vice	set the connected device and station. current device port which is communicating.
ation	address of communication device.
oject direct	address and serial number of upload source register set the offset of current address as follow.
Up Red	
Obje	ct Recipe Button Color Position
П	Device Data
	Station
	VirStaNO 0 Station 1
	Object
	Object D V 0
	Station Device PLC Port VirStaNO 0 Station 1

Current data address of up recipe will change with register value PSW256. D0[PSW256]=D[0+PSW256 value]

We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

> Recipe data the address and serial number of HMI internal data register.

- data set the recipe of recipe data and confirm the recipe according to actual data capacity.
- recipe

ι	Up Recipe	23
	Object Recipe Button Color Position	
	Count 1	

➢ count total group of recipe data

button

- key type define the key code of touch key or enter key. Enter key is only for OP560, MP360, MP760, XMP, XMH.
- > Hide button hide the button when operating

Hide But	ton			
Normal	Change Aspect	🔽 Use Text		_
	User Defined	Content Up)	*
O Press	Save Aspect	Font		Ŧ
τ	Jp	C Align Left	C Align Top	
		Align Center	💿 Align Middle	
I		C Align Right	C Align Bottom	

- normal displaying status picture when the button of up recipe display normally or after releasing the button of up recipe.
- ➢ press displaying status picture when the button of up recipe is pressed.
- Change aspect modify the button aspect of up recipe. It belongs to its own material library. You can choose from it freely.
- ▶ User defined modify the button aspect of up recipe. It belongs to user defined library.
- Save aspec save the button aspect of up recipe. It is convenient for programming.
- text modify the content, font and align type of up recipe button text.
 content set the displaying content of up recipe button.
 - font set the size, font and type of up recipe button text.
 - align you can choose align type according to requirement.
- Password set if the button of up recipe need to be protected by password. If you choose "password", please use password protection.at the same time choose the password level.

color

Up Recipe		×
Object Recipe Butto	on Color Position	
Kind Text Color Key Color Back Color	Color	

- \blacktriangleright kind choose the up recipe button to modify the kind of color
- \succ color modify the color according to the kind.
- position

Up Recipe		X
Object Recipe Button C	olor Position	
Position	Size	
X 173	Width 75	
Y 70	Height 42	
Animal		
Horizontal		
Vertical		
🗆 Lock 🗖 Zo	oom Ratio	

 \succ position set the upper left point to be the coordinate point(0, 0). Set the X and Y

	coordinate val	lue of up recipe button.
	X position	set the X coordinate value of up recipe button.
	Y position	set the Y coordinate value of up recipe button.
\triangleright	size	set the width and height of up recipe button.
	width (W)	set the width of up recipe button
	height (H)	set the height of up recipe button
\triangleright	animal	set if the up recipe button need to be moved.
	horizontal	set the up recipe button in the horizontal position of HMI according to
	register value.	, modifying X coordinate value.
		X coordinate value=X position+current value of register
ver	tical set t	the up recipe button in the vertical position of HMI according to register value,
m	odifying the Y o	coordinate value.
		Y coordinate value=Y position+current value of register
\triangleright	lock	set if the up recipe button in screen can be moved.

Zoom ratio set if it can be zoomed when editing its size. But this function can not work now.

4-3-24. Function button

Function button contains many functions such as set ON/OFF the coil, copy register, import/export csv file, arithmetic and so on.

1. Click "□" icon in the component tool bar. Mov the cursor to the screen and click left mouse to set. Click right mouse or ESC key to cancel it. You can also edit its size by boundary points.



2. Double click "function button" or choose "function button" and click right mouse. Set the attribute by choosing "attribute" or "¹

■ function

nction Button Limit	Color Position		
nction Pressing	•	All	
	Add	Set Coil Reset Coil	-
		Reverse Coil Copy Coil	
	Modify	Screen Jump Set Data	
		Copy Register	
	Delete	User Input Open Window	
		Close Window Down Scheme	Ξ
	Move Down	Up Scheme	
	Move Up	Data Block Transmit Arithmetic	
	move op	Import CSV Data Export CSV Data	
	Password	Write DataBase	
	1 30011013	Copy File Delete File	
		Down File Call Function	-

function set the operation type. It contains released, pressed, releasing, pressing. Pressed: ON



➢ function options

add add the selectable functions.

- modify modify the relative function attribute
- delete clear the relative optional function

move up move the object option up a physical location.

move down move the object option down a physical location.

Limit	×
Password	
Level1	•
Limited By Coil	MO
ОК	Cancel

password operate the password protection function and choose the password level. At the same time please set the relative level in "system setting".

Limited by coil when it is ON, the function button can be used.

Selectable function choose the relative function. It contains 21 functions. Now the write data base, copy file, delete file and download file are in research. They can be used in the programming software of following version.

(1) set coil

Set ON the coil.

Choose the "set coil" and click "add" button to add this function to the left list. In the left list, please double click this option or click "modify" to enter the setting window. Then you can modify the relative coil address.

Function Button	23
Function Button Limit Color Position	
Function Pressing All	
Add Set Coil Reset Coil Reverse Coil	
Function-Set Coil	
Object	
Station	
Device PLC Port -	
VirStaNO 0 Station	
Object	
Object M V O	
OK Cancel Apply	

 \succ station

- device device port which is communicating
- station address of communication device
- ➢ object set the coil address
- Indirect set the offset of current address

Function-Set Coi		x
Object		
Station Device VirStaNO	PLC Port 0 Station 1	
Object Object		

The object address is M0[D0]=M[0+D0 value]

We suggest using internal address of HMI(PSW and PFW) for indirect address. If not, the communication will be slow.

(2) reset coil Set OFF the coil

unction Button Limit	•	All	
Reset CoilM0	Add	Set Coil Reset Coil Reverse Coil	Â
nction-Reset Coil	-	X	
Object			
Station			
Device PLC Port	0 Station	1	=
Object			
Object M	Indirect		

 \succ station

device device port which is communicating

station address of communication device

- object set the coil address
- indirect set the offset of current address

Function-Reset O	Coil	3
Object		_
Station Device VirStaNO	PLC Port 0 Station 1	
Object Object		

Object address: M0[D0]=M[0+D0 value]

We suggest using intern al address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

(3) reverse coil

Set the relay or coil to be reverse status. If the coil is ON, set to OFF. If it is OFF, set to ON.

23

Function Pres	sing 💌		All	
Reverse Coil M(Add	Set Coil Reset Coil	<u>^</u>
nction-Reverse	Coil	ne l	Reverse Col	×
Object				
Station				
Device VirStaNO	PLC Port 💌 0 Sta	ation	1	E
Object				
Object	M	0		
	_	Indirect		

- \succ station
 - device device port which is communicating
- address of communication device station
- object set the coil address \triangleright
- indirect set the offset of current address \geq

Function-Reve	rse Coil
Object	
Station - Device VirStaN	D 0 Station 1
Object - Object	

The object address: M0[D0]=M[0+D0 value]

We suggest using internal address of HMI(PSW and PFW) for indirect address. If not, the communication will be slow.

(4) copy coil

Copy the status of source coil to target coil.

Function-Copy Co	oil 🧧	x
Object Source Coil Station Device VirStaNO Object Object	PLC Port Image: Station Image: Object to the state of the stateo	
Target Coil Station Device VirStaNO Object Object	PLC Port 0 Station M Indirect	

source coil \triangleright

the address information of readed relay or bit

 \triangleright target coil

device

the address information of readed relay or bit

station \triangleright

device port which is communicating

- station address number of communication device
- object set the coil address \triangleright

> indirect set the offset of current address

nction-Copy Coi		
Source Coil - Station	PLC Port 0 Station 1 M 0	
Target Coil – Station – Device	PLC Port 👻	
VirStaNO Object Object	0 Station 1 M ▼ 0 ▼ PSW256	

The object address: D0[PSW256]=D[0+PSW256 value].

We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

(5) screen jump

Jump to target screen. Click "modify" button, then you can set the target screen ID.

Screen ID	×
Jump to	
C Start Screen	
C Previous Screen	
Screen ID	1
ОК	Cancel

- \succ start screen the screen when system is starting up.
- Previous screen jump to original screen
- Screen ID input the jumping screen number

(6) set dataSet the object value

Function-Set Data
Object
Station Device PLC Port
VirStaNO 0 Station
Object D Indirect
Data
Data Type Word Set Data 0

 \succ station

device	device port which is communicating
station	address of communication device

- > object set the object address
- > indirect

set the object address set the offset of current address

	set the	offset	of	current	address
Fun	ction-9	ot Dat	2		

Obje	-Station					
	Device	PLC Port	-			
	VirStaNO		0	Station		1
[Object					
	Object	D	-		0	
				PSV	V256	
[Data —					
	Data Type	Word	-			
	Set Data		0			

2.5

The object address: D0[PSW256]=D[0+PSW256 value]

➤ data

data type	set if the data type is Word or DWord
set data	set the assigned data

We suggest using internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

(7) copy register

Copy the source register data to the target register

Function-Copy Register
Object
Source Register Station Device PLC Port VirStaNO 0 Station
Object D Indirect
Data Data Type Word
Target Register Station Device PLC Port
VirStaNO 0 Station
Object Object D Indirect
Data Data Type Word

- > source register read the address information of register
 - target register write the address information of register
- stationdevice

⊳

device port which is communicating

- station address of communication device
- object set the object address
- indirect set the offset of current address

Object Station Device PLC Port ♥ VirStaNO 0 Station 1 Object 0 Object 0 Data 0 Data Target Register Station 0 Device PLC Port ♥ VirStaNO 0 Station 1 Object 0 VirStaNO 0 Station 1 Object 0 VirStaNO 0 Station 1 Object 0 Object 0 VirStaNO 0 Station 1 Object 0 Object 0
Station Device PLC Port ▼ VirStaNO Object Object Data Data Type Word ▼ Target Register Station Device PLC Port ▼ VirStaNO Object Object Object Object Object Object Object Data
Data Type Word Target Register Station Device PLC Port VirStaNO Object Object Object Data Data
Device PLC Port VirStaNO 0 Station 1 Object 0 Diject 0 PSW256
Object D PSW256 Data
Void V

The object address: D0[PSW256]=D[0+PSW256 value]

> data set the data type to be Word or Dword.

We suggest using the internal address of HMI (PSW and PFW) for indirect address. If not, the communication will be slow.

(8) user input

Set the ASCII code of input button.

Key Code	×
Input Key Code(0x)	
ОК	Cancel

➢ input key code

the corresponding ASCII code of input button

(9) open window

Open the target window ID

Window Position	
Window ID	
Open Mode	
C Hide G Show	C Indepand

➢ window ID set the target pop-up window ID

> open mode choose the target window to be hide or show

hide the opened window is not visible, but the component in window can still be effective.

show the opened window is visible in project screen.

Open Window	X
Window Position	
Position	
X 165	
Y 85	
🗆 Lock 🔽 Visible	

- position set the upper left corner of pop-up window in the coordinate position of programming screen.
- > lock set if the function button-open window in the screen can be moved.

(10) close window

Close the target window.

window	23
Current window	0
ОК	Cancel

- ➢ current window
- the window will be closed. target closed window ID
- Window ID

(11) down recipe

Download the recipe data saved in HMI to relative device.

Function-Down Recipe	×
Object Groups	
Device Data Station Device PLC Port	
VirStaNO 0 Station	
Object D V 0	
Recipe Data	
Object	
Object PFW 🔽 256	
Data	-
Recipe 1	
OK Cancel Ap	ply

- > Device data address information of down recipe object register
- stationdevice

evice	device port	which is	s communicating	

- station address of communication device
- > object address and serial number of download target register
- > indirect set the offset of current address as follow.

Function-Down	Recipe
Object Group	DS
Device Device Device Device Device Device VirStaN Object	PLC Port
Recipe D Object Object Data Recipe	PFW 2 56

Current address will change with the register value PSW256.

Object address: D0[PSW256]=D[0+PSW256 value]

> recipe data address and serial number of internal data register of HMI.

> recipe set the recipe data according to actual data capacity.

We suggest using the internal address of HMI (PSW and PFW interna address type) for indirect address. If not, the communication will be slow.

(12) up recipe

Upload the recipe data from relative device to the HMI.

n-Up Recip					23
Device Data Station Device VirStaNO		0 Stat	ion J	1	
Object	D		0 ndirect		
Recipe Data Object Object	PFW	•	256		
Data Recipe		1			

> device data address information of up recipe object register

> station

device device port which is communicating

- station address of communication device
- > object address and serial number of upload target register
- > indirect set the offset of current address as follow.

bject Groups]
Device Dat	a
Station -	
Device	PLC Port 👻
VirStaNO	
Object -	
Object	D 🔻 0
	PSW256
Recipe Dat	a
Object -	
Object	PFW - 256
Data	
Recipe	

Current address will change with register value PSW256. Object address: D0[PSW256]=D[0+PSW256 value] > recipe data address and serial number of HMI internal digital register

> recipe set the recipe data according to actual data capacity.

We suggest using internal address of HMI (PSW and PFW internal address type) for indirect address. If not, the communication will be slow.

(13) data block transmit

Transmit the register data group from source address to the target address.

Function-Data Block Transmitted	x
Object	
Source Address Station Device PLC Port VirStaNO 0 Station 1 Object Object D Indirect	
Target Address Station Device PLC Port VirStaNO 0 Station	
Object D Indirect	
Data Register 1	

- > source address read register first address
- ➤ target register write register first address
- ➤ station

device device port which is communicating

station address of communication device

- > object set the object type and address of function button-data block transmit
- > indirect set the offset of current address as follow.

Function-Data Block Transmitted	23
Object	
Object Source Address Station Device PLC Port VirStaNO O Station 1 Object Object D V PSW256	
Target Address Station Device PLC Port VirStaNO 0 Station 1	
Object Object O PSW256	
Data Register 1	

Current object address will change with register PSW256.

Object address: D0[PSW256]=D[0+PSW256 value]

> data set the register number of data block transmit

We suggest using internal address of HMI(PSW and PFW internal address type) for indirect address. If not, the communication will be slow.

(14) arithmetic

Operate arithmetic for target register data and save the value to target register. The object of arithmetic can be constant or variable.

Function-Arithmetic	x
Object Operand Control Operand Control Operand Control Operand Control Operand Control Operation Contr	
Data Data Type Word	

station
 device
 station

device port which is communicating address of communication device

object

set the object type and address of function button-arithmetic storage.

➢ indirect

set the offset of current address as follow.

Function-Arithmetic	x
Object Operand	
Station Device PLC Port VirStaNO 0 Station Object 0 VirStaVO PSW256	
Data Type Word	

Current object address will change with register PSW256. Object address: D0[PSW256]=D[0+PSW256 value]

> data set the data type to be Word or DWord.

We suggest using internal address of HMI(PSW and PFW internal address type) for indirect address. If not, the communication will be slow.

unction-Arithmetic		X
Object Operand		
Operate Kind		
• • · ·	o• o/	
Left Operand		
Use Constant	0 Dec 💌	
C Use Variable	(A)	
Right Operand		
 Use Constant 	0 Dec 💌	
O Use Variable	(B)	

- > operate kind plus, substract, multiply and divide
- > Left operand it contains the setting of constant and variable
- Right operand it contains setting of constant and variable

When you choose constant, you can set the variable by "_____" button.

Left Operate Object	23
Object Station Device PLC Port VirStaNO 0 Station 0	
Object Object PFW 300 Indirect	
Data Data Type Word	

(15) import CSV data

Importing the CSV format file from U disk to XINJE TH (-U), TG (-U), TG (-E) series HMI. You can use the saved data to consult or update the data in HMI.

(1) The title contents of CSV file can not import.
(2) CSV file is produced when HMI exported CSV file data.

port CSV da	ita	ter Thereil
Source Path	Data Save 0	Control Date Time
Device ID		
	Dynamic set	DO
	Import Ctrl	MO
Path/File	CE.csv	
• Fix Nam	e	
C Add ID	After Name	
	0	
	🔲 Dynamic set	DO
start ID	0	
	Dynamic set	DO

- Device ID U disk number. To mark up different U disk (in order to mark up different disk in SCADA function, C disk no. is 0, D disk is 1, E disk is 2...)
- Import ctrl the bit to control the import operation.when this bit is ON, the import is allowed.
- > Path/file the CSV file name need to import
- ➢ Fix name only use the name in path/file
- Add ID after name choose the file by name and number mode. number can be inputted manually or set through register
- Start ID CSV file has many rows. Start ID defines importing from which rows.
 0 means the first row. The row no. can be set through register or input directly.

Import CSV data	23
Source Path Data Save C	ontrol Date Time
Register capacity	100
Register mode C Loo	p 🖲 Line
Data Add Delete	Title Data Format © Dec(D) C Hex(U) C Float(F) C Unsigned(X)
Move up	Data type Word 💌
Move down	Bit length(G) 4 Float length(C) 0

- > Register capacity import data group quantity
- Register mode data storage mode. You need to choose the mode same to CSV file. First confirm if the import data address contains "covered buffer". If yes, you need to choose "loop". If not, please choose "line"(real trend map, history data map, time trend control and sample save have covered buffer).
 - Loop when the data reach the max group quantity, it will cover the original data and store from the first address again

line when the data reach the max group quantity, it stop store.

- Add/delete add/delete the import column
- Move up/move down change the column order
- ➤ title set the title
- ➢ format please set the same format to CSV file
- > Data type please set the same data type to CSV file
- ▶ Bit length/float length choose the same bit length and float length in CSV file

Import CSV data	X
Source Path Data Save Control Date Time Object Object PSW v 256	

Object the import data will store in HMI register PSW or PFW. Please set the PSW or PFW register address.

Import CSV data	X
Source Path Data Save	e Control Date Time
Execute status	MO
Execute result	DO
Execute process	DO

- > Execute status When the bit is ON, the data is importing
- Execute result it shows the execute result through the data in register execute result:
 - 0-import successful
 - 1—import device doesn't exist
 - 2-the memory is low
 - 3-the file name is wrong
 - 4-failed to read/write the file
- \blacktriangleright Execute process it show the importing percent. The percent range is $0\sim100$.

Import CSV data	1	23
Source Path Data Save Control Date Time		
🗖 Date Tim	e	
Date format	YYYY-M-D	
Example	2012-10-9	
Time format	H:MM:SS	
Example	15:44:59	

- Data time import the time of CSV file.
 Date format/time format the date format displayed in HMI
- (16) Export CSV data

Export CSV data function can export the HMI register data to U disk. CSV is the file format which support EXCEL. You can use EXCEL to open and edit the CSV file.

The memory of HMI will extend after using this function. It is convenient for production and maintenance of device.



Export CSV Data	23
Destination Data Save Control Date Time	
Device ID 0	
Dynamic set	
Path/File TW.csv	
○ Fix Name □ Re-export title	
O Name add automatic	
C add number after name	
0	
Dynamic set D0	
O named by date	

- Device ID the number of U disk. If there are many U disks, it can distinguish different disk (when in the configuration, it is hard disk partition number. C disk is 0. D disk is 1 and so on. The no. can be input by manual or register).
- > Path/file set the name of saved CSV file
- ➢ Fix name only save file by the name set in "path/file"
- > Re-export title export the title everytime
- Name add automatic generate file by the mode of name and serial number. The serial number will be added every time.(range: 000~999). The generated file is as following picture.



- Add number after name you can set the serial number after file manually or use a register to set dynamically.
- Named by date use the current date (year, month and day) to name the file. (Now the file name written in "path/file" is invalid) the generated file is as following picture.



Export CSV Data	23
Destination Data Save Control Date Time	
Register capacity 100	
Register mode © Loop © Line	
Temperature Add Title Temperature	
Add Title Temperature	
Delete	
C Float(F) C Unsign	ned(X)
Move up Data type Word	•
Bit length(G)	4
Move down Float length(C)	0
OK Cancel	Apply

Register capacity
data group quantity which need to be exported every time

Register mode data storage mode. You need to choose the mode as same as CSV file. You need to confirm if the exported data address has "ring buffer". If it has, please choose "loop". If not, please choose "line"(normally the data range which save "real trend map", "history trend data map", "time trend" and "data storage" all has "ring buffer").

Loop: continue to export data after exporting the setting groups. The new data will cover the original data.

Line: finish an exporting process according to the group quantity. Then the export process end.

≻	Add/delete	add/delete the list title which is contained in CSV file
≻	Move up/move down	move up/down the generated list title
≻	Title	modify the current list title (displaying list)
	Data format	define the data format (decimal, hex, float number, unsigned
	number)	
≻	Data type	define the data type (Bool, word, dword, byte, string)
\triangleright	Bit length/float length	the data bit length and the bit length after decimal point

xport CSV Data	23
Destination Data Save Control Date Time	
Object PSW 256	

\triangleright	object

choose the object type and first address number of data source.

Export CSV Data		23
Destination Data Save	Control Date Time	
Execute status	MO	
Execute result	DO	
Execute process	DO	

> Execute status the bit show the exporting status. When it is ON, the file is exporting

Execute result the register value will show the result of exporting

Execute result:

- 0-export successfully
- 1-no exporting device
- 2-low RAM
- 3—path and file name is wrong
- 4—reading and writing file failed
- \blacktriangleright Execute process show the export process by percent 0~100

Export CSV Data		2
Destination Da	ata Save Control Date Time	_
Date Time	e	
Date format	YYYY-M-D	
Example	2012-10-23	
Time format	H:MM:SS	
Example	17:01:50	

➢ Date time

export the date time information

Date format/time format

choose the date/time format which is displayed in CSV file.

(17) call function

Call the C function to do more complicated operation and communication.

Call Function	23
Function	1
Name:	•
Exec Mode	
Parallel	
C Serial	

- ➢ Name choose C function name
- Exec mode the execute environment of function can operate many tasks at the same time.

parallel call the task of this function and create new task to execute function. Caller can continue to deal with it.

serial call the task of this function. Only by finishing this function, then you can continue to deal with it. So this function must contain suitable exiting conditions.

About the relation introduction and instructions of function please refer to "HMI C function manual".

Button

Function Button Limit Color	Position	
Key Type © Touch C Enter Code		Password
Hide Button		
Normal Change Aspect User Defined Save Aspect	Vise Text Content Font	Func
Func	C Align Left	C Align Top
	Align Center	Align Middle
	C Align Right	C Align Bottom

➢ Key type

define the key code of touch key or enter key. It is only for OP560, MP360,

Function Button Limit Color		
Кеу Туре		Password
C Touch	lev	vel Level1 <
Enter Code Up	-	·
Hide Button Up Down		
Normal Change Aspe Enter	e E	
User Define Stop	UP	*
		-
C Press _ Save Aspec Clear	+	
UP	C Align Left	C Align Top
	Align Center	Align Middle
	O Align Right	C Align Bottom

MP760, XMP, XMH. The operation of TP, TH, TG HMI is forbidden.

Hide button set if the button is visible. After choose hide button, text and button aspect can not be changed.

-Key Type ◯ Touch ⓒ Enter Code Up		evel Level1	–
- Inde Button			
Normal Change Aspect User Defined Save Aspect	✓ Use Text Content Font	JP	*
UP	C Align Left © Align Center	C Align Top © Align Middle	
	C Align Right	C Align Bottom	

- normal the button appearance
- \triangleright press the button appearance when the button is pressed
- > Change aspect modify the aspect of function button. You can choose the pictures in default
library

- User defined aspect modify the aspect of function button. The picture library is from user.
- Save aspect save the aspect of function button. It is convenient for programming.
- > Use text modify the content, font and align type of function button.
 - content set the displaying content of function button.
 - font set the size, font and type of function button
 - align you can choose the align type freely according to your requirement.

limit

Support the limit function. The function button will be effective when the control bit is ON. Otherwise, the hide button function cannot be operated.

Function Button		23
Function Button Limit	Color Position	
Limit Button	MO	

color

Function Button	×
Function Button	Limit Color Position
Kind Text Color Key Color Back Color	Color
	More

- \blacktriangleright kind choose the button color type
- \succ color modify the color according to the kind.

position

 \triangleright

lock

Function Button	×
Function Button Limit	Color Position
X 253	Width 75
Y 80	Height 42
Animal	
T Horizontal	
Vertical	
🗆 Lock 🗖	Zoom Ratio

- position set the upper left point to be the coordinate point (0, 0). Set the X and Y coordinate value of function button
 - X position set the X coordinate value of function button.
 - Y position set the Y coordinate value of function button.
 - size set the width and height of function button.
 - width (W) set the width of function button
 - height (H) set the height of function button

 \succ animal set if the function button need to be moved.

Animal		
✓ Horizontal	D0	
Vertical	D0	

horizontal set the function button in the horizontal position of HMI according to register value, modifying X coordinate value.

X coordinate value=X position+current value of register

vertical set the function button in the vertical position of HMI according to register value, modifying Y coordinate value.

Y coordinate value =Y position+current value of register

- if choose this item, the button cannot be moved in the screen
- Zoom proportion set if it can be zoomed when editing its size. But this function can not work now.

4-3-25. Function field

The operation is activated by internal system or logical conditions. This is similar to function button. But the differences are as below.

The difference is: function field will activate automatically when the condition is satisfied. But the function field button is invisible in the screen.

1. click the "🖾" icon in component tool bar. Move the cursor to the screen and click left mouse to confirm. Click right mouse or ESC button to cancel it. "Function field" component is invisible button and it will be invisible in HMI.

2. Double click "function field" or choose "function field" and click right mouse. Set the attributes by choosing "attribute" or "¹ button.

Mode

Function	Field	23
Mode	Function Position	
Act	Mode	
•	Start Screen	
0	Coil Spring	
0	Time(Sec.)	
C	Continue	
C	First Scan After Down	
0	First Scan After Power	

- Start screen when the screen of function field is called, the relative function will be executed once.
- Coil spring when the coil change from OFF to ON, the relative function will be executed once.
- Time(sec.) it will execute relative function when the screen is called. It will execute function by certain time (it can be set).



Time (sec) the time, the unit is second

Run immediately execute the function immediately every certain time. If not choose "run immediately", it will execute the function every certain time from the second period.



Continue when the screen is called, every scan will execute relative function. When you choose "time" or "continue", you can choose

Time/Continue Coil Limit M0 to set control coil. This function can be executed

only when this coil is ON.

- First scan after down this function will be executed when the screen is scanned first time after downloading.
- First scan after power this function will be executed when the system is scanned after power on.

Only one of the act modes can be choosed.

function

lode Function Position			
Function		All	
	Add	Set Coil Reset Coil Reverse Coil Copy Coil Screen Jump Set Data	•
	Delete	Copy Register User Input Open Window Close Window Down Scheme	E
	Move Down	Up Scheme Data Block Transmit Arithmetic	
	Move Up	Import CSV Data Export CSV Data Write DataBase Copy File Delete File Down File Call Function	•

The setting of this function is the same to "function button". Please refer to "function button".

position

Function Field	23
Mode Function Position	
Position X 220 Y 110	
Lock Visible	

- position set the upper left point to be the coordinate point (0, 0). Set the X and Y coordinate value of function field.
 - X position set the X coordinate value of function field.
 - Y position set the Y coordinate value of function field.
- lock set if the function field in screen can be moved.
- visible set if the function field is visible when editing it. This function is canceled in Touchwin 2012.

4-3-26. Discrete column map

Show the data of the discrete register in the form of column map or line graph



X axis is register no., the Y axis is the value in register.

The serial number 1~4 from left to right stand for PFW300, PFW302, PFW304, PFW306.

1. Click "Imal" icon in component tool bar. Move the cursor to screen and click left mouse to confirm. Click right mouse or ESC button to cancel it. You can edit the size by the boundary points.



Double click "discrete column map" or choose "discrete column map" and click right mouse.
 Set the attribute by choosing "attribute" or " " button.

object

Discrete Fold Map		23
Object Display Color Po Display Object Table: D0 D0 D0	Add Modify Delete Move Up Move Down	

- Add/delete add/delete data reigster
- Move up/move down change the order of register
- > modify modify the attribute of corresponded register
- display

Discrete Fold Map	×
Object Display Color Position Degree Full Zero 0	Format C Dec C Hex C Float C Unsigned
Pattem C Fold C Dot	Column

- > Degree set the max and min value of Y axis.
- ➢ Format it contains decimal, hex, float and unsigned.
- > Pattern data is showed in the pattern of fold, dot and column.

color

Discrete Fold Map		x
Object Display	Color Position	
Kind	Color	
Fold Color		
	More	

- > kind choose the discrete column map to modify the kind of color.
- > color modify the color according to the kind.
- position

Discrete Fold Map				
Object Display Color Posi	tion			
Position	Size			
X 185	Width 215			
Y 120	Height 115			
Animal				
Horizontal				
Vertical				
🗆 Lock 🔲 Zoor	n Ratio			

- position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of discrete column map.
 - X position set the X coordinate value of discrete column map.
 - Y position set the Y coordinate value of discrete column map.
- \succ size set the width and height of discrete column map.
- width (W) set the width of discrete column map
- height (H) set the height of discrete column map
- \succ animal set if the discrete column map need to be moved.

Animal		
✓ Horizontal	D0	
Vertical	D0	

horizontal set the discrete column map in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the discrete column map in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- > lock lock the column map in the screen, then it cannot move
- Zoom proportion set if it can be zommed by proportion when editing the size. But this function can not work now. This function is canceled in Touchwin 2012.

4-3-27. Continue column map

Display the value of continuous register in column map.



The four columns are PFW300, PFW301, PFW302, PFW303.

1. Click "hat" in the software menu, move the cursor in the screen, click left mouse to confirm, click ESC to cancel. Modify the map size through the boundary point.



2. Double click the continue column map or right click the mouse then choose property or " "" to set the parameters.

Object

The differences from discrete column map: continue column map only needs to set the start register address.

Continue Fold Map	x
Object Display Color Position	
Station Device PLC Port v VirStaNO 0 Station 1	
Object D V 0 PSW256	
Data Data Type Word	

> Station

- Device the device port
- station device station no.
- object set the register type and adress
- ➢ indirect set the address offset

The object address is D0[PSW256] = D[0+PSW256 value].

- Data set the data type: word or Dword
- Display

Continue Fold Map		L	23
Object Display Data Number Range Max Min	Color Position 5 100 0	Format C Dec C Hex C Float C Unsigned	
Pattem	C Dot	Column	

> Data the register quantity

For example, the object is PFW300, data number is 5. The continue column map will display the value of PFW300, PFW301, PFW302, PFW303, PFW304.

Range, format, pattern please refer to discrete column map.

Color

Continue Fold Map	x
Object Display Color Position	
Kind Color	
Fold Color	
More	

- \blacktriangleright kind choose the color type
- ➢ color choose the colors of column map
- Position

Continue Fold Map				
Object Display Color Pos	ition			
Position	Size			
X 222	Width		215	
Y 90	Height		115	
Animal				
Horizontal				
Vertical				
Lock Zoom Ratio				

- position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of continue column map.
- \succ X position set the X coordinate value of continue column map.
- Y position set the Y coordinate value of continue column map.
- \blacktriangleright size set the width and height of continue column map.
 - width (W) set the width of continue column map
 - height (H) set the height of continue column map
- > animal set if the continue column map need to be moved.

Animal		
✓ Horizontal	D0	
Vertical	D0	

horizontal set the continue column map in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

vertical set the continue column map in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- > lock lock the continue column map in the screen, then it cannot move
- Zoom proportion set if it can be zommed by proportion when editing the size. But this function can not work now. This function is canceled in Touchwin 2012.

4-4. Display tool bar



The buttons from left to right are: date, clock, buzzer, backlight, scale, meter, valve, pipe, pump, fan, motor, retort, inverter alarm information, scroll text, real time trend map, history trend map, XY trend map, time trend map, event button, alarm list, real time event, history event, common grid control, data grid control, sample save, sample export.

4-4-1. Date

Display the date.

1. click \mathbb{P} and move the cursor in the screen, click left mouse to confirm, click ESC to cancel.



2. Double click date button or right click mouse then choose property to modify the parameters.

■ display



Manner the date display mode

■ Font

Date	x
Display Font Color Position	
Setting	
String	

- \succ setting set the font of date
- color

Date	x
Display Font Color Position Kind Digital Color Digital Back Col Text Back Color Text Back Color	
Transparent Back	

- \succ kind choose the color type
- \succ color set the colors
- ➢ transparent back the background of date is transparent

Digital back color and text back color are valid when the transparent back is not choosen.

Position

Date		X
Display Font Color Pe	osition	
Position	Size	
X 174	Width	96
Y 110	Height	19
Animal		
Horizontal		
Vertical		
Lock Zoom Ratio		

position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of date

X position set the X c	coordinate value of date
------------------------	--------------------------

- Y position set the Y coordinate value of date
- ➢ size set the width and height of date
 - width (W) set the width of date
 - height (H) set the height of date
- \succ animal set if the date need to be moved.

Animal		
✓ Horizontal	D0	
Vertical	D0	

horizontal set the date in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

- vertical set the date in the vertical position of HMI according to register value, modifying the Y coordinate value.
 - Y coordinate value=Y position+current value of register
- lock lock the date in the screen, then it cannot move
- Zoom proportion set if it can be zommed by proportion when editing the size. But this function can not work now. This function is canceled in Touchwin 2012.

4-4-2. Clock

Display the time.

1. Click ③ and move the cursor in the screen. Click left mouse to confirm and click ESC to

cancel.

FFFF / FF / FF

2. Double click clock or right click mouse then choose property to modify the parameters.

0	Clock	
	Display Font Color Posit	
	Sample 12/3	4 / 56
	 12/34/56 12:34:56 	 Display Hide

- > Sample preview the clock display format
 - Manner set the clock display format
- ➢ second display the second
- Font

۶

Clock		23
Display Demo	Font Color Position	
	Settin	ıg

- ➢ Setting set the font of time
- Color

Clock	×
Display Font Color Position	1
Kind Color	
Digital Color Digital Back Col Text Color Text Back Color More.	
Transparent Back	

- \blacktriangleright kind choose the color type
- \succ color set the colors
- transparent back the background of date is transparent

Digital back color and text back color are valid when the transparent back is not choosen.

Position

Clock	×		
Display Font Color Position			
Position	Size		
X 30(Width 78		
Y 105	Height 19		
Animal			
T Horizontal			
C Vertical			
Lock Zoom Ratio			

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of clock

X position set the X coordinate value of clock

- Y position set the Y coordinate value of clock
- Size set the width and height of clock
 - width (W) set the width of clock
 - height (H) set the height of clock

 \blacktriangleright Animal set if the clock needs to be moved.

Animal		
✓ Horizontal	D0	
Vertical	D0	

Horizontal set the clock in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

Vertical set the clock in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- ➢ lock lock the clock in the screen, then it cannot move
- ➤ Zoom proportion set if it can be zommed by proportion when editing the size. But this

function can not work now. This function is canceled in Touchwin 2012.

4-4-3. Buzzer

The Buzzer will ring when the activate condition is satisfied.

1. Click " **(**, move the cursor in the screen, click left mouse to confirm, click ESC to cancel.

Buzzer is invisible in the screen.



- 2. Double click buzzer or right click mouse then choose property to modify the parameters.
- Object

Buzzer	X
Object Buzzer Position	
Station Device PLC Port v VirStaNO 0 Station	
Object Object Indirect	

⊳ Station

Device

- the HMI port no. communicate to the device
- Station the device station no.
- Object the buzzer object address \triangleright
- Indirect set the address offset

Buzzer	×	
Object	Buzzer Position	
D	Otation Device PLC Port - AirStaNO 0 Station 1	
	Dbject M V D0	

The object address is M0[D0]=M[0+D0 value]



Please choose HMI internal register for indirect address (PSW, PFW).

Buzzer

	Buzzer
	Object Buzzer Position
	Bell Mode
	One
	C Continue
Bell mode	set the ring mode
One	ring once

Position

Continue

 \triangleright

Buzzer	×
Object Buzzer Position	
Position	
X 235	
Y 90	
🗆 Lock 🔽 Visible	

- \geq Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of buzzer
 - set the X coordinate value of buzzer X position
 - Y position set the Y coordinate value of buzzer
- Lock lock the buzzer in the screen, it cannot be moved \triangleright
- Visible \triangleright the buzzer is visible when editing

continue ring

4-4-4. Backlight

Turn on the backlight.

1. Click "*, move the cursor in the screen. Click left mouse to confirm, click ESC to cancel.

Backlight is invisible in the screen.

LCD Light Control

2. Double click backlight or click right mouse then choose property to modify the parameters.

Object

LCD Light Control	23
Object Position Station Device PLC Port v VirStaNO 0 Station 1	
Object Object M Object Object	

> Station

Devicethe port no. communicate with devicestationdevice station no.

- Object the backlight object address
- > Indirect set the offset of object address

LCD Light Control	23
Object Position	
Station Device PLC Port v VirStaNO 0 Station 1 Object Object 0 VirStaNO 0 Object	

The object address is, M0[D0] = M[0+D0 value]

Please choose HMI internal register for indirect address. (PSW, PFW)

Position

LCD Light Control	x
Object Position	_
Position	
X 17(
Y 100	
🗖 Lock 🔽 Visible	

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of backlight

X position set the X coordinate value of backlight

- Y position set the Y coordinate value of backlight
- > Lock lock the backlight in the screen, it cannot be moved
- Visible the backlight is visible when editing

4-4-5. Scale

1. Click "^{1/2}" and move the cursor in the screen. Click left mouse to confirm and click ESC to cancel. Modify the scale size through the boundary point.



2. Double click scale or right click scale then choose property to modify the parameters.

Scale



Style the scale style: vertical, horizontal, round, ³/₄ round, etc.

>	Parameter	display mode, main and slave scale display, scale colors
	Left	the scale display on the left
	Right	the scale display on the right
	Hide border	hide the boundary of scale
	Main	the segments of main scale
	Slave	the segments of vice scale
	Color	the colors of scale

Position

 \triangleright

Scale		×	
Scale Position			
Position	Size		
X 203	Width	40	
Y 60	Height	140	
Animal			
Horizontal			
☐ Vertical			
Lock Zoom Ratio			

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate value of scale

X position set the X coordinate value of scale

Y position set the Y coordinate value of scale

- Size set the width and height of scale
 - width (W) set the width of scale
 - height (H) set the height of scale
- Animal set if the scale needs to be moved.

Animal		
Horizontal	D0	
Vertical	D0	

Horizontal set the scale in the horizontal position of HMI according to register value, modifying the X coordinate value.

X coordinate value=X position+current value of register

Vertical set the scale in the vertical position of HMI according to register value, modifying the Y coordinate value.

Y coordinate value=Y position+current value of register

- > lock lock the scale in the screen, then it cannot move
- Zoom proportion set if it can be zommed by proportion when editing the size. But this function can not work now. This function is canceled in Touchwin 2012.

4-4-6. Instrument

The register value will show in the instrument.

1. Click i and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the instrument, it will show the attribute window.
- Object

Station
Device PLC Port
VirStaNO 0 Station
Object
ObjType D V 0
indirect
Value
Data Type Word 🔻

- ≻ Station Device

 - Virstano
- Object the instrument object address \triangleright set the offset of object address
- Indirect ۶

Object —		
ObjType	D	 0
		 PSW256

The object address = D [0+ the value of PSW256]

Value set the value format (Dword or word)

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Display

ect Display Se	et Color Positio	n
/ Text		
More Langua	age	
Instrument		*
		-
	Font	Art Font Text Library
Nign		Aspect
Nign Horizontal	Vertical	Aspect
	Vertical	Aspect
Horizontal		

- > Text the text on the instrument, user can set many language
- > Horizontal align horizontal align the text
- Vertical align vertical align the text
- > Aspect change the appearance of instrument
- Set

instrument			— X
Object Display S	et Color F	Position	
Direction		Graphics	
Order	Reverse	Pointer Thick	1
Format			
Oec	─ Hex	Main Scale	3
Float	Unsigned	Slave Scale	2
⊂ Data Set			
Max	100	Min	0
🔽 Down Alarm	20	Vp Danger	90
Vp Alam	80	Down Danger	10

> Direction the instrument pointer rotating direction

Graphics the pointer width and the scale quantity
 Data set set the range of scale, alarm value, danger value
 Up danger between setting value and max scale,
 Up alarm between setting value and up danger
 Down alarm between down danger and setting value
 Down danger between min scale and setting value

W Up danger value is larger than up alarm value, down alarm value is larger than down danger.

Color



- ➢ Kind the color type
 - Color set the color
- Position

 \triangleright

Instrument		
Object Display Set C	olor Position	
Position	Size	
X 150	Width	170
Y 90	Height	170
Animal		
Horizontal		
Vertical		
Cock		

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
 X position set the X coordinate of instrument

Y position set the Y coordinate of instrument

A	Size width (W) height (H) Animal	set the width and height of instrument set the width of instrument set the height of instrument the instrument can move		
		Animal		
		V Horizontal	D0	
		Vertical	D0	
	Horizontal	the instrument can horizontal move ac	cording	to register value
	monzontui	X coordinate value =X position+curren		
	Vertical	the instrument can vertical move accordin		e
		Y coordinate value=Y position+current	value	of register
۶	Lock	lock the instrument in the screen, then	it canı	not move

4-4-7. Valve

Simulate the valve status in process control system. For example: the following valve is in close status and open status.





Close status

open status

1. Click 🗑 and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the valve, it will show the attribute window.
- Object
 - (1) Valve object set the trigger signal. When the signal is ON, the valve open; when the signal is OFF, the valve close.

	Object Valve Speed Color Position
	Valve object Station Device PLC Port VirStaNO 0 Station 1 Object
	ObjType M
	Flow of objects
	Device PLC Port VirStaNO 0 Station 1
	Object ObjType M 0
	indirect
ation	
evice	the communication port connect the HMI
tation evice irstano bject	

Object				
ObjType	М	•	0	
		1	PSW256	

The object address = M [0+ the value of PSW256]

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

(2) Flow object

Control the liquid flowing in the valve. When the flow object is ON, the liquid is flowing. When the flow object is OFF, the liquid stop flowing.

> Station

۶

۵ ۱

Device	the communication port connect the HMI
Virstano	the station no. of the communication device

- Object the flow object address
- > Indirect set the offset of flow object address

Object				
ObjType	М	•	0	
			PSW256	

The object address = M [0+ the value of PSW256]

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

■ Valve

Object	Valve	Speed	Color	Position
Man				
Γ				Close State 🔹
	-2	<u>1</u> 2		Change Aspect
				User Defined
				Save Aspect
Direc	tion			
۲	Normal		Reve	erse
Act				
\bigcirc	Set On	Set O	ff 💿 F	Reverse 🔘 Instant

- \triangleright Manner preview the appearance of valve Change aspect change the appearance of valve User defined user can define the appearance of valve Save aspect save the appearance of valve ≻ Direction the liquid flowing direction in the valve \triangleright the action of valve Act Set on the valve always open when trigger signal is ON Set off the valve always close when trigger signal is ON Reverse the valve status will reverse when trigger signal is ON the valve open when keep pressing the trigger signal Instant
 - Speed

- Constant the flowing speed in the valve is constant value, the value should be in the range of max and min value
- Register the flowing speed is controlled through the register, the speed should be in the range of max and min value
 - Min the min speed
 - Max the max speed
- Color



- ➢ Kind set the color type
- \triangleright Color set the color
- Position

Valve			<u> </u>
Object Valve	Speed Cold	or Position	
Position		Size	
X	100	Width	60
Y	110	Height	40
Animal			
Horizon	tal		
Vertical			
Cock			

- Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
 X position set the X coordinate of valve
- Y position set the Y coordinate of valve
- Size set the width and height of valve
- Width (W) set the width of valve

	Height (H) Animal	set the height of valve the valve can move			
		Animal			
		✓ Horizontal	D0		
		Vertical	D0		
	Horizontal	the valve can horizontal move accordin	g to re	gister value,	
		X coordinate value =X position+current	value	of register	
	Vertical	the valve can vertical move according to r	egister	value,	
		Y coordinate value=Y position+current	value c	of register	
\triangleright	Lock	lock the valve in the screen, then it can	not me	ove	

4-4-8. Pipe

Simulate the pipe function in process control system.

1. Click and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



2. Double click the pipe, it will show the attribute window.

Object

When the coil is ON, the liquid is flowing in the pipe. When the coil is OFF, the liquid stops flowing in the pipe.

P	ipe				
	Object	Aspect	Speed Color	Position	
	De	ation evice StaNO	PLC Port	Station	▼
		oject ojType	M ▼	0 indirect	

> Station

Device	the communication port connect the HMI
Virstano	the station no. of the communication device

- Object the pipe object address
- Indirect set the offset of object address

Object				
ObjType	Μ	•	0	
			PSW256	

The object address = M [0+ the value of PSW256]

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Aspect

Pipe				
Object	Aspect	Speed	Color	Position
Asp	ect			
Π				State1 👻
				Change Aspect
				User Defined
				Save Aspect
Dire				Demense
•	Order			Reverse

- preview the appearance of pipe \triangleright Aspect Change aspect change the appearance of pipe User defined user can define the appearance of pipe Save aspect save the appearance of pipe Direction the liquid flowing direction in the pipe \triangleright
- Speed

Pipe					
Obj	ect	Aspect	Speed	Color	Position
l r	0 (Constant			50
	Register				
	Min			0	
	Max			100	

- Constant \triangleright
- the flowing speed in the pipe is constant value, the value should be in the

range of max and min value

Register the flowing speed is controlled through the register, the speed should be in the range of max and min value

Min	the min speed
Max	the max speed

Color

 \triangleright



- \blacktriangleright Kind set the color type
- \triangleright Color set the color
- Position

Pipe		×
Object Aspect Speed	Color Position	
Position	Size	
X 110	Width	80
Y 90	Height	20
Animal		
Horizontal		
Vertical		
Cock		

- Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
 X position set the X coordinate of pipe
 Y position set the Y coordinate of pipe
- Size set the width and height of pipe
 Width (W) set the width of pipe
 Width (W) set the width of pipe
 - Height (H) set the height of pipe

۶	Animal the pipe can move			
		Animal		
		Horizontal	DO	
		Vertical	D0	
	Horizontal	the pipe can horizontal move according to register value,		
		X coordinate value =X position	on+current value	e of register
	Vertical	the pipe can vertical move according to register value,		
		Y coordinate value=Y positio	n+current value	of register
۶	Lock	lock the pipe in the screen, t	hen it cannot mo	ove

4-4-9. Pump

Simulate the running status of pump.

1. Click \square and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



2. Double click the pump, it will show the attribute window.

Object

When the coil is ON, the liquid is flowing in the pump. When the coil is OFF, the liquid stops flowing in the pump.

P	lump
	Object Aspect Speed Color Position
	Station Device PLC Port VirStaNO 0 Station 1
	Object ObjType M 0 indirect

> Station

Device the communication port connect the HMI

Virstano the station no. of the communication device

- Object the pump object address
- Indirect set the offset of object address

Object		
ObjType	M -	0
		V (PSW256)

The object address = M [0+ the value of PSW256]

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Aspect
1.000000

Object Aspec	ct Speed Co	lor Position
Aspect		
		State1
		Change Aspect
		User Defined
		Save Aspect
Direct		
Order		Reverse

- Aspect preview the appearance of pump Change aspect change the appearance of pump User defined user can define the appearance of pump Save aspect save the appearance of pump
 Direction the liquid flowing direction in the pump
- Speed

Pump			
Object Aspect	Speed	Color	Position
Constant			50
Register			
Min		0	
Max		100	

Constant the flowing speed in the pump is constant value, the value should be in the range of max and min value

Register the flowing speed is controlled through the register, the speed should be in the range of max and min value

Min	the min speed
Max	the max speed

Color



- \succ Kind set the color type
- Color set the color
- Position

Pump		— X
Object Aspect Speed C	Color Position	
Position	Size	
X	Width	75
Y 100	Height	45
Animal		
Horizontal		
Vertical		
C Lock		

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
 X position set the X coordinate of pump

	X position	set the X coordinate of pump
	Y position	set the Y coordinate of pump
\triangleright	Size	set the width and height of pump
	Width (W)	set the width of pump
	Height (H)	set the height of pump
\triangleright	Animal	the pump can move

		Animal			
		✓ Horizontal	D0		
		Vertical	D0		
	Horizontal	the pump can horizontal move according to register value,			
		X coordinate value =X position+current value of register			
	Vertical	the pump can vertical move according to register value,			
		Y coordinate value=Y position+current value of register			
►	Lock	lock the pump in the screen, then it cannot move			

4-4-10. Fan

Simulate the running status of fan.

1. Click Q and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



2. Double click the fan, it will show the attribute window.

Object

When the coil is ON, the fan is running. When the coil is OFF, the fan stops running.

Autowind
Object Aspect Speed Color Position
Station
Device PLC Port
VirStaNO 0 Station 1
Object
ObjType M 🔹 0
indirect

Station

Device the communication port connect the HMI

Virstano the station no. of the communication device

- Object the fan object address
- Indirect set the offset of object address

Object			
ObjType	M -	0	
		V (PSW256)	

The object address = M [0+ the value of PSW256]

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Aspect

Autowind	
Object Aspect Speed	Color Position
Aspect	
	State1 -
	Change Aspect
	User Defined
	Save Aspect
Direct	
Order	Reverse
	C C

- Aspect preview the appearance of fan
 Change aspect change the appearance of fan
 User defined user can define the appearance of fan
 Save aspect save the appearance of fan
 Direction the running direction of fan
- Speed

A	Autowind			
	Object Aspec	t Speed	Color	Position
	Constant	ıt		50
	Register	-		
	Min		0	
	Max		100	

- Constant the running speed of fan is constant value, the value should be in the range of max and min value
- Register the running speed is controlled through the register, the speed should be in the range of max and min value
 - Min the min speed
 - Max the max speed
Color

1	Autowind
	Object Aspect Speed Color Position
	Kind Color
	Appearance col Background Co AutowindColor
	More

- \succ Kind set the color type
- \succ Color set the color
- Position

A	lutowind				X
	Object Aspect S	peed Color	Position		
	Position	C	Size		
	X	220	Width	60	
	Y	230	Height	60	
	Animal				
	Horizontal				
	Vertical				
	Lock				

- Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
 X position set the X coordinate of fan
 - Y position set the Y coordinate of fan
- ➢ Size set the width and height of fan
- Width (W) set the width of fan
- Height (H) set the height of fan
- ➢ Animal the fan can move

	Animal	Animal		
	I Horizonta	I	D0	
	Vertical		D0	
Hori	zontal the fan can ho	rizontal move according	g to reg	ister value,
	X coordinate v	alue =X position+curre	nt value	e of register
Verti		al move according to re		•
	Y coordinate v	alue=Y position+currer	nt value	of register
> Lock		n the screen, then it can		•

4-4-11. Motor

Simulate the running status of motor.

1. Click and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



2. Double click the motor, it will show the attribute window.

Object

When the coil is ON, the motor is running. When the coil is OFF, the motor stops running.

ľ	Notor	
	Object Map	Color Position
	Station Device VirStaNO	PLC Port
	Object ObjType	M indirect

➤ Station

Device the communication port connect the HMI

- Virstano the station no. of the communication device
- Object the motor object address
- Indirect set the offset of object address

Object			
ObjType	м 👻	0	
		V (PSW256)	

The object address = M [0+ the value of PSW256]

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Map

N	Motor				
	Object Map Color Position				
	ON Map OFF Map				
	Change Aspect				
	User Defined				
	Save Aspect				

- > ON Map Preview the running image of motor
- > OFF Map Preview the stop status image of motor
- Change aspect change the appearance of motor
- ➢ User defined user define the motor appearance
- Save aspect save the appearance of motor
- Color



- \blacktriangleright Kind choose the color type
- \triangleright Color set the color
- Position



- \triangleright Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate X position set the X coordinate of motor Y position set the Y coordinate of motor ⊳ Size set the width and height of motor Width (W) set the width of motor Height (H) set the height of motor Animal the motor can move \triangleright Animal Horizontal D0 Vertical D0 Horizontal the motor can horizontal move according to register value, X coordinate value =X position+current value of register
 - Vertical the motor can vertical move according to register value,
 - Y coordinate value =Y position+current value of register
 - Lock lock the motor in the screen, then it cannot move

4-4-12. Retort

Simulate the running status of retort.

1. Click \blacksquare and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the retort, it will show the attribute window.
- Object

Object	Range	manner	Scale	Color	Position
Sta	tion				
De	vice	PLC Port			
Vir	StaNO		0 St	ation	
Ob	ject				
Ob	јТуре	D	-		0
				indirect	
Va	ue				
Da	ta Type	Word	-		

➢ Station

Device	the communication port connect the HMI
Virstano	the station no. of the communication device

- > Object the retort object address
- Indirect set the offset of object address

Object			
ObjType	D	•	0
			PSW256

The object address = D [0+ the value of PSW256]

Value set the value format (Dword or word)

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Range

Retort			X
Object Range	manner Scale	Color Position	ı
Max	100	Min	0
Variable	D0	Variable	DO
V Alarm			
Check	Max	Check I	Min
Max	100	Min	0
🔲 Variable	DO	Variable	D0
) Alarm F	Fast	Alarm Slow	

- > Max the max value of retort, it can be set through the register
- Min the min value of retort, it can be set through the register
- Alarm display the liquid level in the retort according to the alarm information Upper limit value < max value
 Upper limit alarm: in the range of upper limit to max value
 Lower limit value > min value

Lower limit alarm: in the range of min value and lower limit value

Alrm mode: fast mode and slow mode

Manner



- > User defined user define the retort appearance
- > Changing change the appearance of retort
- Scale

Retort					
Object	Range	manner	Scale	Color	Position
Us	se Scale				
Mair	n Scale		3		
Slav	ve Scale		3		

➢ Use scale

Main scaleset the main scale of retortSlave scaleset the vice scale of retort

Color



- \succ Kind set the color type
- \succ Color set the color
- Position



Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate

	X position Y position	set the X coordinate of retort set the Y coordinate of retort			
\triangleright	Size	set the width and height of retort			
	Width (W)	set the width of retort			
	Height (H)	set the height of retort			
\triangleright	Animal	the retort can move			
		Animal			
		I Horizontal D0			
		Vertical D0			
	Horizontal	the retort can horizontal move according to register value,			
	Homzontai	X coordinate value =X position+current value of register			
	Vertical	the retort can vertical move according to register value,			
	· · · · · · · · · · · · · · · · · · ·	Y coordinate value =Y position+current value of register			
۶	Lock	lock the retort in the screen, then it cannot move			

4-4-13. Inverter alarm information

This function can show the string contents according to the register value when the PLC port device is frequency inverter.

1. Click and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the variable string, it will show the attribute window.
- Object

Variable string
Object Display Font Color Position
Station
Device PLC Port
VirStaNO 0 Station 1
Object
ObjType D V 0
indirect
Value
Data Type Word 👻

➤ Station

Device	the communication port connect the HMI
Virstano	the station no. of the communication device

- Object the object address
- Indirect set the offset of object address

Object			
ObjType	D	•	0
			PSW256

The object address = D [0+ the value of PSW256]

Value set the value format (Dword or word)

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

Display

Variab	ole string			×	
Obje	ect Disp	lay Font Co	olor Position		
	Content				
	Value	Text description	on of string	Add	
	0	TextEx		Modify	
				Delete	
	Alignment				
			_ ⊚ Left	🔘 Тор	
	г	lext	Center	Middle	
			Right	Bottom	
			Coil control		
	Chang	jing(U)			

- Content the contents of variable string
 Value the value to show the string
- Text des... the string contents
- > Add add one text
- Delete delete one text
- Aspect the background of text
- Alignment the alignment mode of text
- Font

Variable string				
Object Display Font Color Position				
Font	t			
		Setting		
	String	Art		
]		

- > Setting set the font, size of string
- Art set art style of string
- Color

Variable string	
Object Display Font	Color Position
Kind	Color
Aspect Color Background Col Text color	
	More

- \succ Kind set the color type
- ➢ Color set the color
- Position

Variable string		
Object Display Font Co	olor Position	
Position	Size	
X [110]	Width	50
Y 80	Height	20
Animal		
Horizontal		
Vertical		
Lock		

	Position	set the upper left point to be th	e coordinate n	oint (0, 0)	and set the X and X
,	coordinate	set the upper left point to be th	e coordinate p	,oint (0, 0)	and set the 74 and 1
	X position	set the X coordinate of string			
	Y position	set the Y coordinate of string			
\triangleright	Size	set the width and height of strin	g		
	Width (W)	set the width of string			
	Height (H)	set the height of string			
≻	Animal	the string can move			
		Animal			
		✓ Horizontal	D0		
		Vertical	D0		
	Horizontal	the string can horizontal move a	according to re	egister valu	le,
		X coordinate value =X position-	+current value	of register	
	Vertical th	the string can vertical move according to register value,			
		Y coordinate value =Y position-	+current value	of register	
	Lock	lock the string in the screen, then it cannot move			

4-4-14. Scroll text

The text can move from left to right.

1. Click mouse to confirm, click ESC to cancel.

- 2. Double click the scroll text, it will show the attribute window.
- Message

Scroll Text			X
Message	Common		
	Control	Content	
1	Show Always	Thank you very much !	

- Control it includes show always and limited by coil
 Show always input the contents in it
 Limited by coil the contents will display when the coil is ON
- Content right click the text to copy, delete and build new text, double click the text to change the contents

Right click the content number to add new message.

ontrol	Content	
essage	you very much	!
	ontrol	ontrol Content

Common

Scroll Text	
Message Comm	non
Y	140
Margin	20
Scroll speed	1 /0.1s

- ➢ Y the text coordinate of Y-axis
- Margin the space between message, the unit is pixel
- Scroll speed the moving speed of text

4-4-15. Real trend map

The real trend map can collect the data and display on the trend map. The data include temperature, pressure, and liquid level.

For the following application, it collects the value of register D0, value quantity is 20, collection period is 1 second, storage address starts from PSW301. The real-time trend map is shown as below:



the first value is stored in PSW301~302, the second value is stored in PSW303~304.....

1. Click \bowtie and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the real trend map, it will show the attribute window.
- Trend map

Real Trend	X
Trend Map Color Position	1
0 D0	Add
	Batch Add
	Modify
	Delete

- Add add the collection object
- > Delete delete the collection object
- > Modify modify the collection object

(1) Object

Real Trend
Trend Map Color Position
0 D0 Add
Trend Map
Object Trend Map Pick Save Color
Station
Device PLC Port VirStaNO 0 Station 1
Object ObjType D indirect
Value Data Type Word
Station
Device the communication port connect the HMI
Virstano the station no. of the communication device
Object the object address
ndirect set the offset of object address
Object

De

≻

- Ob \triangleright
- \triangleright Ind

Object			
ObjType	D	-	0
		1	PSW256

The object address = D [0+ the value of PSW256] Value set the value format (Dword or word)

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

(2) Trend map

Trend Map	
Object Trend Map Pick Save	Color
Data	Display
Count 100	Map Mode
Pick Period 5 Sec	Fold
Format	O Dot
🔘 Dec 🛛 Hex	Column
Float Oursigned	
Range	Move Mode
Max 100	Move Pen
Min 0	Move Paper

Data

	Count	the collection data quantity
	Pick period	the collection period
۶	Format	decimal, hex, float, unsigned value
۶	Range	max and min value of Y-axis coordinate
۶	Display	the display mode of map: fold, dot. column
۶	Move mode	
	Move pen	the curve will move according to the value
	Move paper	the coordinate axis will move according to the value

(3) Pick



> Control when the coil is ON, the map starts collecting data

(4) Save

Trend M	Лар
Objec	t Trend Map Pick Save Color
	ObjFype PSW 256
] Auto locate

- > Object the storage address of collection data
- > Auto locate the system will auto store the collection data in the HMI

(5) Color

Set the the color of curve in the map

■ Color

Set the coordinate axis color

R	eal Trend					
	Trend Map	Color	Position			
	Kind		Color			
	Color					
				More		
					_	

Position

	Real Trend		— ×	
	Trend Map Color Position			
	Position	Size		
	X 140	Width	215	
	Y 90	Height	115	
	Animal			
	Horizontal			
	Vertical			
	Cock			
Position coordinate	set the upper left point to b	e the coordinate p	point (0, 0) and set the X and Y	
X position	set the X coordinate of real trend map			
Y position	set the Y coordinate of real trend map			
Size	set the width and height of real trend map			
Width (W)	set the width of real trend map			
Height (H)	set the height of real trend map			
Animal	the real trend map can mov	ve		
	Animal			
	Horizontal	D0		
	Vertical	D0		
Horizontal	the real trend map can horiz	zontal move accor	ding to register value,	

 X coordinate value =X position+current value of register
 Vertical the real trend map can vertical move according to register value, Y coordinate value =Y position+current value of register
 Lock lock the real trend map in the screen, then it cannot move

4-4-16. History trend map

 \succ

 \triangleright

The history trend map can display the history data and real-time data at the same time. The history data can be seen through event button.



1. Click \bowtie and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the history trend map, it will show the attribute window.
- Trend source

listroy Trend				
Trend So	urce Displa	ay Object Color	Font Position	
	Add	Batch Add	Modify Delete	
NO	Object	Lower limit	Upper limit	
1	D0	0	1024	

- > Add add the collection object
- Delete delete the collection object
- > Modify modify the collection object, double click the object to modify

Register

⊳

Trend	Source Disp H	Histroy Trend Source
NO 1	Add Object D0	Register Trend Data Color Station Device PLC Port VirStaNO O Station Object Obj Type D indirect
		Value Data Type Word 💌
Station		
Device	the commu	nication port connect the HMI
Virstano	the station r	no. of the communication device
Object	the object ac	ldress
Indirect	set the offset	t of object address
		ject jType D ▼ 0

The object address = D [0+ the value of PSW256] Value set the value format (Dword or word)

We suggest using internal register for indirect address (PSW, PFW), otherwise the communication speed will be slow.

PSW256

(2) Trend data

Histroy Trend Source		
Register Tren	d Data Color	
Format		
Oec	─ Hex	
○ Float	Unsigned	
Range		
Max	1024	
Min	0	

> Format the data format: decimal, hex, float, unsigned value

- \triangleright Range the max and min value of value, the default value is 1024 and 0
- (3) Color

Histroy Trend Source	- Contract -
Register Trend Data	Color
Kind	Color
Color	
	More

Set the curve color

Display

Histroy Trend				
Trend Source Display Object Color	Font Position			
Data	Time			
Page Data	🔘 Тор			
Total Data 10	Ø Bottom			
Pick Period 1 Sec	None			
Control This Regist was used to control Pick!				
Current Data The current value will be placed in from PSW500 to PSW506 register				

Page data the data quantity displayed in the map, for example the following map displayed 5 page data



> Total data the total collection data quantity. For example total data is 10, Each collection value occupied register quantity = (collection data quantity n + collection time 6)*data capacity

- Pick period the collection period
- Time the time display format
- > Control control the collection action through coil
- Current data store the first group of data on every page. Occupied registers = current collection objects n + collection time 6



Object

Histroy Trend					
Trend Source	Display	Object	Color	Font	Position
Object ObjType	PFW	•		256	
Auto loca	ate				

- Object type the register address to store the data
- > Auto locate the HMI will auto-store the data in registers
- Color



- \blacktriangleright Kind set the color type
- \triangleright Color set the colors

Font

Trend Source Display Object Color Font Position Demo Setting String	F	listroy Tre	nd					
Setting		Trend So	urce	Display	Object	Color	Font	Position
		Demo						
String						Settir	ng	
			5	String				

- Setting set the font and size
- Position

Histroy Trend		
Trend Source Display Obj	ect Color Font	Position
Position	Size	
X 455	Width	215
Y 104	Height	153
Animal		
Horizontal		
Vertical		
Cock		

Position
 coordinate
 X position
 Y position

Size

 \triangleright

set the X coordinate of history trend map set the Y coordinate of history trend map set the width and height of history trend map

set the upper left point to be the coordinate point (0, 0) and set the X and Y

Width (W)set the width of history trend mapHeight (H)set the height of history trend map

the history trend map can move

Height (H) ➤ Animal

Animal		
✓ Horizontal	D0	
Vertical	D0	

Horizontal

the history trend map can horizontal move according to register value, X coordinate value =X position+current value of register

	Vertical	the history trend map can vertical move according to register value,
		Y coordinate value =Y position+current value of register
\triangleright	Lock	lock history trend map in the screen, then it cannot move

4-4-17. Event button

Event button has page up and page down function for data storage function. This button is used together with history trend map, history event, time trend map, XY trend map.

1. Click \blacksquare and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



2. Double click the event button, it will show the attribute window.

Event

Event Button			
Event Button Color	Position		
Trend Type	Function		
Trend/Event	Prev Page		•
Time Trend			
Time Axis	Left (Thin)	T Deta	20 (10
🔿 Y Axis	Up (Thin)	Rate	20 /10
	ID All Trends	T	
C XY Poly Trend	Clear		Ŧ

- Trend type choose trend/event, time trend or XY poly trend according to the requirements
- (1) Trend/event

This item is for history event and all the trend maps

E	vent Button	×
	Event Button Color	Position
	Trend Type	Function
	Trend/Event	Prev Page 🔹
	Time Trend	Prev Page Next Page Prev Item
	Time Axis	Lef OK ResetContent
	Y Axis	Up Move Up
		Move Down ID Move Left Move Right
	C XY Poly Trend	Zoom Out Zoom In

- Prev page page up (this function is also fit for common grid and data grid)
- Next page page down (this function is also fit for common grid and data grid)
- Prev item last item (this function is also fit for common grid and data grid)
- ➢ Next item next item (this function is also fit for common grid and data grid)
- Ok confirm the current value and record the current time (only fit for history event)
- Reset content clear all the collection data
- Move up move up the current coordinate scale (only fit for trend map)
- Move down move down the current coordinate scale (only fit for trend map)
- > Move left move left the current coordinate scale (only fit for trend map)
- Move right move right the current coordinate scale (only fit for trend map)
- Zoom outzoom out the current coordinate scale (only fit for trend map)
- Zoom in zoom in the current coordinate scale (only fit for trend map)

(2) Time trend

Event Bu	itton		
Event	Button Color	Position	
Tren	d Type	Function	
™	rend/Event	Prev Page	-
🛛 💿 Ti	ime Trend		
	Time Axis	Left (Thin) 🔻	
	O Y Axis	Left (Thin) Left (Wide)	Rate 20 /10
		Right (Thin) Right (Wide) Zoom Out(Thin)	
© X	(Y Poly Trend	Zoom Out(Wide) Zoom In(Thin)	
		Zoom In(Wide) Reset Zoom Out(Rate) Zoom In(Rate)	

- Left (Thin/wide) move left the current coordinate scale (thin/wide means the move distance)
- Right (Thin/wide) move right the current coordinate scale (thin/wide means the move distance)
- Zoom out (Thin/wide) zoom out the current coordinate scale (thin/wide means the zoom rate)
- Zoom in (Thin/wide) zoom in the current coordinate scale (thin/wide means the zoom rate)
- ➤ Show show the curve
- ➢ Hide hide the curve
- > Reset reset the curve
- > Zoom out/in (rate) zoom out/in the current coordinate scale according to the rate

(3) XY poly trend

Event But	tton	
Event	Button Color	Position
Trend	Туре	Function
© Tr	end/Event	Prev Page 👻
🔘 Tir	ne Trend	
	 Time Axis Y Axis 	Left (Thin)
@ X	Y Poly Trend	Clear Clear Clear&&Draw Reserve&&Draw Repete&&Draw

- Clear
- clear all the fold line
- Clear&draw clear the fold line, and draw new fold line
- ➢ Reserve&draw reserve the old fold line and draw the new fold line
- Repeat&draw draw new line and cover the old fold line once the data coordinate changed
- Button

Event Button	22
Event Button Color Position	
Text More Language	
Coil Control	Font Art Font Text Library Password Level Level
Key Hide	Key Type Touch Membrane Code
 Released Change Pressed Custom Save 	Align Left © Top Middle @ Center Right © Bottom

- More language the text showing on the button can be set to multi-language, click "text library" to add language
- > Coil control when the coil is ON, the button is functional
- Password the button will be protected by password. Please choose the password level. Please refer to "Touchwin special function component" manual
- Key type touch key(for TP, TH and TG series) or membrane key(for OP560, MP360, MP760, XMH, XMP)
- ➢ Key hide hide the button
- Released/pressed set the released and pressed button appearance Change: change the appearance; custom: user defines the appearance; save: save the appearance
- Align choose the button alignment mode
- Color



- ➢ Kind set the color type
- Color set the colors
- Position

Event Button					
Event Button Color Po	osition				
Position	Size				
X 197	Width	50			
Y 52	Height	30			
Animal					
Horizontal					
Vertical					
Lock					

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
 X position set the X coordinate of event button

Y position Size

 \triangleright

 \triangleright

Size set the width and height of event button

set the Y coordinate of event button

the event button can move

- Width (W)set the width of event buttonHeight (H)set the height of event button
- Height (H) Animal

Animal		
✓ Horizontal	D0	
Vertical	D0	

Horizontal

the event button can horizontal move according to register value, X coordinate value =X position+current value of register

	Vertical	the event button can vertical move according to register value	
		Y coordinate value =Y position+current value of register	
\triangleright	Lock	lock event button in the screen, then it cannot move	

4-4-18. XY trend map

User sets the reference curve in advance and compares it to the actual curve to analysis the stability of actual curve.

For example:

X-axis object is PSW300, Y-axis object is PSW301. This curve compares to the reference curve. Reference curve: Y = X;



1. Click $\stackrel{\text{lin}}{=}$ and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the XY trend map, it will show the attribute window.
- Coordinates

oordinates Set Cu	Irve Pick Curv	ve Position	
Hor		Ver	
Data Type Uns	igned 🔹	Data Type	nsigned 🔻
Segment	2	Segment	2
Value		Value	
Up	100	Up	100
Low	0	Low	0
Total	5	Total	5
Float	0	Float	0
Color			
Coord	-	Background	
Scale	•	Color	
Value			

➢ Horizontal

Homzontai	
Data type	the data type include unsigned, decimal, hex, float number
Segment	the X-axis scale
Value	show the X-axis scale value
Up	the max X-axis scale
Low	the min X-axis scale
Total	the total bit of data
Float	the decimal bit of data
Vertical	please refer to horizontal settings
Color	
Coordinate	the color of X-axis and Y-axis
Scale	the color of scale
Value	the color of the coordinate value
Background	the color of background

■ Set curve

A A

Coordinates	Set Curve	Pick Curve	Position
			Curve
		Up	Curve
			Color -
		Down	Curve Mode
			Fold
			Dot
			Coordinates

- Add/delete add or delete the curve
- ➢ Color the curve color
- ➢ Curve mode fold line or dot
- > Coordinates add coordinate for curve

Curve Coordinates			×
Coordinates Point:(0,0)		Set	
T OINC.(0,0)	Up	X:	0
	Down	Y:	0
Add Del		ОК	Cancel

Choose the coordinate point and set the X, Y coordinates.

Pick curve

Coor	dinates S	et Curve	Pick Cun	ve F	osition	
		or ourve			oanon	
<u> </u>	Irve				Set	
					Curve	
				Jp	Curve	
				Jp	X Object	
					Y Object	
				own		
						Set Param
					- Auto	Save
					Contr	ol Pick
	Add	Del				
ld/delete		r delete tl	he curve			
Y object	the re-		1	3737		
		-			axis coordin	
t parameter	the pa	arameters			axis coordina ate mode, co	lor
t parameter	the pa	-				
t parameter	the pa	arameters	s include			lor
t parameter	the pa	rameters rameter	s include ter		ate mode, co	lor
t parameter	the pa	rameters rameter Parame Update	s include ter e Mode	upd	ate mode, co	lor
t parameter	the pa	rameters rameter	s include ter e Mode	upd	ate mode, co	lor
t parameter	the pa	rameters rameter Parame Update	s include ter e Mode	upd	ate mode, co	lor
t parameter	the pa	Parameter Parameter Update	ter Mode	upd	ate mode, co	
t parameter	the pa	Parameters Update Interva Color Total D	ter Mode	upd	ate mode, co	
t parameter	the pa	Parameters Parameter Update Interva Color Total D	ter e Mode al Data e Mode	upd	ate mode, co	
t parameter	the pa	Parameters Parameter Update Interva Color Total D	ter Mode	upd	ate mode, co	
t parameter	the pa	Parameters Vpdate Interva Color Total D Curve	ter e Mode al Data e Mode	upd	ate mode, co	
	the pa	Parameters Parameter Update Interva Color Total D Curve	ter e Mode al Data e Mode Fold Dot	Time	ate mode, co	
odate mode	the particular the pa	Parameters Parameter Update Interva Color Total D Curve © drawing o	s include ter e Mode al Data e Mode Fold Dot	Time	ate mode, co	
odate mode erval	the pa Pa the o the o	Parameters Parameter Update Interva Color Total D Curve O drawing o updating	s include ter e Mode al Data e Mode Fold Dot curve mo period	Time	ate mode, co	
odate mode erval olor	the pa Pa the o the o the o	Parameters Parameter Update Interva Color Total D Curve O drawing o updating curve co	s include ter e Mode al Data e Mode Fold Dot curve mo period lor	e upd	ate mode, co	
odate mode erval blor tal data	the particular the pa	Parameters rameter Parameter Update Interva Color Total D Curve @ drawing o updating curve co max coo	s include ter e Mode al Data e Mode Fold Dot curve mo period lor ordinates	e upd	ate mode, co	
odate mode erval olor	the particular the pa	Parameters Parameter Update Interva Color Total D Curve O updating curve co max coo d line and	s include ter e Mode al Data e Mode Fold Dot curve mo period lor ordinates d dot	e upd	ate mode, co	

Position

AAA

sition		Size	
	42	Width	255
Y	185	Height	148
Horizont	tal		
Vertical			

۶	Position coordinate	set the upper left point to be the coordinate point (0, 0) and set the X and Y				
	X position	set the X coordinate of XY trend map				
	Y position	set the Y coordinate of XY trend map				
۶	Size	set the width and height of XY trend map				
	Width (W)	set the width of XY trend map				
	Height (H)	set the height of XY trend map				
۶	Animal	the XY trend map can move				
		Animal Image: Horizontal Image: Horizontal Image: Vertical D0				
	Horizontal	the XY trend map can horizontal move according to register value, X coordinate value =X position+current value of register				
	Vertical	the XY trend map can vertical move according to register value,				
		Y coordinate value = Y position+current value of register				
≻	Lock	lock XY trend map in the screen, then it cannot move				

4-4-19. XY fold map

Note: only fit for TH, TG series HMI

The XY fold map can collect two groups of register and draw the curve in point, line mode. For example: the two groups of register are PSW300~PSW309, PSW310~PSW319. PSW256 is drawing mode. PSW256=1 clear and re-draw; PSW256=2 save and re-draw; PSW256=3 clear; PSW256=4 repeat re-draw.



1. Click i and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the XY fold map, it will show the attribute window.
- Graph

raph Pick Po	osition	
Aspect		
	Frame:	•
	Background:	
Trend		
Style		
C Line	Point	Point-Line
Line		Point
Color:	•	Color:
Width: 1	•	Width: 4
Style		Style
Solid		Rect
Dash		Round

> Aspect set the frame and background color of curve

> Trend

Style the curve display mode: point, line, point-line

Line the color/width/curve style

Style solid line and dash line

Point the color/width/curve style

Style rectangle point, round point

Pick

23

Share buffer the X/Y axis data are from the same register

- If share buffer is effective, the (X, Y) coordinates are the value starting from PSW300. First coordinate is (PSW300, PSW300), the second is (PSW301, PSW301)....
- (2) If share buffer is not effective, the coordinates of X and Y are from different register groups.

Share buffer		
X Data	D0	X Parameter Set
Y Pick Add	DO	Y Parameter Set

X data set the X-axis data type, min and max value

Y pick add set the Y-axis data type, min and max value

- > Dynamic set this function is selected: set the coordinates quantity through register
 - This function is not selected: set the coordinates quantity directly
- Draw mode

First status set the drawing mode at the beginning. The modes can be never draw, draw once, and repeat drawing

- Register control set the drawing mode through the register
- Register value=1 clear the drawing and draw the new one
- Register value=2 reserve the old one and continue drawing behind the old fold line
- Register value=3 clear the current fold line
- Register value=4 repeat drawing

The drawing mode can be set through event button, please refer to chapter 4-4-17.
Position

≻

≻

≻

 \triangleright

XY	Poly Map
	Graph Pick Position
	Position Size
	X 139 Width 220
	Y 122 Height 185
	Animal
	Horizontal
	Vertical
	Lock
Position	set the upper left point to be the coordinate point $(0, 0)$ and set the X and Y
coordinate	
X position	set the X coordinate of XY fold map
Y position	set the Y coordinate of XY fold map
Size	set the width and height of XY fold map
Width (W)	set the width of XY fold map
Height (H)	set the height of XY fold map
Animal	the XY fold map can move
	Animal
	V Horizontal D0
	Vertical D0
Horizontal	the XY fold map can horizontal move according to register value,
	X coordinate value =X position+current value of register
Vertical	the XY fold map can vertical move according to register value,
	Y coordinate value =Y position+current value of register
Lock	lock XY fold map in the screen, then it cannot move

4-4-20. Time trend map

The curve collects the data according to the time. For example, the collection period of the following curve is 1s. The storage mode is continuous storing until full.



The collection period of following curve is 3s; the storage mode is cyclic covering.



1. Click is and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.

2. Double click the time trend map, it will show the attribute window.

Common

ommon View	Object Trend Color Position
otorge Size	10
otorge Mode	 rotate overwrite full stop
ick Mode	Pick Period
	Period 1 Secc -
	Pick Ctrl M0
	Variable Mode M0
	Fix Mode
	Stop © Circle
	Pick Feel M0

Storage size the data quantity. For example: the storage size 10 means 10 groups of data. Each group of data occupies some registers.

Rotate overwrite registers=curve occupied register n+time

6(year/month/day/hour/minute/second)

Full stop registers=curve occupied register n+ time (according to time axis)

Storage mode the mode to store the data

Rotate overwrite store from the beginning address when the data is full and cover the original data. If the fix mode is stop or the variable mode coil is OFF, it will stop collecting when the data is full.

Full stop storing when the data is full

Pick mode the data collection mode, this mode is effective when the storage mode is rotate overwrite

Pick period the data collection period, the unit is 1s; if the pick control is effective, it starts to collect data when the coil is ON

Variable mode and fix mode

If variable mode coil is ON or fix mode is circle, the storage mode will be rotate overwrite If variable mode coil is OFF or fix mode is stop, the storage mode will be full stop

Variable mode and fix mode cannot be selected at the same time.

Pick feel when the rising edge of coil is coming, it will collect the data once

View

Time Trend	
Common View	Object Trend Color Position
Grid Style	Time Grid 5 Y Grid 5
Time Info	Year Month Day
	Hour Minute Second
Init Time	30 Secon 💌
Time Section	6
Scale Section	2 Font
Y Section	6
Scale Section	2

- ➢ Grid style display the grid for time axis and Y axis
- \blacktriangleright Time info the time type displaying on the time axis
- ➢ Init time the range of time axis, the min unit is second
- > Time section divide the time axis in sections
- > Scale section display the scale value for each time axis section
- Y section divide the Y axis in sections
- Scale section display the scale value for each Y axis section



Object

The object registers are used to store the collection data. The storage data type depends on the storage mode.

(1) Storage mode is rotate overwrite: store the collection data and time

mmon View	Object Trend Color Position
Station	
Device	Local registers 👻
VirStaNO	0 Station 0
Object	
ObjType	PSW - 256

- > Object type the register type and first address
- > Auto locate auto-allocate the register address according to the object type
- (2) Storage mode is full stop: set the collection data register address

Corr	nmon View Object Trend Color Position
	Station
	Device Local registers
	VirStaNO 0 Station 0
	Object
	ObjType PSW - 256



the register type and address

The auto locate is unavailable in full stop mode.

Trend

ïme Trend	
Common View Object Trend	Color Position
Line2 Temperature	Map Mode
Line1 Line2	Color Pick D0
	Another Group
	Display ◉ Dec
	Float Oursigned
	Data Type
	🔘 Byte 💿 Word 🔘 DWord
	Init Min 0
Add Batch Add Delete	Init Max 100

- > Add/delete add or delete the curve
- Batch add add the curve in batch
- ➢ Map mode

Fold/dot/column display the data in the mode of fold line, dot, or column curve

- ➢ Color the color of curve
- Pick the collection data register

ime Trend		Σ
Common View	Object Trend Color Position	
Line2 Temperature	Map Mode	
Line1 Line2	Color Pick D0	
Cont	rol	
Ob	oject	
	Station Device PLC Port VirStaNO 0 Station	1
	Object ObjType D 🗸 0	
Add Ba	indirect	



set the address offset

Control	Electra (×
Object		
Station Device VirStaNO	PLC Port	▼ 1
Object ObjType	D ▼ 0	

The object address changed with PSW256. The address = D[0+PSW256 value]

We suggest using the internal register of HMI for indirect address (PSW, PFW), otherwise the communication speed will be slow.





Note: (1) The first curve cannot set another group

(2) If "another group" is not selected, the initial max and min value will refer to the last curve

- Show scale set the scale value format
- > Data type the data type: byte, word, Dword
- ➢ Initial min the min value of curve
- ➢ Initial max the max value of curve

Color

Time Trend	
Common View Ob	iject Trend Color Position
Kind Frame Color Background Col Grid Color Time Label Colo	Color

- \succ Kind the color type
- > Color the color of frame, background, grid or time label

The color of background and grid is effective if "display grid" is selected.

Position

Time Trend		×
Common View Object	Trend Color Posit	ion
Position	Size	
X 78	Width	295
Y 93	Height	184
Animal		
Horizontal		
Vertical		
Lock		

- Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate
- X positionset the X coordinate of Time trend mapY positionset the Y coordinate of Time trend map
- > Size set the width and height of Time trend map
- Width (W) set the width of Time trend map
- Height (H) set the height of Time trend map
- > Animal the Time trend map can move

		Animal	
		V Horizontal D0	
		Vertical D0	
	Horizontal		er value,
		X coordinate value =X position+current value of register	
	Vertical	the Time trend map can vertical move according to register val	ue,
		Y coordinate value = Y position+current value of register	
\triangleright	Lock	lock Time trend map in the screen, then it cannot move	

4-4-21. Alarm list

The alarm list will show the alarm information when there is trigger signal of controller. 1. Click I and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.

^{M0} Alarm List

<u> </u>
, <u>,</u>

2. Double click the alarm list, it will show the attribute window.

■ Common

Data Logger
Common Alarm Position
Title
Caption More Language
Alarm List
Font Art Font Text Library
Title Height 20 Align
Alarm Width 100 Center
Row Count 5
Cell Height 20 Sorder Bold

- ➢ Title display the alarm title
- More language the title can be set to 8 different languages Title height the size of title
 Alarm width the row width of alarm information
 Row count the row quantity of alarm information
- > Cell height the row height of alarm information
- Align the alignment mode of alarm information
- Border bold the frame of list is bold
- Alarm

~

ata Logge	er					23
Common	Alarm	Position				
		Control	Content			
	M0		Alarm Content			
		Common Alarm	Common Alarm Position Control	Common Alarm Position Control Content	Common Alarm Position Control Content	Common Alam Position Control Content

- > Control set the coil to control the alarm information
- > Content the contents of alarm infomation
- (1) Add, delete alarm information

Right click the information number to add or delete information.

Data Logge	r		×
Common	Alarm Position		
	Control	Content	
	New Message	ent	
	Delete		

(2) Modify the control coil

Double click the coil to modify the information

Data Logger	l
Common Alam Position	
Control Content	
2 M0	
Object	
Station	_
Device PLC Port	
VirStaNO 0 Station 1	
Object ObjType M V 0	
indirect	

(3) Modify the alarm information

Double click the alarm content to modify the information

Data Logger	L			
Common Alarm Position				
Control	Content			
1 M0	Alarm Content			
2 M0				
Text				
Text Font Color				
Content				
More Language				
Alarm Content				

(4) Add alarm contents

Right click the alarm contents to add new text, variational text and data.

(Data Logger								
	С	ommon	Alarm	Position					
				Control		Conte	ent		
L		1	MO		Alarm Cont	ent		1	
		2	MO				N T .	1	
		3	MO				New Text		
							New Variation	onal Text	t
							New Data		

1 Text

Double click the text to modify the contents, font and color.

Text		×
Text	Font Color	
Con	tent	
-	More Language	
Te	ext	*

2 Variable text

It displays the text according to the register value.

/arial	le string	
Obj	ect Display Font Color Position	
	Station	
	Device PLC Port	•
	VirStaNO 0 Station	1
	Object	
	ObjType D V 0	
	indirect	
	Value	
	Data Type Word 👻	

3 Data

It will display the register value when the alarm occurs.

alue	
Object Text I	Font Color
Station	
Device	PLC Port
VirStaNO	0 Station 1
Object	
ObjType) 🗸 (
	indirect
Value	
Data Type V	Mart -
Data Type	Vord 🔹

(5) Copy, delete the contents

Right click the alarm contents to copy and delete the contents.

Da	Data Logger						
	Common	Alarm	Position				
			Control		ntent		
	1	MO		Alarm Content			
	2	MO				Сору Со	ntent
	3	M0				New Text	t
						New Vari	iational Text
						New Dat	a
						Delete	

Each piece of contents can add different kinds of information including text, variable text, and data.

Position

Data Logge	×
Common	Alarm Position
Positio	n
x	231
Y	92
Cock	

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate

	X position	set the X coordinate of alarm list
	Y position	set the Y coordinate of alarm list
≻	Lock	the alarm list cannot move

4-4-22. Display real time event

This function is to real-time show the information.

1. Click \square and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.



- 2. Double click the real time event, it will show the attribute window.
- Aspect

Real Event		— ×
Aspect Event Color	Position	
More Language		
Information		*
		~
F	ont	Font Text Library
Setting		Align
Rows	3	 Left
Width	195	Center
Height	25	Right

- > More language the title can be set to 8 languages
- ► Rows the row number
- ➢ Width the width of information
- Height the height of information
- ➢ Align the alignment mode of information
- Event



- ➢ Add add information
- Batch add batch add information

Modify modify the information

Note: double click the information to modify the contents

- > Delete delete the information
- (1) Coil

Event Source	x
Coil Infomation Station Device Device PLC Port VirStaNO 0 Station 1 Object ObjType M 0 indirect 0	

> Station

 \triangleright

- Device the communication port
- Station the device station
- Object the coil address
- Indirect the offset of address

Coil	Infoma	ion
	Station Device VirStaNO	PLC Port
	Object ObjType	M ▼ 0 ▼ PSW256

Object address=M[0+PSW256]

We suggest using internal register of HMI (PSW, PFW) for indirect address otherwise the communication speed will be slow.

(2) Information

Event Source	×
Coil Infomation	
Event	
More Language	
Over volt	*
	-
	Text Library

> Event add or modify the contents displayed in the real time event

Color

Real Event	
Aspect Event Colo	Position
Kind	Color
Title Color Frame Color Color Message	
	More

- \succ Kind the color kind
- ➢ Color the color of title, frame, message
- Position

Real Event	×
Aspect Event Color Position	
Position	
X	
Y 34	
Cock	

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate

X position	set the X coordinate of real-time event
Y position	set the Y coordinate of real-time event

 \succ Lock the real-time event cannot move

4-4-23. Display history event

History event will real-time show the event information and store the state and data.

1. Click and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. Drag the boundary to change the size.

PFW256 PFW 2pging Time	Info	Affirm Time
M0		
	_	

- 2. Double click the history event, it will show the attribute window.
- Aspect

Aspect Event Pick	Save Color	Position	
Column			
Column1 (C)) Column2	Column3	
Title			
More Language			
Spring Time			*
			Ŧ
	F	ont Text l	Library
Align ×ó¶ÔÆë	- Colum	n Width	118
Row Height 2	25 Rows p	er page	2
		apacity	100

Column set each column title, alignment mode and column width
 Title set the title name

More language the title can be set to 8 kinds of language

Align the alignment mode of title

Column width change the column width

- Row height change the row height
- Rows per page set the row numbers on each page
- Show year display the year behind information
- Event capacity the total event numbers

The event will occupy register numbers = [event capacity n+start end code 1]* Every event occupied register numbers 13 + start end pointer 4 Which is (n+1)*13+4 Each event occupied register numbers =trigger time 6+event information 1+confirm time 6=13

Event

pect		ck Save Color Positio	
NO	Object	Alarm message	Trigger
1	MO	Over volt	Up Edge
			upport Unicode

Add/batch add/modify/ delete add/batch add/modify or delete the event information Double click the information in the event list to modify the objects:

Histroy Event	Event Source
Aspect Event Pick Save Co	Coil Event
Add Batch Add NO Object Alarm message 1 M0 Over volt	Device PLC Port
	Object ObjType M

- > Station set the communication port device and station no.
- > Object the coil address to trigger the history event

ent Source Coil Event		
Descript		
Descript		
More Language		
Over volt		
		-
		Text Library
Spring		
(a) Accord Edge	Descend Edge	

- > Descript the contents of history event
- > Spring the event will be activated by rising edge or falling edge of coil signal

Pick

The history event will collect data when this item is choosen. When the coil is ON, the data will be collected.

ŀ	listroy Event				
ſ	Aspect Event Pick	Save	Color	Position	
	Control				
	M0 This Pick		was used	to control	

Save

Histroy Event	
Aspect Event Pick Save Color Position	
Object ObjType PFW 256	
Auto locate	

- Object
- ject the object address to store the history event data
- > Auto locate the system will auto-assign the registers to store the data

Color

listroy Event Aspect Event Pick	Save Color Position
Kind Title colors Frame Color Event Color	Color
	More

- ➢ Kind choose the kind of color
- \succ Color set the color
- Position

Histroy Ev	ent	_	-	-		
Aspect	Event	Pick	Save	Color	Position	
Pos	ition					
x		267				
Y		101				
Lo	ck					

Position set the upper left point to be the coordinate point (0, 0) and set the X and Y coordinate

X position	set the X coordinate of history event
Y position	set the Y coordinate of history event
т 1	41 - 1

Lock the history event cannot move

4-4-24. Common grid

Common grid can display and input data in the table. It can be used together with column map, XY fold map for data input function. For display function, it is used together with sample save and sample export.

Note: please use event button to make the operations including prev item, next item, prev page, next page. Please refer to chapter 4-4-17.

1. Click is and move the cursor in the screen, right click mouse to confirm, click ESC to cancel.

Pito	Name	year	month	day	hour	minute	second	quantity	amount
000	A	000	000	000	000	000	000	000	000
000	В	000	000	000	000	000	000	000	000
000	С	000	000	000	000	000	000	000	000
000	D	000	000	000	000	000	000	000	000
000	E	000	000	000	000	000	000	000	000

Note: don't change the table size by dragging the boundary of table. Otherwise the table cannot be touched correctly. Please modify the column width and row height in the grid control property.

- 2. Double click the common grid, it will show the property window.
- Object

G	id Control
	Object Common Column Position
	Station
	Device PLC Port
	VirStaNO 0 Station 1
	Object
	ObjType D 🗸 0

- Station communication port device and station no.
- > Object the first address of the common grid

The address arrangement of grid object





Common

Object Common	Column Posit	lion	
Total Rows	3	Title Height	2
Visible lines	3	Cell Height	2
🗸 Title 🗸	Bold border	Title Font	Cell Font
Title	Jage	V Static colu Title More La	nguage
	xt Library		Text Library
Width	30	Width	80
Static column na More Langu Worker1		Worker1 worker2 worker3	

- \blacktriangleright Total rows the total rows of table
- \blacktriangleright Visible lines visible lines \leq total rows
- > Title height the height of title row
- > Cell height the height of each row
- ➢ Title display the title row
- > Bold border the frame of grid is bold line
- > Title font the font of title words
- \succ Cell font the font of each word in the row
- Auto-increment column display the number of column
- Title(more language)set the number title, support 8 kinds of language
- Width the width of number column
- Static column the name of column
 - Title(more language)set the title of static column, support 8 kinds of languageWidththe width of static column
- Static column name set the name column contents

Column

bject Common	Column	Position		
Modifiable		Add	Modify	Dele
Title	Width	Data	Format	Alignment
point	50	WORD	UINT	Align Ri
			J	
KeyBoard KeyBoard_60(
rveyboard_out	Hind	7	8	9 +/-
	- 22			
	Harris		5	6 CLR
				IT I HERE
	44 -		1.1	Company of the state
	HM		2	3 ESC
	HM - H	41 - 45 F.J. 1 7 - 4	2 10 10 10 10 10 10 10	3 ESC

- > Modifiable the data in the table can be changed
- ➢ Add add a new column
- > Modify modify the data in the grid
- Delete delete one column
- > Keyboard choose the keyboard type which is used to change the data

Grid Control					23
Object Common C	Column Pa	sition			
🔽 modifiable	Add		Modify	De	lete
Title	<u>Wid</u> th D	ata	Format	Alignment	
point	50 V	/ORD	UINT	Align Ri	\geq
Column information		/			×
Title More Language point Width	51	В	itLength	Text	Library 3
Type Word	•	D	otLength		0
Format Dec(D) Hex(U) Float(F) Unsigned(X)			Align Hor C Left C Cente Right		

Double click the data in the list to modify the details:

- \succ Title the title of the column
- \succ Width the width of column
- > Bitlength the data bit length before decimal point
- > Dotlength the data bit length after decimal point
- Type the data type (word, Dword)
- \succ Format the data format

Note: the time is in hex format

Position

Grid Cont	rol		
Object	Common	Column	Position
Pos	ition		
X		174	
Y		83	
C La	ock		

- Position set the common grid position and size
- > X position set the X coordinate of common grid
- Y position set the Y coordinate of common grid
- ➢ Lock the common grid cannot move

4-4-25. Data grid

Note: this function is only suitable for TH and TG series HMI.

Data grid can display continuous register data. It is used together with sample save and sample export. Data grid has circular buffer and time displaying. Common grid is suitable for mass data monitoring and modifying.

The following example shows the data of sample save function. The purpose is to display the data collected by sample save function.

NO	Name	Data 1	Data 2	Data 3	Data 4	Time
0	A1	25	50	100	150	2011-09-20 13:46:07
1	A2	20	40	80	120	2011-09-20 13:46:05
2	A3	15	30	60	90	2011-09-20 13:46:03
3	В3	10	20	40	60	2011-09-20 13:46:01
4	В4	5	10	20	30	2011-09-20 13:45:59

Note: please use event button to make the operations including prev item, next item, prev page, next page. Please refer to chapter 4-4-17.

1. Click and move the cursor in the screen, right click mouse to confirm, click ESC to

cancel.

Dino	Name	Data1	Data 2	Data 3	Data 4	Time
000	A1	000	000	000	000	000
000	A2	000	000	000	000	000
000	A3	000	000	000	000	000
000	B3	000	000	000	000	000
000	В4	000	000	000	000	000

2. Double click the data grid, it will show the property window.

Object

	Data Grid
	Object Common Column Position
	Station Device PLC Port VirStaNO 0 Station 1
	ObjType D 🗸 0
Station	the communication port and station no.
Object	the first object address of the grid
The address arran	ngement of grid object
Column 1	Column 2 Column 3 Column 4 Column 5
	st address+1 first address+2 first address+3 first address+6 (year/month/day hour/minute/second)
Row 1	• Hourmindersecondy
Row 2	

■ Common

Data Grid	-	×
Object Common Column Pos	ition	
Total Rows	Title Height	20
Visible lines 5	Cell Height	20
Title Bold border	Title Font Ce	II Font
Auto-increment column	Static column	
Title	Title	
NO	Name	*
-		-
Text Library	Text Lit	orary
Width 30	Width	80
Static column name		
More Language	A1 A2	
A1 ^	A3 B3	
	B3 B4	
Text Library		

- \succ Total rows the total rows of table
- > Visible lines visible lines \leq total rows
- > Title height the height of title row
- > Cell height the height of each row
- ➤ Title display the title row
- > Bold border the frame of grid is bold line
- \blacktriangleright Title font the font of title words
- > Cell font the font of each word in the row
- > Auto-increment column display the number of column
- Title(more language)set the number title, support 8 kinds of languageWidththe width of number column
- Static column the name of column
- Title(more language)set the title of static column, support 8 kinds of languageWidththe width of static column
- Static column name set the name column contents

Column

ta Grid Dbject Common	Column	Position	-		<u> </u>
Circle Buffer		Add	Modify	Del	ete
Title	Width	Data	Format	Alignment	
Data1	60	WORD	UINT	Align Ri	
Data 2	60	WORD	UINT	Align Ri	
Data 3	60	WORD	UINT	Align Ri	
Data 4	60	WORD	UINT	Align Ri	
Time	60	WORD	UINT	Align Ri	

- > Circle buffer auto-allocation the head and tail pointer
- Add anew column
- > Modify modify the data in the table
- Delete delete one column

Double click the data in the list to modify the details:

Data Grid	-	-	-		Σ
Object Comm	non Column	Position			
Circle Buf	fer	Add	Modify	De	elete
Title	Width	Data	Format	Alignment	
Data1	60	WORD	UINT	Align Ri	\geq
Column info	ormation	_	_		23
Title More Data 1	Language				*
				Text Libra	
Width		60 Bit L	_ength		3
Туре (Word	👻 Dot	Length		0
Format		A	lign Hor		
⊙ Dec(⊙ Hex(⊙ Float ● Unsi	U) (F)	() Left) Center) Right		
Format	H:M:S				-

- \succ Title the title of the column
- ➢ Width the width of column
- > Bitlength the data bit length before decimal point
- > Dotlength the data bit length after decimal point
- ➢ Type the data type (word, Dword)
- ➢ Format the data format
- > Time to display the time and set the time format

Position

Data Gr	id
Objec	t Common Column Position
P	osition
X	87
Y	72
	Lock

- Position set the data grid position and size
- > X position set the X coordinate of data grid
- Y position set the Y coordinate of data grid
- Lock the data grid cannot move

4-4-26. Sample save

Sample save can collect the local data and store in the HMI. The data can be displayed in data grid and export to U-disk in csv format.

The following is the application of sample save and data grid. The sample save button collects the data from PSW256 to PSW259 and store in the address beginning with PSW300 then show in the data grid.

NO	Name	Data 1	Data 2	Data 3	Data 4	Time
0	A1	25	50	100	150	2011-09-20 13:46:07
1	A2	20	40	80	120	2011-09-20 13:46:05
2	A3	15	30	60	90	2011-09-20 13:46:03
3	B3	10	20	40	60	2011-09-20 13:46:01
4	В4	5	10	20	30	2011-09-20 13:45:59

Note: please use event button to make the operations including prev item, next item, prev page, next page. Please refer to chapter 4-4-17.

1. Click and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. This button is invisible after downloading in the HMI.

Pick Save Data

2. Double click the sample save button, it will show the property window.

Object

Pick Save Data	
Object Pick Save Position	
Display Object Table: 0 D[0] Add	
Batch Add	
Modify	
Delete	
Move Up	
Move Down	

- Add add collection object
- Batch add add more objects at once
- Modify modify the collection object
- Move up move up the object
- Move down move down the object
- Pick

Pick Save Data	
Object Pick	Save Position
Count	10
Period	1 Sec
Manner	ymthms 💌
Control	
	This Regist was used to control Pick!

➢ Count the collection data amount

The registers occupied by data collection function=every piece of data information * data amount n

The registers occupied by every piece of data information=collection object (m) + time (year/month/day/hour/minute/second=6)

If there is no collection time, the registers = m

- Period the data collection period, the min unit is 1s
- Manner the time format

- Control the collection process is controlled by the coil, when the coil is ON, it is collecting data.
- Pick save data

Pick Save Data			×
Object Pick	Save	Position	
Object			
ObjType	PFW	▼ 25	6

- Object the storage register address of collection data, the default address is PFW or PSW register
- Position

Pick Save Data	×
Object Pick Save Position	
Position	
X	
Y 152	
Cock	

- Position set the sample save position and size
- X position set the X coordinate of sample save
 Y position set the Y coordinate of sample save
- Lock the sample save cannot move

4-4-27. Sample export

The sample save function cannot store mass real-time data in actual project. Sample export can solve the problem. It can export the data in U-disk and backup in PC.

1. Click ⁴ and move the cursor in the screen, right click mouse to confirm, click ESC to cancel. This button is invisible after downloading in the HMI.

Export sample data

2. Double click the sample export button, it will show the property window.

Common

Export Co	ontrol		Date Time		Position
Common	Samp	Sample Destination			Save
torge Size			100		
ick Mode	Period Picl	<i>c</i>			
	Period	`	1 Secc -		
	Pick C	ìtrl	MO		
	Dynar	nic Pic	k MO		
	Fix Mod		Recycle		

Storage size the export data amount

The registers occupied by sample export =every piece of data information * data amount n The registers occupied by every piece of data information=collection object (m) + time (year/month/day/hour/minute/second=6)

Pick mode period pick and feel pick

Period the collection data period, the min unit is 1s

Pick control when the coil is ON, it starts to collect data

Dynamic pick when the coil is ON, circular store the data; otherwise it will stop collecting when the memory is full.

Fix mode recycle: circular store the data; stop: when the memory is full, stop storing data

_

Dynamic pick and fix mode can not work at the same time. User can choose one of them to work.

Feel pick it will collect data when the rising edge of signal is coming.

■ Sample

Export sample data	3		23
Export Contr Common	ol Sample	Date Time Destinatio	Position n Save
Temperature	Add	Title Ter	mperature
	Batch Add	Sample	D0
	Delete	Data Type 🛛 🛛 🕅	′ord 🔻
		Format Dec(D) Float(F)	 Hex(U) Unsigned(X)
	Move up	Bit Length(G)	4
	Move down	Float length(C)	0

- Add add one piece of collection data
- > Batch add add many pieces of collection data at once
- Delete delete the collection data
- Move up move up the collection data
- Move down move down the collection data
- > Title the title of collected data
- Sample the collected data address, click the address to modify the details

Pick Data	×
Object Station Device VirStal	PLC Port 🔹
Object ObjTyp	

- Data type word, Dword (32 bits), string
- > Data format the data format: decimal, hex, float, unsigned number
- > Bit length the bit length before decimal point
- > Float length the bit length after decimal point

Destination

Export Control		Date Time		Position
Common	Sample	Destinati	on	Save
evice ID				
Dvr	namic set			
		DO		
Path/File				
CE.csv				
Dynamic set	Í			
	l			
Fix Name				
	Re-exp	ort title		
Name add aut	omatic			
add number at	ter name			
0				
		DO		
Dyr	namic set	DU		

> Device ID the storage route of export data. 0 means C: $\$ in PC.

The device ID must be 0 when it is used in the HMI.

- Path/file export file name and export mode
- Fix name export to the same file
- Re-export title export the data title every time
- Name add automatic auto-increase the export file name number, for example the name is 002, the next file name is 0020001, 0020002, 0020003.... The mex number is 0029999

Add number after name add fix number after file name, the number can be set through register, the max number is 9999

Named by date name the file by date

Save

Export Co	ntrol	D	ate Time	Position
Common	San	nple	Destination	Save
Object	Jan	ipio	Destinguon	

- Object the collection register address
- Export control

Export sample data								
Common	Sample	Destinatio	n	Save				
Export Contro	1	Date Time	Pos	sition				
After export fir	nish reset register	data						
Control export	ing 🚺	10						
🔲 Real time exp	ort 🛛 🔊	10						
Export status	N	10						
Export result		00						
Export proces	s	00						

> After export finish reset register data

Clear all the data after the export is successful

- Control exporting when the memory is full, the coil is ON, the data will be exported
- Real time export it will export data when the rising edge of signal is coming
- ➢ Export status when the coil is ON, it means exporting status;
- Export result the register will show different exporting result

Register = 0, exporting is successful

Register = 1, the export device doesn't exist

Register = 2, U-disk memory is low

Register = 3, the file name or route is wrong

Register = 4, read write file failed

- > Export process the register will show the exporting process percentage
- Date time

Export sample dat	a				x
Common	Sample		Destination	Save	
Export Cont	trol	Date	Time	Position	
🔽 Date Time					
Date format (YYYY-MM-DD	•			
Example	2013-01-1	D			
Time format (HH:MM:SS	•			
Example	14:22:07				
- Date time export the collection data time
 Date format the date display format
 Time format the time display format
- Position

Common	Sample	Destination	n Save
Export Control		Date Time	Position
Position			
X	198		
Y	82		
•	02		

Position set the sample export position and size

set the X coordinate of sample export

- > X position
 - Y position set the Y coordinate of sample export
- Lock the sample export cannot move

4-4-28. Process orbit

With the new Xinje precise cutting technology, CAD file can be sent from U-disk to HMI. Then CAD file can be sent from HMI to PLC. PLC can send the cutting parameter file to HMI and show the cutting image.



1. Click 🖻 to put it in the screen, click ESC to cancel.



- 2. Double click the process orbit, it will show attribute window.
- Orbit

Process Orbit			X
Orbit Position			
Label		۲	
Bit Len Float Len	5 2 Font	Bit Len Float Len	5 2 Font
Color	•	Color	-
Aspect Frame	•	Back	
Processing		Raised knife	•
Processed Unprocess	▼	Processed Unprocess	▼
Set Path File path			
File name			
Units	m 🔻		

≻ Label

	Bit Length	the value bit length showing on X/Y axis
	U	
	Float lengt	h the value decimal bit length showing on X/Y axis
	Font	the value font showing on X/Y axis
	Color	the value color showing on X/Y axis
\triangleright	Aspect	
	Frame	the frame color
	Back	the background color
≻	Processing	
	Processed	the color of processed orbit
	Unprocess	the color of unprocessed orbit
≻	Set path	read file from specified path
	File path	the path of the file
	File name	the name of the file
\triangleright	Unit	the unit of the orbit, the default unit is meter
	Position	

289

Process Orbit		
Orbit Position		
Position	Size	
X 150	Width	298
Y 100	Height	237
Animal		
Horizontal		
Vertical		
Lock		

- Position set the coordinate of orbit according to the origin on the upper left corner
 X the X-axis coordinate
 - Y the Y-axis coordinate
- > Size set the width and height of orbit
 - Width the width of orbit
 - Height the height of orbit
- \blacktriangleright Animal the move direction of orbit

Horizontal horizontal moving the orbit. Set the X-axis position through register.

X coordinate = X position + current register value

Vertical vertical moving the orbit. Set the Y-axis position through register.

Y coordinate = Y position + current register value

➢ Lock lock the orbit, it cannot move

5 HMI internal register

5-1. HMI internal registers

The internal register of TH series HMI include PSB, PSW, PFW, PRW, PHW

Register	Note	
PSB	Bit object	
PSW	Word object	
PFW	Power-off retentive word object	
PRW	Power-off retentive word object (for TH)	
PHW	Power-off retentive word object (for TH)	

Note: PHW only exist when it is required in order, TH465 doesn't have PHW.

The register range:

Model Register	TH465	TH765/TH865/THA62/THA65	TG series
PSB	256~1023		
PSW	256~4095		
PFW	8M-occupied by screen-occupied by system	256~246015	256~4000255
PRW	0-999		-
PHW	-	-	-

PSB, PSW, PFW amount and range can be set in File/setting/panel/set parameters.

Set	x
PFW Num	4096
PSB Num	1024
VisPSW Num	4096
PriPSW Num	4096
Cache Num	1
ОК	Cancel

5-2. Special internal registers

PSW, PFW, PSB address 0~255 are used by system.

Register	Function	Explanation
PSB0	Always close coil	
PSB1	Always open coil	
PSB2	First start scanning ON coil	
PSB3	100ms pulse coil	ON OFF 50ms OFF 50ms
PSB4	1s pulse coil	ON OFF
PSB5	1 minute pulse coil	ON OFF
PSB6	300ms pulse coil	ON OFF
PSB8	Screen saver status flag	Enter the screen saver auto set on, exit the screen saver auto set off
PSB15	Communication flag	0: successful 1: failed
PSB16	Scan the screen first time successful	
PSB30	First scan after download	
PSB31	First scan after power on	
PSB60	Level 1 password flag	1: password open 0: password close
PSB61	Level 2 password flag	1: password open 0: password close
PSB62	Level 3 password flag	1: password open 0: password close
PSB63	Level 4 password flag	1: password open 0: password close
PSB64	Level 5 password flag	1: password open 0: password close
PSB65	Level 6 password flag	1: password open 0: password close
PSB66	Level 7 password flag	1: password open 0: password close
PSB67	Level 8 password flag	1: password open 0: password close
PSB68	Level 9 password flag	1: password open 0: password close
PSB170	Remote log in flag	1: log in 0: not log in

1. Bit object PSB

2. Word object PSW

Register	Function	Explanation
PSW0	Start screen number	
PSW1	Present screen number	
PSW20	Screen width	Read only
PSW21	Screen height	Read only
PSW26	PSB amounts	Read only
PSW27	PSW amounts	Read only
PSW28	PFW amounts	Occupy PSW28, PSW29 (read only)
PSW30	Year	Hex format, read only
PSW31	Month	Hex format, read only
PSW32	Day	Hex format, read only
PSW33	Hour	Hex format, read only
PSW34	Minute	Hex format, read only
PSW35	Second	Hex format, read only
PSW36	Week	Hex format, read only
PSW40	Recipe index	
PSW54	Device amounts	
DOWICO	COM 1 (Download) communication	
PSW60	successful times	
PSW61	COM 1 (Download) communication failed times	
PSW62	COM 1 (Download) communication overtime times	
PSW63	COM 1 (Download) communication data error times	
PSW64	COM 1 (Download) device version	
PSW65	COM 1 (Download) device model	
PSW70	COM 2 (PLC) communication successful times	
PSW71	COM 2 (PLC) communication failed times	
PSW72	COM 2 (PLC) communication overtime times	
PSW73	COM 2 (PLC) communication data error times	
PSW74	COM 2 (PLC) device version	
PSW75	COM 2 (PLC) device model	
PSW80	COM3 (extension port) communication successful times	
PSW81	COM3 (extension port) communication failed times	
PSW82	COM3 (extension port) communication	

	overtime times	
DOMINO	COM3 (extension port) communication	
PSW83	data error times	
PSW84	COM3 (extension port) device version	
PSW85	COM3 (extension port) device model	
PSW140	LICD D nort checking	When u disk is inserted into usb-b port, the
P5 W 140	USB-B port checking	value changes from 0 to 8
	Local IP	Occupied PSW154~PSW165 (12 single
		word registers) (read only)
DCW/154		PSW154~PSW157 are IP addresses
PSW154		PSW158~PSW161 are subnet masks
		PSW162~PSW165 are the default
		gateways
	Local ID	Occupied PSW170~PSW174(read only)
PSW170		(5 single word registers, PSW172 is
		decimal format, others are hex format)
PSW216	History event export process	

3. Word object PFW

Note: $PFW0 \sim 255$ is special address of the system, which cannot be erased frequently. Please do not erase $PFW0 \sim 255$ frequently when doing the program, otherwise it will affect the service life of flashrom.

Register	function	Explanation
PFW1	Start screen number	
		0: turn on the buzzer sound.
		1: turn off the buzzer sound.
PFW2	Buzzer sound	Please restart the HMI after setting.
		The default value is 0, which means turns on the
		buzzer sound.
PFW10	Screen saver on time	
PFW11	Screen number for screen saver	
PFW20	COM 1 (Download) baud rate	4800, 9600, 19200, 38400, 115200, 187500
PFW21	COM 1 (Download) data bit	0-8, 1-7
PFW22	COM 1 (Download) stop bit	0-2 bit, 1-1.5bits, 2-1 bit
PFW23	COM 1 (Download) parity	0-None, 1-Odd, 2-Even
PFW24	COM 1 (Download) station no.	
PFW25	COM 1 (Download) sending delay	Unit: ms
	COM 1 (Download) Modbus rtu	PFW26.2=0, send 0x06 function code.
PFW26.2	· · · · · ·	PFW26.2=1, send 0x10 function code.
F1 W 20.2	PFW26.2 write single word or multi-words function code switching	Please restart the HMI to make the settings of
		PFW26.2 effective.
PFW30	COM 2 (PLC) baud rate	4800, 9600, 19200, 38400, 115200, 187500
PFW31	COM 2 (PLC) data bit	0-8, 1-7
PFW32	COM 2 (PLC) stop bit	0-2 bit, 1-1.5bits, 2-1 bit

PFW33	COM 2 (PLC) parity	0-None, 1-Odd, 2-Even
PFW34	COM 2 (PLC) station no.	
PFW35	COM 2 (PLC) sending delay	Unit: ms
PFW36.2	COM 2 (PLC) Modbus rtu write single word or multi-words function code switching	PFW36.2=0, send code 0x06 PFW36.2=1, send code 0x10 The status of PFW36.2 will be effective when re-power on the HMI
PFW40	COM3 (expansion port) baud rate	4800, 9600, 19200, 38400, 115200, 187500
PFW41	COM3 (expansion port) data bit	0-8, 1-7
PFW42	COM3 (expansion port) stop bit	0-2 bit, 1-1.5bits, 2-1 bit
PFW43	COM3 (expansion port) parity	0-None, 1-Odd, 2-Even
PFW44	COM3 (expansion port) station no.	
PFW45	COM3 (expansion port) send delay	Unit: ms
PFW60	Password level 1	Occupy PFW60, PFW61
PFW62	Password level 2	Occupy PFW62, PFW63
PFW64	Password level 3	Occupy PFW64, PFW65
PFW66	Password level 4	Occupy PFW66, PFW67
PFW68	Password level 5	Occupy PFW68, PFW69
PFW70	Password level 6	Occupy PFW70, PFW71
PFW72	Password level 7	Occupy PFW72, PFW73
PFW74	Password level 8	Occupy PFW74, PFW75
PFW76	Password level 9	Occupy PFW76, PFW77
PFW84	Local IP setting	Occupied PFW84~PFW95 (12 single words registers) PFW84~PFW87 are IP address PFW88~PFW91 are subnet masks PFW92~PFW95 are default gateway
PFW100	Adjust the backlight	TN/TG (except TG465 and TGC65)/TE/ZG and TH765-N(V1.0 and above) have this function.
PFW101	Multi-language switching	Value 0~7 means language 1 to 8 (Touchwin v2.D and higher versions support this function
PFW130	Shielding device and station no.	V2.D.2n and higher version supported, please refer to chapter 7-25

6 Q&A

Q1 How to choose the software according to the hardware version of the HMI?

TP series:

	Software version
Hardware version	Visible in the "HELP" menu of the
Visible on the label at the back cover of HMI	software
V2.6, V2.7	V2.78/V2.99
V2.C and above	V2.C.6i

TH series:

	Software version
Hardware version	Visible in the "HELP" menu of the
Visible on the label at the back cover of HMI	software
V2.C and above	V2.C.6i

TG series:

	Software version
Hardware version	Visible in the "HELP" menu of the
Visible on the label at the back cover of HMI	software
New version	V2.D and above

Q2 How to install two or more versions of software in PC?

1. Change the path of the software as following in the installation process.

🛃 Setup - TouchWin Edit Tool	
Select Destination Locat Where should TouchWin Edi	
	Setup will install TouchWin Edit Tool into the following folder. To continue, click Next. If you would like to select a different folder, click Browse. At least 1, 298.0 MB of free disk space is required. C:\Frogram Files\Xinje\TouchWin Edit Tool
Setup	< Back Next > Cancel

2. According to the above, the default path for software installation is as "C:\Program Files\Thinget\TouchWin editing tool". Click the "VIEW" button to change the installation path manually to "C:\Program Files\Thinget\16\TouchWin editing tool". Then click the "OK". As following,

👸 Setup - TouchWin Edit Tool	
Select Destination Lo	
Where should TouchWin E	11t Tool be installed?
	Browse For Folder I lowing folder. Select a folder in the list below, then click OK.
	C:\Program Files\Xinje\TouchWin Edit Tool
Setup	< Back Next > Cancel

Q3 Why the software can not be installed or used normally?

1. Please close the anti-virus software and the system optimization tools before the installation;

2. Double click the shortcut of the software on the desktop after the success of the installation. then the following picture will pop up:



Reason: the current color mode is too low.

Method: right click the desktop, then choose the "attribute". Please change the color quality to the "highest (32 bit)" in the "settings" option.

💭 🗢 🖳 🕨 Control Panel 🕨 All Control Panel	items 🕨 Display 🕨 Screen Resolu	ution	▼ 4 3	Search Con 🔎
File Edit View Tools Help Change the appearan Display: 1. DELL	ce of your display	Seneric PnP Monitor and Intel	R) G33/G31 Express aphics Media Accelera Troubleshoot r	Chipset Family
			ОК	Cancel Ap

Q4 Does the software have tradional version? Does it support Tradional Chinese input?

There is no traditional version of the installation software. But in the simplified Chinese system, you can input traditional Chinese, Spanish, Japanese, German, French, etc.

At present, our company supports four software version such as simplified Chinese version, English version, German version and Korean version.

Q5 What shall we do when the HMI program of TH series and TG series can not be downloaded?

You need to use the USB download line to download the programs of TH and TG series HMI, and you can also buy or borrow the USB printer communication line. But the printer communication line must be complied with USB2.0 standards, and it should have the shielding layer, one side of the line is square, and the other side is flat.



1. Check whether the computer is installed with the USB driver

Get the USB driver from XINJE CD. Please give the power to the HMI again after the success of the driver's installation.

Note: Please read the installation instructions in the driver package before installation.

2. Please check whether the driver is abnormal if it is already installed.

Connect the USB download cable to the USB port of computer and the HMI, then give the power to the HMI again. Right click the "my computer" button on the desktop of computer, then choose the "attribute", and choose the "device manager" in the "hardware", If the computer is installed the USB driver, there will be red marked information in the "Device Manager/Universal Serial Bus Controller ".



(1) If there is no information, you need to install the USB driver again.

(2) If there is red marked information, please confirm whether there is a yellow exclamation mark before it. If so, you need to update the driver program again.

3. The USB driver can not be installed

- (1) Please close the anti-virus software and the system optimization tool.
- (2) Please check which operating system your computer belongs to. If your operating system isWin7 64 bit, you need to use the special driver of Win7 64 bit to update your driver.
- (3) There are two kinds of installation methods for the USB driver. The instructions are in the driver package, so you can have a try in turn.
- (4) If the USB driver still can not be installed, you should contact us to get the technical support.
- 4. Cannot download program through the USB driver is installed normally
- (1) Check whether the display model is in accodance with the HMI model;

Reason: customers may replace the TP screen with TH and TG screen, but they forgot to convert the model in the program and downloaded the program of TP to the TH and TG screen.

Solution: Check the display model in the "document/system settings/display".

(2) The USB download cables are not qualified;

You can replace a new cable if it is not confirmed. Now some USB download cables on market are not shielding wires, and the anti-interference ability is poor. We suggest you to use the shielding cable within 1.2m.

(3) Try to pull up and insert the USB download cable or restart the HMI;

(4) If the program still can not be downloaded, you should set on DIP switch 2 which is on the back of the TH and TG series HMI and resume the power. Then you can forced download from USB and serial port.

(5) Check whether there is interference;

We suggest you to use the independent 24V power supply. The power can not be connected with other devices at the same time. Don't put the high interference equipment around HMI, such as frequency inverter and so on. If the conditions allows, you should put the HMI to the place without high interference, such as office.

(6) the USB Port anti-interference ability of some computers is poor, or the USB port is easily damaged;

We suggest change another PC to try again. Then you can check if the program is downloaded successfully.

(7) Charging powers of some notebook computers are not very stable.

We suggest you to disconnect the power supply of the computer before downloading the programs.

Q6 What shall we do when the programs of TP series HMI can not be downloaded?

1. Is the hardware version matched the software version?

According to the configuration table of hardware and software, you can check whether current software version is matched the hardware version that you can find from the back cover of the TP HMI.(you can click the "help/about")

TP series

	Software version
Hardware version	Visible in the"HELP" menu of the
Visible on the label at the back cover of HMI	software
V2.6, V2.7	V2.78/V2.99
V2.C and above	V2.C.6i

2. Please use the multimeter to check whether the download cable is damaged or the contact of it is undesirable.

PC serial port (COM)

Dowload port of TP

		8	eries HN	ш
Pin	Name		Pin	Name
1			1	NC
2	RXD		2	RXD
3	TXD		3	TXD
4			4	А
5	GND		5	GND
6			6	BUSY
7	RTS		7	В
8			8	NC
9			9	NC

3. Check the serial port of the computer

(1) Change a serial port or a computer to try again if you are using the computer with serial port;

- (2) If you are using a USB convertor:
 - a. check whether the USB convertor driver is installed;
 - b. If the system of computer is win7 system, please use V2.C.6i. If the system of computer is XP system, please check the port number of the convertor. If it is more than COM10, please change the number to COM1 or COM2 manually, and then give the power to download again.

Note: If the program of the HMI can be downloaded by serial port card and can not be downloaded by the USB convertor, you should change the USB convertor. You can buy the USB convertor from us. The reason is that the USB convertor of other companies can not be connected with the 7 pin of download cable of the HMI.

4. If all of the above is ok, you may connect the pin5 and the pin8 of the download port. Then you should give the power again and forced download.

Note: The pin5 and pin8 must be connected in the process of cut power and power on again.

Q7 Why does it show the error HMI capacity is not enough when downloading the program?

Reason: the capacity of the program is larger than HMI capacity.

Methods: simplify the picture content

1. In the "tool/option" of the software version before V2.C.6b, we suggest you to cancel this fuction if you choose the "Encryption Download".

2. If you don't use download port communication, we suggest you to choose the "not use Download port". Otherwise the download port will occupy the resources.

3. Don't choose "automatical save" and "redo" in "tool/option"

Q8 How to choose the download cable of HMI?

Choose the right cables according to the series of HMI

TH and TG series screen download cable: It supports the USB2.0 standard and has the shielding layer. One side of it is square and the other side is flat.



Dowload port of TP

TP series screen download cable:

PC serial	l port (C	OM)		-
	1 .	s	eries HN	11
Pin	Name		Pin	Name
1			1	NC
2	RXD		2	RXD
3	TXD		3	TXD
4			4	A
5	GND		5	GND
6			6	BUSY
7	RTS		7	В
8			8	NC
9			9	NC

Q9 Why the program can not be uploaded? How to set to upload the program?

Reason: has not choosed the "full download" in the "tool/option", so programs can not b e uploaded.

Phenomenon: "there is no project" will be prompted when the programs are being upload ed.

Programs of HMI can be uploaded if you do the following operations before downloading.

1. For software version before the V2.c.6b, you should choose the "full download" or "upload" in the "tool/option".

Q10 how to choose the right communication cable?

Please refer to "HMI and PLC connection manual"; If the instructions can not explain the

connection of communication cable, customers can make their own communication cable referring to the definition of our HMI pin.

PLC communication port support: RS232/RS485/RS422

Download communication port support: RS232/RS485

Download port:



Pin number	definition	description
1	NC	Empty signal pin terminal
2	RXD	RS232 communication recieve data
3	TXD	RS232 communicaiton send data
4	А	RS485 communication"+"signal
5	GND	Signal ground
6	NC	Empty signal pin terminal
7	В	RS485 communication"—"signal
8	NC	Empty signal pin terminal
9	NC	Empty signal pin terminal

PLC port:



Pin number	definition	Description	
1	TD+	RS422 communication send "+" signal	
2	RXD	RS232 communication receive data	
3	TXD	RS232 communication send data	
4	А	RS485 communication "+" signal	
5	GND	Signal ground	
6	TD-	RS422 communication send"—" signal	
7	В	RS485 communication "—" signal	
8	RDD-	RS422 communication "—" signal	
9	RDD+	RS422 communication receive "+" signal	

Q11 Why the screen can not communicate normally and it displayed error "communicating"?

1. Refer to HMI and PLC connection manual;

you can find the related device connection diagram and refer to some special communication tips.

2. Check whether the connection of communication cable is correct

Check whether connection of the screen and equipment is correct.

3. Please use the multimeter to check whether the communication cable is damaged;

4. Check whether the type of project PLC is suitable with the type of actual connection;

5. Check the settings of communication parameters;

The communication parameters must fit for the communication equipment. For example: equipment model, modbus number, bit rate, stop bit, data bit, odd and even parity.

Generally, PLC needs to power on again after the PLC parameters downloading.

6. You may set up a program to have a test for finding the reason.

If the new program is normal, you need to check the content of the project. Especially the button, data input and some parts related with communication equipment. For example: HMI is communicated with XINJE PLC. The modbus number is 1. Then connect with the PLC port of the screen by using the cable. Add a button for setting the soft component M0 in PLC. The modbus number of this button need to be set to 1, the "equipment" must be chosen PLC port.

Button	
Object Operate Button Color	Position
Device PLC Port	Station 1
Object M 🔽	0 Indirect

7. Check the current communication port of HMI:

HMI has two communication ports which are PLC port and Download port. Check which port is used for communication of HMI. Don't use the wrong communication port. Every part of equipment should be "PLC port" if you are using the PLC port.

8. Check the station number in communication window:

Customers should confirm the station number of communication equipment. If the number is 1 and the communication window that the screen pop up is "communicating, the PLC station number is 0.....", The station number of some part in HMI program may be 0. Please change the station number to 1.

9. Field interference:

Check whether there is interference. Please take some anti-interference measures, such as putting the shielding layer on the communication cable, using independent power and isolate the high frequency equipment with HMI.

Q12 Why the communication speed between TP, TH series HMIs and communication equipments is so slow?

Following stituations may cause the communication speed between TP, TH series HMIs and communication equipments to be slow:

1. Many indirect parts are used in the program (the indirect address is communication device address):

Solutions: set the address to the internal address of HMI.

2. using the curve chart, and the collection period is within 1 minute.

Solutions: Change the number of "Cache" to 2 in the "File/setting/panel/set paraemter".

Project Set	X
Color Para Alternation	Font Project Clock Panel Device
Model TP460-L Description 240*128, m	onochromatic
	Set parameter
Set	
PFW Num	1024
VisPSW Num	1024
PriPSW Num	1024
Cache Num	2
ок	Cancel

Note: If the collection period is within 1 minute, please use TG series HMI.

Q13 How to change the download mode of HMI to communication mode?

Software editing:

1. Please choose download port device:

Device		×
	Please select port Download Device: Unuse Downlad Port Thinget XC Series Thinget FC Series Thinget V5 Series Inverter Mitsubishi FX Series Mitsubishi Q Series Omron CPM/CQM Series Omron CP/CJ/CS Series Siemens S7-200 Series Siemens S7-300/400 Koyo S Series Schneider (Micro/Neza/Twido) Matsushita (FP0/FP1) Com Para: 19200, 8, Even, 1 Setting	THE REPORT OF TH
< Back	Next > Finish C	Cancel

2. Please choose the "download port" in the device options and set the right station number.

Button	
Obje	ct Operate Button Color Position
	Station Device Download VirStaNO 0 Station 1
Г	Object
	Object M 🔽 O
	Indirect

hardware connection:

TH, TG: the Download port of TH and TG series HMI can communicate with device directly.

TP: You need to connect pin 5 with pin 6 of download port. The method is like this .

1. connect pin 5 with pin 6 directly on the communication cable, then insert it into the download port of HMI. At last you must give the HMI power again;

2. Please connect the pin 5 with pin 6 by wire when HMI has no electricity. Then you need to give the power again and move the wire.

Note: This method will be ineffective after you give the HMI power again, then you need to connect again.

Q14 How to use the broadcasting function of HMI?

The boardcasting station number of HMI is 0, so you can not use readable components such as indicator light, button indicator light, data input and data display, etc. If not, the screen will be

white.

Q15 How to set when the screen is slave station?

Customers can choose the "Modbus slave(panel is slave)" or "free type"(panel is slave)". The former is used to Modbus protocol, and the latter is used to free communication protocol.
 Please get the free format protocol manual from XINJE CD.

Q16 What shall we do if HMI does not support the current equipment model?

1. If the devices that the HMI supports are the same brand and different series, but the device communication protocol are same and they have the same device address, you can choose the device type matched with the screen.

2. Please confirm the communication protocol of the device. If it support Modbus, "Modbus RTU" or "Modbus ASCII"can be chosen.

3. If the communication protocol of the device can not meet the two coditions above, please use the following methods.

(1) You can write the communication protocol by yourself. Refer to HMI user defined protocol manual.

(2) You can use C language function if the device has few variables such as meters. Please refer to Touchwin C language manual.

Q17 Why the HMI only can read the data but cannot write when communicating with Omron PLC?

1. The old version Omron editing tools can change the settings of DM6600 directly, then it can change the former default-value to Monitor.

2. The new version Omron editing tools: "tools/internet settings/PLC settings". You need to change the startup conditions of PLC to monitor state.

After changing the Omron settings, repower on the PLC. Then the HMI can read/write the data of Omron PLC.

Q18 Cannot print the whole contents when using microprinter.

Solutions: increase the width and length of the print window.

Q19 How to calibrate the screen of HMI?

TP series HMI is matrix screen. Touch drift doesn't exist, and it can't do touch calibration. If it

can not be touched, please confirm reasons referring to the method of Q47.

The calibration method of TH and TG HMI:

- 1. Turn on DIP switch 3 and give the power to HMI again;
- 2. Click the cross-shaped centre according to the order;

3. It shows the calibration success if the centre appears a " \circ ". Click it into the screen of customers, and then turn off the DIP switch 3. If the centre appears a "X", you need to calibrate again till the centre appears the circle.

Q20 How to calibrate the system time in the HMI?

- 1. Set a screen jump button in the screen. Set the screen ID to 60002.
- 2. Download the program in the HMI. Press this button to jump to time/date setting screen.

Q21 How to modify the password in the HMI?

1. Set a screen jump button and set the screen ID to 60003;

2. Download the program to the HMI. Press this button to jump to password changing screen. **Note:** the current password should be opened before changing the password.

Q22 which model support U-disk data import and export?

- 1. TH-UT/NU/NU3, TG (-U) or TG (-E) series HMI;
- 2. The U-disk capacity should less than 32G;
- 3. It doesn't support the mobile hard disk.

Q23 Can the mouse connect to the USB-A port of HMI?

No, it can not.

Q24 Can the register in the keeping area without electricity in the HMI be expanded?

It is expandable.

TH series HMI can add two kinds of power loss retentive registers. They are PHW(0.52 million registers) and PRW (one thousand registers). PHW will be provided when you indicate specially when ordering, and the TH465 don't have PHW. Only the initial address of PRW and PHE start from 0.

Q25 What is the function of the HMI dail switch?

TP765:

Number 1 is ON. Change the download port to communication port; Number 2 is ON. Forced Download; Number 3 and 4 are not defined TH, TG series: Number 1 and 4 are not defined; Number 2 is ON, forced download;

Number 3 is ON, system menu: clock calibration, touch calibration and the USB-disk data import.

Q26 How to open the advanced functions of HMI?

V2.C version and above:

- 1. Open the programming software, and create or open any program;
- 2. Click the "tool/option", and click the "user mode".



3. and then open the programme software again.

	郡件 (2) 工具 (2) 窗口 (2) 帮助 (4)	
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65535; Common S		
60001: Password		
60002: SetRTC		
- 60003: Password		
60004: XC Input		
60005: XC Outpu		
	· · · · · · · · · · · · · · · · · · ·	
65532: PickSave		
- 65533: Print		
65534: Alarm		

V2.C version and below:

If the software is installed, please do from the first step. If the software has been used for a long time, please do from the second step.

1. Create a file after opening the software. Then save it. After that, a system file named Option.dat will be generated automatically in the root directory of the system.

2. Open the file by using the text file;

3. Add two lines in the end like this: [software]

usermode=1

Note: please confirm that whether the [software] is in the file at first. If it exists, please cancle them first and add the two lines above. If not, the advanced functions will not be opened.



4. Please open the HMI software again after saving the file of "Option.dat". Then the advanced function will open.

Q27 How to modify the Chinese input and the font size of historical events in the software?

Modify in the "File/ settings/font".

Q28 How to display the time and the week in HMI?

1. Click the "date" and the "clock" component, and place them in the screen;

File	Edit	View	Part	Tool	Window	Help			
							. 👻 🌭		
$\overline{\}$	$ \supset \square$		$\bigcirc \bigcirc$] 🔣 🤌	J 🌮 🭕	ا 💫 🕅	8	P 🕝

- 2. Display the week: set a data display. The address is PSW36, and the type of display is hex.
- 3. Download to the screen or do the off-line simulation.

Q29 Is the HMI password functional again after open?

- 1. Screen jump will make the password functional again.
- 2. The other parts: after the screen saver lighten again, the password will be functional again.

Q30 How to clear the data in trend map and data grid?

1. time trend

If the saved address of the historical data of the time trend is PFW256.

Time Trend
Common View Object Trend Color Position
Station Device PLC Port VirStaNO 0 Station 0
Object Vert Vert Vert Vert Vert Vert Vert Ver

Clear method:

- a. place a function button.
- b. add "set data".
- c. set the PFW256 (Dword) to 260, and also set the PFW258 (Dword) to 260 (the formula is "PFWm =m+4, PFW(m+2)=m+4")

Function Button	
Function Button Limit Color Position	
Function Pressing All	
Set Data Address:D0 Add Reset Coil Value:0 Add Copy Coil	
Function-Set Data	
Object Station Device PLC Port VirStaNO Object Object Object Indirect	
Data Type DWord Set Data 260	Apply
OK Cancel Apply	

d. At last, modify the button content to clear.

2. clear the data grid, common grid

Refer to the steps in item 1.

3. clear real time trend map

Refer to the steps in item 1.

4. clear the history data map/XY trend/display history event

Clear method:

a. click the event button

b. choose reset content in trend/event item

Event Button		
Event Button Color	Position	
Trend Type	Function	
Trend/Event	ResetContent	•
C Time Trend		
 Time Axis Y Axis 	Left (Thin) Up (Thin) ID All Trends	▼ Rate 20 /10
C XY Poly Trend	Clear	

c. At last, modify the button content to clear.

5. Clear XY curve

Similar to clear trend/event, choose reset content in XY poly trend item.

Event Button		1	
Event Button Color	Position		
Trend Type	Function		
C Trend/Event	Prev Page		Ŧ
C Time Trend			
C Y Axis	Left (Thin) Up (Thin) ID All Trends	▼ Rate	20 /10
XY Poly Trend	Clear		•

Q31 How to make the scroll texts in the screen?

1. **THIN** scroll text: the text can move from right to left of the screen, and it will disappear when it moves to the end of left. Then it will come out from right.

- 2. **P** move animation: you can draw the moving line, and also can control the speed of it. (the best choice)
- 3. The animation function in the text button.

Text			U
Display Font Color P	osition		
- Position	Size		
X 160	Width		40
Y 80	Height		20
Animal			
Horizontal		D0	
Vertical		DO	
🗆 Lock 🔽 Z	oom Ratio		

To move the text in different direction by changing the register value.

Q32 How to set password for HMI components?

1. For example, we use button. Please choose the password function and choose the password level.

Button					
Object	Operate	Button Color	Position		
Key	Туре —			Password	
0	Touch			level Lev	vel1 🗸
0	Enter	Code	v		
	Hide But	on			
œ	Normal	Change Aspect	✓ Use Text		
		User Defined	Content	ON	*

2. Open the "File/setting/para, choose password function and choose the password level.

Proj	ject Set		
	Device Para	Expand Device Font	Projec Panel
	Screen Start Screen	No. 1	
(l✓ Passowrd Level Lev	<u> </u>	
	-Screen Save -		
	Latency Time	e After 3 Minute 💌	
	Close LCE	O Show Screen	

3. Set the screen jump button, the screen ID is 60001(the screen to input password).

4. Download the program to the HMI. Press screen jump button to input the password. Then you can operate the button which has password.

Q33 How to switch I/O terminals of PLC in the HMI?

If the PLC terminal is broken, you can switch the terminal through HMI without changing the PLC program.

- 1. Use a screen jump button, set the screen ID to 60004.
- 2. Download the program to the HMI, press the screen jump button.
- 3. Click output port.





Note: HMI only support XINJE PLC terminal switching.

Common problems:

1. the I/O switching screen is not functional, all the register become D0.

Your PLC program is from other brands of PLC. Then change the model to XINJE PLC.

It is not useful.

2. The I/O switching screen is not functional.

The I/O switch screen button size cannot be changed. If changed, the function will not useful. After switching the terminal, the PLC must restart again.

Q34 How to make a keyboard in the software?

Set the ASCII code in user input button. Then arrange these buttons as the keyboard order.

\sim
2 🏀 🗢 🎀 🚥 🎟 1 🛛 🛛 🕮 🕮 🖾 🖓 🌆 🚳 🖓 🖓 🖓
k 🛛 🖬 🖗 🥝 🐠 🔆 i 🛗 🖾 🖾 🗑 🛲 😰 💆 🗳 i 💷 i 🔛 i 🗠 1.
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sin sin X' / 🕑 🄏 🖑 🔆 🛠 💕 📴 🗄 🖕 🖳 🚔 🚔 📃
· · · · · · · · · · · · · · · · · · ·
User Input
Operate Button Color Position
ASCII Code 0x 31

Q35 Why the software cannot operate the off-line simulation?

1. More than one versions of Touchwin software are installed in the computer, and the

current one is not the one installed at last.

There are two kinds of solutions:

a. Uninstall all the versions. Then install only one version in the PC.

b. you just need to modify the contents of registry without uninstalling the software.

Click start/run in the PC, input "regedit" to open the registry editor. Click

HKEY_LOCAL_MACHINE/SOFTWARE/THINGET/TouchWin. Double click AutowinPath. Input the software installation route (the software version you want to off-line simulation) in the value data item.

Registry Editor	-			
Inc. Edit Inc. Intervented Inc. Intervented Inc. Edit Inc. Intervented Intervented Inc. Edit Intervented Intervented Inc. Edit Intervented Intervented Inc. Edit Intervented Intervented Intervented Intervented Intervented Intervente		Vame (Default) AutoWinPath Language Edit String Value name: AutoWinPath Value data: C:\Program File	Type REG_SZ REG_SZ REG_SZ	Data (value not set) C:\Program Files\Xinje\Touch English Edit Tool\AutoWin OK Cancel

2. The type of HMI is OP series or XP/XMP/XMH series.

Q36 Why the on-line simulation shows communicating?

1. Check whether the PLC model is XINJE XC series or Modbus RTU. Now the on-line simulation function can only support the device of Modbus protocol.

2. Choose the wrong COM port connecting with PC

Right click the mouse on the screen of "on-line simulation". Choose the correct COM port then close the on-line simulation screen and open again.

3. Check whether the communication wire is connected between equipment and computer and the connection is correct.

4. More than one versions of software are installed in the computer. The current one is not the one installed at last. If you want to know the solution, please refer to the Q35.

Q37 Which software does the OP560 use?

OP560-L and OP560-T use Touchwin software.



Q38 Can the program of MP series be converted to the program of TP, TH, TG series?

No. The programs cannot copy and paste. If not, the program will has error.

Reason: MP series have both touch buttons and normal buttons. The properties of many parts are different from that of the TP, TH and TG series. If paste or copy the program, the project cannot open anymore.

Q39 Can the HMI programs of different types be converted to each other?

Yes.

1. The resolution of each model are different. After changing the model, the buttons will mix up in the sceen. Before changing the model, please choose all the buttons in the screen and right click the mouse, then choose group.

2. Then change the model of HMI in the software menu "file/setting/panel".

Q40 How many functions can be added in function button or function field?

The max is 126.

Q41 How to calculate the PFW quantity used in the program?

1. PFW quantity of data sample export

a. the storage size is m.



b. sample data quantity is n.



c. the time and date occupy six PFW registers.

Export sample da	ta		
Common	Sample	Destination	
Export Con	trol	Date Time	P
🔽 Date Time			
Date format	YYYY-MM-DD	•	

ThePFW quantity:

If exporting the clock, the quantity of PFW is: $m \times (n+6)$ If not exporting the clock, the quantity of the PFW is: $m \times n$

2. The PFW quantity of sample save.

The same method of item 1.

3. The PFW quantity of history trend map

a. the trend source is n

ł	Histroy data map						
	Ti	rend Sou	rce Disp	lay	Object Color	Font	Position
					Add	Modify	D
		Order	Object		Min Value	Max Val	ue
		1	D0		0	1024	

b. the total data is m

Histroy data map					
Trend Source	Display Object Colo	r Font			
Data		Time —			
Page Data		01			
Total Data	10	• E			
		_			

c. The history trend map can save the time and date. The date and time will occupy 6 registers. The quantity of PFW is: $m \times (n+6)$

4. The PFW quantity of time trend map.

a. the storage size is m

Time Trend			
Common	View	Object Trend Color	Position
Storge Si	ize		10

b. the line quantity is n

Tim	e Trend			
С	ommon View	Object	Trend	Color
	Line5		Map M	ode — Id C
	Temperature			
	Line1 Line2		Color	•
	Line3 Line4		🔽 Anotł	ner Gro
	Line5			Image: A start of the start
			D 1	

c. The time trend map can save the time and date. The date and time will occupy 6 registers. The quantity of PFW is: $m \times (n+6)$

5. The PFW quantity of history event.

a. the event capacity is m

Histroy Event		
Aspect Event Pick	Save	Font Color
Column		
First	Title	Spring Time
C Second	Align	Left 💌
C Third	Width	118
Line Height		25
Lines / page		2
Event Capacity		100
Show Year		

b. every event contains: spring time (occupy six registers) and informations (occupy one register) and affirm time (occupy six registers). Every event will occupy 13 PFW registers.

Spring Ti	mė∶∶	Info I	Affirm Time	
				Ľ

The PFW quantity is: (m+1)*13+4

Q42 What's the meaning of PSW/PFW/PSB/PRW/PHW?

There are 5 kinds of internal registers: PSB, PSW, PFW, PRW, PHW

Register	Notes
PSB	Bit object
PSW	Word object

PFW	Power loss retentive Word object
PRW	Power loss retentive Word object
PHW	Power loss retentive Word object (selectable)

Note: PHW will be provided when you indicate specially, and the TH465 has no PHW. It only has PRW.

The range of internal registers:

Modle Object	TH465	TH765/TH865/THA62/THA65	TG865/TGA62
PSB	256~1024		
PSW	256~4096		
PFW	256~ (8M-occupied by screen-occupied by system)	256~24, 6016	256~410,0000
PRW	0-1000		None
PHW (selectable)	None	0~52,0000	None

PSB, PSW, PFW: the registers address from 0~255 are occupied by the system.

Note: refer to chapter 5 for internal registers details.

Q43 Why does the HMI screen show chip picture?

Create a easy program at first, and download it to the HMI to confirm whether it is the program problem or the hardware problem. If the new program has no problem, you need to check the program.

The chip number is in the top left corner. The following situations may cause the chip picture.

1. There are contents or components which can not be read in the screen. You can find the problem by the exclusive method.

2. chip number 01:cannot write in because there are too many screen contents. You can simplify the contents in the screen.

For example: (1) choose "not use Download port". Because the download may occupy some capability.

2 Please cancel "complete downloal" in the "tool/option".

- 3. Chip number 04: We suggest you to use the desktop computer and the direct serial port if you use the notebook computer and the USB converter.
- 4. the software installation has problem. The old software is not uninstalled completely or cleared when you are installing the new software. We suggest you to install the software again. (you must change the installation path manually)
- 5. If customers use the user-defined protocol and the chip appears when you insert the communication wire, it indicates that the receiving description of user-defined protocol has some problems.
- 6. Try forced download.
- 7. if the problem still cannot be solved, please contact us.

Q44 Why does the HMI screen become white?

1. some project has many screens and much communication data. The screen will become white if the PLC communication cable is not inserted in the screen. If you insert the communication cable, the white screen will disappear immediately.

2. The power supply voltage of HMI is low.

3. short connect pin 5 and pin 8 of TP com port. Turn on DIP switch 2 of TG, TH series. Then power on the HMI again.

If it shows loading screen, it is not the reason of hardware. Some system address, such as PFW0~256 or PSW0~256 and so on, may be used by the program. If the screen is still white, the hardware may have some problems.

Q45 The HMI touch screen has problem?

1. The HMI mounting problem

Take off the HMI from the control cabinet, and operate it. If the operation has no problem, it indicates that it is caused by mounting problem. You need to measure the installation size. Don't mount too tight, otherwise the pressure of the touch panel will be too high.

2. The communication is not well

3. Make a program and test

Set a light button PSB300, and download it to the HMI to test the touch situation. If the touch function is not good, turn on DIP switch 3 to calibrate the touch screen for TH and TG series.

If the new program has no problem, you need to check according to the following steps:

a. indirect address is used (the indirect address is from communication device)

b. when you use the event buttons, please don't set two or more trend maps or common grid at the same time.

c. When adjust the size of common grid, it will have offset after downlosading to the HMI. You can click each attribute in the softwre and download again.

Q46 What is the operating temperature and the storage temperature of HMI?

Operating temperature: 0 ℃~ 50 ℃ Storage temperature: -10 ℃~ 60 ℃
7 Touchwin v2.d new functions

7-1. Multi-language

The button text can show 8 kinds of language.

For example: we make two kinds of language for lamp button.

1. Choose more language in lamp button window (lamp button state is ON).

LampButton	Σ
Object General Aspect Color Position	
Aspect	
ON Change	
© OFF Customer	
Pressed Save	
Released Save	
Text	
More Language	
	÷
Font Art Font Text Library	

2. Click text library, set the language count to 2, and input the text in each language window:

Label set	· interior ·	ter (m.)tak		X
Language Count 2	•	Language settings 🛛	Font applied to all	Font Setting
Language1 Font On	Language1	Font	guage1 Font	Language1 Font
-		•	Ŧ	-

If the entire text fonts are the same, please choose font applied to all.

Label set

Language Count	2	-	Language settings 📝 Font applied to all	Font Setting

Sand Street, Name Line, Party

3. Repeat step 1 and 2 when lamp button state is OFF.	
LampButton	
Object General Aspect Color Position	
Aspect ON Change	
OFF Customer	
Released	
Text Image: More Language	
Off	
Font Art Font Text Library	
Label set	
Language Count 2 Language settings Font applied to all Font Setting	
Language1 Language1 Language1	
Off _ 关闭	*
	*

4. Then make a data input button, the address is PFW101. This button is used to choose the language.

PFW101=0, it shows English. PFW101=1, it shows Chinese.

ata Inpu	ıt					
Object	Display	Convert	Inputs	Font	Color	Position
	perate Obj Station Device VirStaNO	ect Local reg		itation		▼
	Object ObjType	PFW	•	indirect	101	



7-2. Ethernet function

There are two modes for Ethernet connection:

- 1. RJ45 straight through cable with hub;
- 2. RJ45 crossover cable without hub, but only for one to one connection (HMI-HMI, PLC-HMI, HMI-PC).

Ethernet can make multiple networks: one to many, many to one, many to many.

7-2-1. Make Ethernet operation

TG765-ET, TG865-ET and TGA62-ET support Ethernet function.





TG765-ET TGA62-ET



TG865-ET

Please use Touchwin software version 2.D and later. (1) Open Touchwin software, select HMI type



(2) Select Net device. The IP address of own devices is HMI IP.

Device					
Device	Own devices	102	160	0	
COM Device PLC Port DownLoad Port	Subnet Mask	192 . 255 .			
Net Device	Gateway	192 .	168	0	1
	Port (502

(3) Right click Net device/New to make a new project.

Device									
	e DM Device PLC Port DownLoad Port 	Own devices IP Address Subnet Mask Gateway Port	255	•	255	•	0 255 0	•	0
Name			X						
Name	Device1								
		ОК Са	ncel						

(4) Right click the project name, there are delete and rename menu.

Device	
Device - COM Device - PLC Pot - DownLoad Pot - Net Device	modbus_Tcp Siemens S7-1200 Series
Delet	-

(5) Select Modbus_Tcp, the IP is PC IP address. Protocol is TCP.

Device	
Device COM Device PLC Pot DownLoad Pot Net Device Device1	modbus_Tcp Siemens S7-1200 Series IP 192 . 168 . 0 . 1 Port 502
	Protocol
	● TCP ◎ UDP
	Communicate Parameters Waiting time 0 ms Retries 3
	Waiting time 0 ms Retries 3 Timeout 1500 ms
	Communicate status register
	PSV 256
	Communication status information is not exported!

(6) Communication status register

If choose this item, PSW set to 256, PSW256 is communication successful times, PSW257 is communication failure times, PSW258 is communication overtime times, PSW259 is error times.

Com	nmunicate status register						
PSV	256						
Communication state occupies address PSW[256] ~ PSW/25911							

(7) after doing these steps, click next to finish the new project building.

(8) use a data input button on the screen, choose device 1 in the station device item.

D	ata Inp	out								X	<u> </u>	
	Object	Display	Inputs	Font	Color	Position						
	Operate Object											
		Station Device	PLC Po	rt			•					
		VirStaNO	Local re PLC Por									
		Object	Device ¹									
		ObjType	D	•		0						
	indirect											

(9) after choosing device 1, the object is modbus address: 4x, 3x

۵	Data Inpu	Jt						X
	Object	Display	Inputs	Font	Color	Position		
		perate Obj	ect					
		Station						
		Device	Device	1			-	
	· ا ا	VirStaNO		0	Station		1	
	-0	Object						
		ObjType	4x	•		0		
					indirec	t		

(10) HMI is Modbus_TCP master station in this project. HMI also can be slave station.

7-2-2. Communicate with Siemens S7-1200 PLC

We use TG865-ET and S7-1200 CPU1211C 6ES7 211-1BD30-0XB0 for this application.



(1) choose HMI type in Touchwin software



(2) Choose net device. The own device IP address is TG865-ET IP

Own devices							
IP Address	192		168		0		1
Subnet Mask	255		255		255		0
Gateway	192		168		0		1
Port							502
	IP Address Subnet Mask Gateway	IP Address 192 Subnet Mask 255 Gateway 192	IP Address 192 . Subnet Mask 255 . Gateway 192 .	IP Address 192 168 Subnet Mask 255 255 Gateway 192 168	IP Address 192 168 . Subnet Mask 255 . 255 . Gateway 192 . 168 .	IP Address 192 168 0 Subnet Mask 255 255 255 Gateway 192 168 0	IP Address 192 168 0 . Subnet Mask 255 255 255 . Gateway 192 168 0 .

(3) Right click net device, build a new project.

Device								
Device	Own devices							
COM Device	IP Address	192		168		0		1
···· PLC Port ···· DownLoad Port	Subnet Mask	255		255	•	255	•	0
New	Gateway	192	•	168	•	0	•	1
	Port							502

(4) Choose Siemens S7-1200 series in the device list. The IP is S7-1200 IP address. Port no. 102 cannot be changed. The IP address can be changed in PLC software.

Devi	ce		
	Device COM Device PLC Port DownLoad Port Net Device Device1	modbus_Tcp Siemens S7-1200 Series	
		IP 192 . 168 . 0 . 1 Port 10)2

(5) Set the communication parameters. The timeout time cannot be larger than 3000ms. Retries time is 1.

Communicate Parameters									
Waiting time	0	ms	Retries	1					
Timeout	3000	ms							

(6) Communication status register

If choose this item, PSW set to 256, PSW256 is communication successful times, PSW257 is communication failure times, PSW258 is communication overtime times, PSW259 is error times.

Con	municate status register	
PSV	256	
Communic PSW/1259	cation state occupies address PSW[256] ~ 11	

- (7) Click next to finish the process. Then enter the editing screen.
- (8) Use data input button on the screen. The device is S7-1200 (device 1)

0)ata Inpu	ıt						×
	Object	Display	Inputs	Font	Color	Position		
	_Op	erate Obj	ect					
	- S	Station						
	1	Device	PLC Po	rt			-	
	\ \	VirStaNO	Local re PLC Por					
		Dbject —	Device1	1				
	(ObjType	D			0		
				[indirea	ct		

(9) S7-1200 object M and DB must be defined in the PLC. Otherwise, it cannot communicate with HMI.

Data Input

_							
	Object	Display	Inputs	Font	Color	Position	
		oerate Obje	ect				
	- I C ⁸	Station					
	1	Device	Device	1			•
	1	VirStaNO		0	Station		0
	-0	Object					
	0	ObjType	1	-		0	
			1 Q		indirec	t	
	-1	/alue	M				
			DB0				
	1	Data Type	001				
			DB2 DB3				

Note:

(a) Siemens S7-1200 doesn't have station no. It only has IP address. The S7-1200 PLC and TG series HMI can make different networks: multi-HMI one PLC, one HMI multi-PLC, multi-HMI multi-PLC.

One HMI to many PLCs



Many HMIs to one PLC



Many HMIs to many PLCs



- (b) The RX/TX LED light when the communication is successful. The RX/TX shining means the PLC is finding network.
- (c) S7-1200 can connect the entire Siemens Ethernet device. Modbus_Tcp can connect to TBOX and XINJE PLC.

7-2-3. Communicate with TBOX

This application uses TG865-ET and XINJE PLC XC3-24R-E, Ethernet module TBOX. (1) Material XINJE HMI: TG865-ET XINJE XC series PLC: XC3-24R-E XINJE Ethernet module: TBOX Ethernet switch and Ethernet cables

(2) Network diagram



- (3) TBOX setting please refer to Ethernet module TBOX manual.
- (4) Touchwin software setting:
- a. choose TG865 in the type list:



b. choose net device, the TG865-ET IP address cannot be conflict with other device in the network.

Device								
Device	Own devices			460		_		
COM Device	IP Address	192	•	168	1	0	•	100
DownLoad Port	Subnet Mask	255	•	255	•	255	•	0
Net Device	Gateway	192		168		0		1
	Port							502

c. right click net device, build a new project.

Device	1 S. S. S.		
Device	Own devices IP Address	192 . 168 . 0 . 100	
PLC Port DownLoad Port	Subnet Mask	255 . 255 . 255 . 0	
Net Device	Conterway	192 . 168 . 0 . 1	
		502	
	Name		
	Name Devic	e1	
		OK Cancel	

d. choose modbus_Tcp device

Device	
Device COM Device PLC Port DownLoad Port Net Device Device1	modbus_Tcp Siemens S7-1200 Series
	IP 192 168 0 14 Port 502 Protocol Image: CP Image: UDP Image: Word exchange Image: Word exchange
	Communicate Parameters
	Waiting time 0 ms Retries 3 Timeout 1500 ms
	Communicate status register PSV 256 Communication state occupies address PSW[256] ~ PSW[256]1

The IP 192.168.0.14 is TBOX IP address. It can be set through XCPpro software. Port 502 cannot be changed.

e. click next to finish and enter the editing screen.

f. for example: use data input button. Choose device 1 in device list.

Data Inpu	ıt						
Object	Display	Convert	Inputs	Font	Color	Position	
-Op	perate Obj	ect					
	Station						
	Device	Device1				-	
, I I I I I I I I I I I I I I I I I I I	VirStaNO		0 S	tation		1	
	Object						
	ObjType	4x	•		0		
				indirect	1		

Note: please fill in the object address as the Modbus address list in XC series PLC manual.

g. after making the program, download it to the TG865-ET. Then the TG865-ET can control the remote device through Ethernet.

Note: TBOX can connect many PLCs through RS485. The PLC station no. can be set through XCPpro software.

Edit TBOX Device			
Communication Master/Client TBOX C	Comment		
Master Mode		Client Mode	
Protocol: TCP -		Send Delay(ms): 0	<u>▲</u> ▼
Station-IP Table	Shield Table	Station Table	
Station IP Num IP	Station 1	Station Num	
	2	2	

Please see above window from XCPpro software. If there are many PLC stations, the send delay time should be set to improve the communication speed.



7-3. Show the button address

to show the button address.



R

Click

7-4. Save encrypt

Sometime, users have to send the program to their customers to download. But users don't like the customer to know the program contents. Users can use save encrypt function in this case. If the program is saved in encrypt mode, this program can download in HMI. But the program contents cannot be seen in the software.

How to use save encrypt function:

1. After making the program, click File/save encrypt to save the file.



2. Then when you open the encrypt file in Touchwin software, you cannot see the program contents anymore. But you still can download the file to HMI.

7-5. Batch copy

If user needs to make many buttons, the button address is increasing by one, other settings are the same. Batch copy function is easy to do this.

For example, user makes many lamp buttons, the addresses are M0~M9.

1. Make the first lamp button, the address is M0.

La	LampButton								
	Object	General	Aspect	Color	Position				
	Operate Object								
	Sta	tion							
	Device PLC Port								
	VirStaNO 0 Station 1								
	Object								
	Ob	jType 🛛	1	•	()			
				ir 📃	ndirect				

2. Right click the button, choose batch copy.



3. In the batch copy window:

Batch Copy	23
Layout	
Rows	2
Columns	5
Row distance	5
Column distance	5
Address	
O Hor Add	Seg First 👻
⊘ Ver Add	Interval 1 👻
ОК	Cancel

Layout settings: set the row, column quantity and the distance between them.

Hor add: the address increases in horizontal direction. For example, the buttons have 2 rows, 5 columns. The buttons are as the following:



Ver add: the address increases in vertical direction.



Seg: for some devices such as Omron CP series PLC, the address has two segments. This setting can decide which segment address is increased.

Interval: the address cumulative value. For example: interval=1, the addresses are M0, M1, M2...

Interval=5, the addresses are M0, M5, M10....

7-6. Font batch setting

If there are many buttons and texts in the screen, this function can set all the fonts together at the same time.

1. choose all the texts or buttons (press shift to choose more buttons)



2. click font setting **F**, set the font in the following window:

Font		X
Font: Times New Roman	Font style: Bold	Size:
Times New Roman Trebuchet MS Verdana	Regular ^ Italic Bold	8 9 10 Cancel
Viner Hand ITC	Bold Italic	12 14 16 •
Effects	Sample	
Underline	AaBbYy	Zz
Color: Black -	Script: Western	
	Troaton 1	

3. These texts will have the same font settings.



7-7. Hide the button

The buttons support hide function: text, dynamic text, variable text, button, lamp, lamp button, data display, alarm display, text display, data input, text input, Chinese input, set data, user input, window button, down recipe, up recipe, function button, clock button.

For example, hide the lamp button.

1. Choose coil control in the lamp button setting window.

LampButton							
Object General Aspect Color Position							
Button Operate							
Twinkle Status							
Stop ○ ON ○ OFF							
Twinkle Speed							
Slow Fast							
Password							
Level -							
Coil Control							
MO							

2. When M0=1, the lamp button will hide.

7-8. Hex keyboard

When data input type is hex:

Data Input			
Object Display	Convert Inputs	Font Color	Position
Format		Bit Length	
Dec	Hex	Total	5
Float	Unsigned	Float	0

Please choose keyboard_8 (hex input keyboard):

Data Input	X
Object Display Convert Inputs	Font Color Position
Password Level Level1 -	Notice
Up Limit	Lower Limit
64	Register
✓ Pop-up keyt KeyBoard_8	
L	OK Cancel Apply

7-9. Picture rotation

Picture rotation function only support the pictures import from material library or map. For example, import one picture from material library. Choose 11.bmp and click open to add it in the screen.

⊡ ·· <mark>⊡ Map ··· ·</mark> c_circle ··· · c_circle ··· · ⊡ c_circle2					Transpare
c_jump c_jump1 c_lamp	01.bmp	02.bmp	03.bmp	04.bmp	=
c_Lamp1 c_Others c_pipe1_60x60 c_pipe2_60x60					
	05.bmp	06.bmp	07.bmp	08.bmp	Add Mate
····· <mark>````</mark> c_pipe6_30x30 ···· `````` c_pipeL_60x60 ···· ``````` c_pipeM_60x60					Del Mate
····· <mark>```</mark> c_pipeS_60x60_: ···· ```` c_rectangle ···· ```` c_rectangle2	09.bmp	10.bmp	11.bmp	12.bmp	
C_otaling c_rotary 					Cance

Click rotate 90 degree (clockwise/counterclockwise) button _____, the picture will rotate as

required.



7-10. Set limit through register for data input button

For example, up limit = D0, lower limit = D10. If D0=100, D10=10, the data input range is from 10 to 100.

Data Input	
Object Display Convert Inputs Font	Color Position
Password Level Level1 -	Notice
Up Limit	Unit 0
Register D0	Register D10
✓ Pop-up keyt	
KeyBoard_1	Max: AAAAAAAA Min: AAAAAAAA
	Vision (Length Vision)

7-11. Button alignment

If the buttons in the screen is messy, please use alignent function to make them in order. The alignment modes include left-aligned, middle-aligned, right-aligned, up-aligned, down-aligned, etc.

7-12. Undo



7-13. Variable string

Compared to version v2.c.6, new version v2.d.1 supports row change of text label.

Variable string
Object Display Font Color Position
Content
Value Text description of string Add
0 TextExggggmm Modify
More Language
More Language
TextEx test may
Text Library
OK Cancel
TextEx Dotest may

7-14. Import/export data type

For v2.d.1 and higher version, the data type of sample export support string.

Export sample data	1		<u> </u>	
Export Contr	ol	Date Time	Position	
Common	Sample	Destinati	on Save	
Temperature	Add	Title Te	emperature	
	Batch Add	Sample	D0	
	Delete	Data Type	itring 🔹	
		Format		
		Dec(D) Dec	Hex(U)	
		Float(F)	Unsigned(X)	
	Move up	Number of	4	
	Move down	Float length(C)	0	

Data grid also can support string.

Data Grid						83) · · · ·	
Object Common	Column	Positio	Column in	formation			x
Circle Buffer		Add	Title	e Language			
Title	Width	Data	Point				*
Point	50	WOR					Text Library
			Width		50	Number of	3
		-	Туре	String	•	DotLength	0
			- Format			Align Hor	
			O De	c(D)			

7-15. Print function

The print function only supports micro-printer.

User can set the print function in File/setting. The print modes include 8 lattice and 24 lattice.

System Settings
Para Interactive Panel Device Project Clock Font
Screen Start Screen No. 1
Passowrd Level Level1
Screen Save
Latency Time After 3 minute
Close LCD Show Screen
Printer
Points 24 Point
Horizontal
Left to Right O Top to bottom
Right to Left O bottom to top

The print directions include horizontal and vertical direction. User needs to test the best print direction; otherwise, the print contents will be garbled.

Right click print window to add new print window.



The print setting window has two tabs: object and print window.

Print

Obj	ect Print W	lindow	
	Station Device		
	Device	PLC Port	-
	VirStaNO	0 Station	1
	Object —		
	ObjType	M • 0	
		indirect	

The object will trigger the print function. For PLC address, the object should be ON for 3s at least. For HMI internal address, the object should be instant ON.

Object Print Wind	ow		
Window			
Name print pa	ige		
Size		Paper	
Width	160	O Hor	
Height	120	⊚ Ver	
		Cut	
Tip			

Print window tab: set the window name, size. If the micro-printer support cutter, please choose cut function.

The print direction can be horizontal or vertical.

7-16. Proportion function

Proportion function is Double word calculation; please use Dword data type in PLC.

7-16-1. Proportion function of data input

For example, HMI data input range is 4~20 (float), PLC data range is 0~18432. When user input 4 in HMI, the real data in PLC D0 is 0.

1. Click data input button²³, set the object address to D0, data type is Dword.

Da	ta Inpu	ıt					
(Object	Display	Convert	Inputs	Font	Color	Position
	_Op	oerate Obj	ect				
	- F	Station					
	[Device	PLC Port				•
	1	VirStaNO		0 S	tation		1
		Dbject					
	0	ObjType	D	•		0	
					indirect		
		/alue					
	[Data Type	DWord	•			

2. The display tab defines the input data format and bit length.

0)ata Input					
	Object Display	Convert Inputs	Font	Color	Position	
	Format		Bit	Length		
	O Dec	─ Hex	Т	otal		5
	Float	Unsigned	FI	oat		2

3. Convert tab

Input convert: source data range is 4~20 (HMI); result data range is 0~18432 (PLC).

Show convert: make the calculation result 0~18432 as data source, then change them to float value 4~20.

After setting, when user input 4 in HMI, the HMI will show 4, but in PLC D0, the value is 0 in fact.

Data Input	
Object Display Convert Inputs Font	t Color Position
Input Convert	
Source	Result
	Type Dec 💌
Upper 20.000000	Upper 18432
Register	Register
Lower 4.000000	Lower 0
Register	Register
Show Convert	
Source	Result
Type Dec 💌	
Upper 18432	Upper 20.000000
Register	Register
Lower 0	Lower 4.000000
Register	Register
Register	Register

7-16-2. Proportion function of data display

For example, PLC data range is 0~18432, HMI data display range is 4~20. 1. Click data display button, set the object address to D0, data type to Dword.

Display Data	
Object Displa	y Font Color Position
Station	
Device	PLC Port 👻
VirStaNO	0 Station 1
Object	
ObjType	D - 0
	indirect
Value	
Data Typ	B DWord

2. As the proportion of 18432/20, the result is float value. Please choose float type data in data display button.

Display Data						
Object Display	Font Color	Position				
Format		Bit Length				
O Dec	⊘ Hex	Total	5			
Float	Float		2			

3. In convert item, please enter the source and result value range.

Convert Source	Result
Type Dec 💌	
Upper 18432	Upper 20.000
Register	Register
Lower 0	Lower 4.000d
Register	Register

4. Then when the D0 in PLC is 18432, the data displayed in HMI is 20.00.

7-17. Upper/lower limit for calculation result

123

The calculation result of set data, function button, function field support upper and lower limit. For example, use two set data buttons. One button is auto plus one, another button is auto minus one. The result range is 0-5.

1. Click set data button		, the object address is D0, the data type is wor	rd.
--------------------------	--	--	-----

etting d		e Button Color Positio	n
	ation evice	PLC Port	•
Vi	rStaNO	0 Station	1
	oject ojType	D indirect	0
	alue ata Type	Word 👻	

2. The function is plus operation, the operand is 1. The upper limit is 5, the lower limit is 0. Setting data

Object Operate	Button	Color	Position		
Function					
• +	◎ -	0		© /	Constant
Operand		1			
Format					
Oec	─ Hex) Fi	oat	Unsigned	
🛛 Up Limit			ЪС	V Lower Limit	
		5			0
Register	U	p Limit		Register	Lower Limit

- 3. The button name is +1.
- 4. Repeat the step 1-3 to make button -1.

Then download the program in the HMI. Press +1 and -1 button to change the D0 value. When D0=5, +1 button cannot increase the D0 value. When D0=0, -1 button cannot decrease the D0 value.

Function button and function field also have upper limit and lower limit for calculation result.

	Function Button	2
	Function Button Color Position	
Function-Arithmetic		All
Operate Kind	O / Add Modify	Set Coil Reset Coil Copy Coil Screen Jump Set Data Copy Register
Left Operand	Delete Delete Move Down	User Input Open Window Close Window Down Scheme Up Scheme
Right Operand	Dec (B) (Move Up) (Password)	Arithmetic Import CSV Data Export CSV Data Copy File Delete File
Up Limit 100 Register Up Limit	Lower Limit 0 Register Lower Limit	Down File Call Function

7-18.Scrolling text

This function can set the scrolling speed.

The pixels that the text has walked in 0.1s are the scrolling speed value. The larger the value, the faster the scrolling speed.

Scroll Text	
Message Common	
<u>x</u>	210
Margin	20
Scroll	1 /0.15

7-19.Dynamic specified file name for data import and export function

1. For "import CSV data", "export CSV data" in function field or function button and sample export; the csv file name can be set dynamically.

For example: open "import csv data" function, please see the following window.

The "dynamic set" choice is in source path tab. Please select this item and set the register address.

Then user can input the csv file name in this address through character input button or data input button.

Function Field Mode Function Position Import CSV data	All Set Coil
Source Path Data Save Control Date Time Device ID 0 Dynamic set D0 Import Ctrl M0 Path/File CE.csv Dynamic set PSW300 Fix Name	Reset Coil Reverse Coil Copy Coil Screen Jump Set Data Copy Register User Input Open Window Close Window Down Scheme Up Scheme Data Block Transmit Arithmetic Import CSV Data Export CSV Data Copy File Delete File Down File Call Function
Add ID After Name O Dynamic set D0 Start ID O Dynamic set D0 Break	取消 应用

2. Dynamic-specified file name can only specify 8 characters which occupied four registers.

bject	
Device	Local registers
VirStaN	
ОђТур	PSW S00
Value	
Data Ty	pe nRegs 🗸 Number of 4

7.20 Rotate animation

1. Place a rotate animation component.

Animation clip	Animation Position
Material	Preview
Picture0 Picture1 Picture2	Add
	Modify
	Delete Delete
	Move Up
	Move Down

- 2. Click 'add' or 'modify' and select your picture from the material library;
- 3. You can double click the picture and modify the picture size, position.

mation clip Animation	Position	
osition	Size	
<u>K</u> 240	<u>W</u> idth	129
<u>Y</u> 200	Height	136
nimal Morizontal		

4. Animation attribute

Period: the animation running time, can be set to constant or specified by register.

Enable and reset: If only select 'enable' option and unselect the 'register controls' option, then the animation will always be running. If select the 'register controls' option at the same time, the animation will run only when corresponding coil is on. So does the reset function.

Mode: animation have random and continue mode. In continue mode, the picture will switch according to the default sequence. In random mode, the picture will switch according to your setting. For example, if write 1, 3 after random, picture will change between picture 1 and 3, picture 2 is not included.

Animation moving mode: single mode and trip mode. It also can set repeat the animation or not. Coil control: when coil is on, the animation is visible; otherwise it is invisible.

nimation clip	Animation	Position
Period		
	8	oo ms
(DO	Register controls
🗹 Enable 🚺	MO	Register controls
Reset	MO	Register controls
Mode		
🔘 Random		
⊙ Continue		
	💿 Sing	gle
🗹 Repeat	🔿 Trip	,
Coil Contr	ol —	
ſ	MO	

7-21. Modbus function code switching

Some Modbus devices send 0x06 function code when write single word while others send 0x10 function code. The HMI register PFW36.2 can switch them in this software. When PFW36.2=0, send 0x06 function code. When PFW36.2=1, send 0x10 function code. After changing the value of PFW36.2, please restart the HMI to activate the function.

7-22. Public screen

The screen No.65535 is public screen. The buttons in this screen will be displayed on the top layer.

7-23. Screen saver

When the HMI is in screen saver mode, system coil PSB8 will be ON. When the HMI exits the screen saver mode, PSB8 will be OFF.

7-24. Turn off the backlight

When the system coil PSB9 is ON, the backlight will be OFF. The backlight will be ON again when touching any place on the screen.

7-25. Shielding user-defined device and station no.

The value in PFW130 (Dword) is m (the first address). The shielding device and station no. table:

Device name	Each device covers 16 addresses. The 16 bits of each register mean the 16 station no.			
	Setting ON the bit means shield the station no.			
	For example: shield download port station no. 1: set ON PFWm.0.			
	Shield download port station no.10: set ON PFWm.9.			
	Shield download port station no.20: set ON PFW(m+1).4.			
	1	2	•••	16
Download	PFWm	PFWm+1	•••	PFWm+15
port	PFWm.0-PFWm.15	PFW(m+1).0- FW(m+1).15		PFW(m+15).0- PFW(m+15).15
	Means station	Means station no.16~31		Means station no.240~255
	no.1~15			
PLC port	PFW (m+16)	PFW (m+16) +1		PFW (m+16) +15
Extension port				
Reserved port				
Ethernet	PFW(m+4*16)	PFW(m+4*16) +1		PFW(m+4*16) +15
device 1				
•••	•••	•••		•••••
Ethernet	PFW(m+11*16)	PFW(m+11*16)+1		PFW(m+11*16) +15
device 8				



This function will set value m in PFW130 (Dword). It will occupy 192 addresses starting from PFWm.

For example: set value 300 in PFW130 (Dword). PFW300.0 means download port station no.1 device. When this bit is ON, the download port station no.1 device will not communicate with others. PFW300.1 means download port station no.2 device. PFW316.0 means PLC port station no.1 device.



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